Emerging Transformation in Higher Education

Concepts – Projects – Networking

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Foreword

Dr. Anette Pieper de Avila
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Looking back on 15 years of experience at the Institute for Socio-cultural Studies of Kassel University the results and long lasting effects of the University Staff Development Programme (UNISTAFF) are striking: more than 300 academics mainly from universities in Central America, East Africa, Southeast Asia and the Middle East have gained hands-on experience through an intensive ten-weeks programme in the field of organisation development, teaching and learning, curriculum development and research management. After having completed the course, the participants were in the position to implement their knowledge and generate transformations at their home universities. UNISTAFF is funded by the Federal Ministry for Economic Cooperation and Development (BMZ) in the framework of the DIES programme, which is jointly coordinated by the DAAD and the German Rectors’ Conference (HRK).

UNISTAFF offers to middle and senior university staff the opportunity to learn from each other and to exchange views on challenges in higher education management across borders. Next to the provision of university management know-how by German experts the concept of peer learning is an essential part of the didactical approach. Furthermore, the execution of individual change projects is a key element of the course: under the guidance of the German course coordinators, these projects are designed and implemented by participants and many have led to concrete results such as the redesign of curricula on faculty level, the development of quality assurance instruments in research or the set up of a teacher training programme.

This unique combination of project orientation, competency based learning and intercultural exchange in a multi-disciplinary and open atmosphere of dialogue in the small university town of Witzenhausen constitutes the success of UNISTAFF. The training has not only influenced the participants’ careers in university management, the spirit of UNISTAFF has also been kept alive through intensive follow-up measures coordinated by the University of Kassel and regional networking activities which derived from the own initiative of UNISTAFF alumni. Strong regional networks were formed in Central America and Mexico (GUCAL), East Africa (REAL) and Southeast Asia (INDOSTAFF) which in turn have become active in the training of university staff. Recently, these networks have been opened up for alumni of other DIES training courses (such as the International Deans’ Course or UNILEAD).

This transfer of knowledge and long-term perspective is exactly what the DAAD’s DIES programme is aiming for.

Dr. Anette Pieper de Avila
The University Staff Development Programme (UNISTAFF), successfully conducted by the Institute for Socio-cultural Studies (ISOS) of Kassel University from 1994 to 2009 and supported by the German Academic Exchange Service (DAAD) from its very beginning, brought together more than 300 experienced scholars and university administrators from all over the world: Latin America, Africa, the Middle East as well as South-east Asia. The participants, jointly enhancing their knowledge in issues of organisation development, curriculum development, teaching & learning and knowledge and research management, formed dynamic regional groups of alumni who are actively engaged in the development of their universities and extend their competence to other colleagues.

After 15 years of ISOS stewardship and retirement of the three facilitators Prof. Dr. Michael Fremerey, Dr. Siawuch Amini and Dr. Matthias Wesseler, activities of the UNISTAFF programme are in a process of decentralization. The focus will lie on fostering the various activities in the already existing networks in Central America, East Africa, South East Asia and the Middle East. The co-ordination of the follow-up activities will lie in the hands of the International Centre for Higher Education Research of Kassel University. ISOS and DAAD as supporting organization therefore felt that the time was ripe to call the alumni to come together to share the results of their work and to exchange their experiences in working together for higher education development. A call for proposals was launched to all alumni to hand in contributions for the International UNISTAFF Forum with the title “Emerging Transformation in Higher Education: Concepts – Projects – Networking”. The reaction of alumni from all over the world, among which the overall majority is holding a leading position within their universities, exceeded all expectations, so that due to time and budget restraints a strict selection process had to take place. Finally, more than 40 alumni were invited to the forum providing space for presentations and discussion on innovative approaches of the alumni. The diversity of participants coming from various regions and countries holding different positions – lecturers, heads of departments, vice-deans and deans and members of other boards in the area of higher education, as for example a regional association of universities and from most different scientific backgrounds as education, language sciences, natural sciences or medicine assured a broad scope of contributions and discussions.

The current volume reflects the great diversity of contributions considering local identity as well as regional needs. The common goal of UNISTAFF alumni to cooperate for higher education development has resulted in very specific regional and local activities that actually make a difference.
Introductory articles by the three facilitators of the UNISTAFF programme Michael Fremerey, Matthias Wesseler and Siawuch Amini provide a résumé of the UNISTAFF programme. By giving an insight to UNISTAFF from different points of view, they provide an analysis of the importance and the assets of mutual sharing, co-operation and development of shared visions in higher education development.

Linkages: University and society, the first part of the volume, analyses the relationship between universities and their environment. The articles show the importance of relating teaching and research to societal needs to allow universities to fulfill their responsibility to contribute to a society’s development. The first article of this chapter, “The dialectics of innovation”, presented by Prof. Caro Lucas as keynote address on the forum, set the frame for the forum with an analysis of the pre-conditions within a society to develop and implement innovations. The further articles cover a broad range of linkages between higher education and society: from the exigence towards universities to change and develop in order to fulfill their role as source of knowledge and innovation, the integration of relevant stakeholders, international and national co-operation to contributing to local development and needs.

The second part gives an insight into Quality assurance: Concepts and strategies. The contributors present innovative approaches to quality assurance, integrating different stakeholders as well as local perspectives and needs.

Passing over to the third part we are invited to have a look at Networking. Networking at local, regional and international level has become a successful and often used measure of the UNISTAFF alumni to support each other, to spread the gained knowledge in higher education development as well as to form disciplinary networks. Beyond the local and regional focus, the networks link up with each other and thus form an international learning community.

Capacity Building is the common topic for the articles of the fourth part. Building capacity for higher education development and sustainable development is one of the key objectives of the UNISTAFF programme and the follow-up activities organised by the alumni.

The editors would like to express their gratitude towards all participants of the forum who have come together to share their experiences. Furthermore, we would like to thank Dr. Siawuch Amini, Prof. Dr. Michael Fremerey and Dr. Matthias Wesseler – who for so many years were and still are engaged in developing innovative cooperative learning strategies in the field of staff development for higher education institutions.

Special thanks, also in the name of the participants of the forum and all UNISTAFF alumni, go to the German Academic Exchange Service DAAD and the section ‘International Consultancy Projects and Higher Education Management (DIES)’ who not only supported the realisation of this conference but for so many years the annual implementation of the UNISTAFF programme with now more than 300 alumni all over the world. By supporting the alumni networks, DAAD fosters the local and international exchange of the alumni and the multiplication of their knowledge, skills and visions. An exciting phase and further support of the networks will be the
integration of the alumni of the ‘International Deans’ Course’ (IDC) and the ‘University Leadership Management Course’ (UNILEAD), two further DAAD-supported training courses in higher education development, which already started in East Africa and South-East Asia.

The editors wish the reader an exciting and inspiring time with this wide range of articles, sharing ideas and suggestions to a common goal: networking for institutional change to support sustainable development.
THE UNISTAFF EXPERIENCE.
ACHIEVEMENTS AND POTENTIAL.
UNISTAFF: Generating innovative competence in higher education

Michael Fremerey

The authors in this volume share a common background, and the innovatory approaches towards higher education development they describe are largely nurtured by the University Staff Development Program (UNISTAFF) conducted by the University of Kassel. For a better understanding of the context, the essentials of this program shall be briefly described below.

As a training program for faculty from universities in developing countries, UNISTAFF was initiated in 1994 by the Institute for Socio-cultural Studies (ISOS) of Kassel University in the rural community of Witzenhausen. UNISTAFF stands for the University’s tradition of promoting academic further education, while at the same emphasizing its goal to achieve a special international profile.

What began in the summer semester of 1994 with 6 participants in a pilot project developed, over the next 15 years, into an internationally known program. Supported by the German Foundation for International Development (DSE) and the German Academic Exchange Service (DAAD) – the latter having taken over sole responsibility for the programme since 2004 – there are now over 300 alumni, mostly from universities in Central America, East Africa, South-East Asia and the Middle East, of the annual one-semester courses. These alumni have formed regional network groups, which in turn have become active in the training of university staff and so help to multiply the programme in their particular region.

The aims

Questions of quality and relevance in university teaching and research have dominated the international debate on higher education since the end of the 90s (cf. UNESCO 1998). The UNISTAFF program tackled these questions right at the start and has been doing so increasingly over the years. The defects diagnosed in quality and relevance are related to university systems per se, but have a special significance in economically underprivileged countries in Asia, Africa and Latin America, where the quality of university teaching and research is considerably behind that of international standards. The critical debate on the contribution of the expensive higher education system to overall development is largely nurtured by this circumstance (cf., for example, Gerth 2003; Gibbons 1998; Green 1997; Neave 2003; UNESCO 2003 and 2004; Fremerey 2007). In view of the diverse understanding of quality in higher education performance UNISTAFF puts emphasis on a situation- and process-oriented understanding of this concept. Quality, accordingly, develops in a persistent discourse that considers the specific conditions in which teaching and research take
place, taking into account changing goals and objectives. Relevance, in the sense of aligning the research and teaching with prevailing overall development problems, is understood from this perspective as a component element of quality.

UNISTAFF is not providing specialized subject training. Its programme is related more to the growing insight that university development, under radically changing conditions (autonomy, competition, networking, internationalization) is also depending on new transdisciplinary competencies. Accordingly, the generation of knowledge and research require targeted management in order to become optimally effective; learning processes have to be recognized, planned and evaluated in their complexity, transcending the cognitive dimension; innovation presupposes organizational learning and leadership capacity so that challenges can be recognized and implemented in sustainable strategies of change. The fundamental importance of specialized subject qualification for the development of higher education systems remains undisputed, though it has more and more to take account of the question of relevance. However, the focus of the UNISTAFF program on trans-disciplinary competencies takes into account the fact that approaches and programmes for the development of such competencies are extremely rare – in contrast to the multiplicity of further education programmes available to acquire in-depth specialized knowledge. Thus, UNISTAFF recognizes the changing profile requirements for university careers as well as the need to tackle questions of academic quality and relevance from a systemic and transdisciplinary perspective.

In addition to providing competencies the UNISTAFF program wants to play its part in forming and strengthening an international group of university teachers, researchers and managers who are prepared and qualified to set a process of change in motion in order to raise quality and relevance in their universities. To achieve as widespread an impact as possible the programme alumni in autonomous regional networks are themselves becoming active in the further training of university staff.

The target group

UNISTAFF wishes to address university staff in all faculties who are responsible for leadership and management functions at the middle levels (department, faculty, committees) and/or those interested in taking over such tasks and are appropriately qualified to do so. This general direction is based on the experience that initiatives towards meaningful innovation are emerging particularly from this level. The strategic position of the actors in vertical and horizontal information flow, together with their long-term career prospects at the university, make them particularly receptive to innovation-oriented ideas. At the same time, they have a certain potential of influence and power that - at least to some extent - enables them to push through initiatives of this sort. This approach is supported by governance structures that are changing in many higher education systems to the advantage of broader possibilities of active participation on the part of middle leadership levels.

In addition to occupying middle leadership positions, the support from like-minded colleagues plays an important part in mobilizing innovation potential. For these
reasons, UNISTAFF follows the "critical mass" principle, which envisages the concentration of scarce resources in a limited number of universities and higher education systems. The result has been a focus on the regions of Central America, East Africa (Kenya, Uganda, Tanzania, Malawi, Ethiopia), South-East Asia (Indonesia, Philippines) and Iran. Other countries are also represented individually in the UNISTAFF program\(^1\), but no sustainable formation of alumni groups has resulted so far. This also sheds light on the typical recruiting pattern of UNISTAFF: Many of the participants are motivated and proposed by former participants, usually with the intention of strengthening innovative potential in their own university. In this way not only have groups and networks emerged in individual universities, countries and regions with organizational potential, but the work in the training courses has also been very positively influenced by "hand-picked" participants. Other selection criteria, such as a detailed letter of motivation or the proposal of a change project, which the applicant wishes to work on during the course, supplement personal references.

**The philosophy**

*Sharing*

Appropriate and sustainable initiatives for change and development in higher education can be imparted only to a very limited extent, if at all, *ex cathedra*. Against this is not only the interculturally limited range of specific development and action strategies, even if one has to assume that the phenomenon "university" is subject to an international convergence process. Rather more importantly a vertical (usually north-south) transfer model fails to recognize the fact that university staff, especially when they are in responsible positions, have specific experience and relevant knowledge. The transfer of such pools of experience and knowledge thus develops its effectiveness especially in horizontal exchange, i.e. in the dialogue between those concerned. This is where its special importance is located: as a process of sharing among peers, in which situations described, patterns of behaviour or events become "meaningful" for the interlocutors.

In practice this means enabling learning processes, in which the exchange among the course participants acquires an enhanced significance. Teamwork and the organization of individual teaching and study units by the participants themselves are the most important methodological tools used. The role of the university teacher responsible for a particular module changes accordingly: he is no longer the only source of knowledge, as envisaged in the traditional teaching-study process, but rather the creator of a context in which knowledge from various sources flows together and, as a result, new knowledge and new competencies emerge. This includes also opening up tacit knowledge, which some participants have in large measure, but needs to be surfaced by means of dialogue. The interpretation of non-verbal communication and personal address of individuals are important methodological approaches in this

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\(^1\) For example: Argentina, Brazil, Venezuela, Ghana, Nigeria, Cameroon, Egypt, Vietnam, Cambodia, Mongolia
context. In practice, the adherence to such andragogical principles presents itself as anything but simple, because of course the teacher has knowledge worth communicating, which the participants also demand. The aim for balance of "vertical" and "horizontal" transfer and the common acquisition of new knowledge in team work can counteract the one-sided teaching process. Incidentally, an important part of the teachers’ knowledge comes from the participants of the many previous courses. The teachers thus ultimately become a facilitator in a horizontal process of knowledge transfer.

**Context**

The organization of the context as an important task of the teacher and the course management gains a special significance in processes of horizontal knowledge transfer. Discourse and dialogue require a framework, which creates familiarity and offers possibilities of identification, gives a group of initial strangers ample opportunity to feel and develop common bonds, and ultimately meets the requirements for work in differing personal constellations. The UNISTAFF program places great value on an appropriate context creation right from the start. This does not refer solely to the availability of suitably equipped rooms or appropriate accommodation for the course participants; it implies also intensive social support that includes the help with individual problems, the organization of weekend activities or cultural evenings. Numerous evaluations\(^2\) and feedbacks demonstrate how essential such efforts are for the success of the course. Special emphasis is placed here on the importance of the fourth dimension of learning, as formulated by UNESCO in 1998: *learning to live together.*

**Authenticity**

Learning processes that build on fictional situations and that have not been experienced personally by the teacher usually lack conviction and sustainability. Especially in contexts where it is not simply a matter of absorbing theoretical knowledge, but where in the background of the discourse there is always the question of the concrete implementability, a learning climate marked by authenticity is of great importance. In short, change and innovation in university organization, teaching and research should have been experienced personally and induced by those actors who are propagating them. Only in this way the requirements and strategies for change can be communicated convincingly. Against this background it is important that those responsible for the modules in the UNISTAFF program are able to look back on a wealth of personal experience with processes of innovation in "Third World" universities and in Kassel University. This experience does not only generate an abundance of illustrative case studies, but it may also be assumed that in this way a basis for authenticity has been created that has a positive effect on the learning process of the course participants. Authenticity however also plays an important role at another level: Throughout the entire course there is a common thread in the subject

\(^2\) Cf. the external evaluations: King & Wernz-Homberger 1999; Weiland et al. 2009
"Working in the Team". The importance of the team in terms of synergies developing out of diversity is not only a prominent subject in the organizational development module, but also appears in the daily practice of work groups with changing composition, dealing with specific tasks that come out of the course content. At the same time, the entire ISOS staff itself tries to deploy the principles of teamwork, which also includes an open discussion about diverging opinions, in order to authentically demonstrate its functions and effects.

Core elements of the course

Modules
At the heart of the 16 UNISTAFF courses held so far are three interconnected modules, each one of which lasts for 2-3 weeks: (1) Organizational Development, (2) Teaching, Learning and Curriculum Development, and (3) Research and Knowledge Management.

Organizational Development: The module is aimed essentially at the development of competencies in planning, initiation and management of innovation processes at different organizational levels. It deals, among other things, with

- the perception of the university as a "learning organization"
- fundamentals and practice of working in a team
- management of conflicts and leadership in force fields.

Teaching, Learning and Curriculum Development: This module focuses on questions of enhancement and assurance of quality in the teaching/learning process, in particular:

- the fundamentals of teaching and learning in the university context
- curriculum development and implementation
- evaluation and accreditation as instruments of quality assurance.

Research and Knowledge Management: This module is dedicated to developing and evaluating research concepts, including approaches to research-based learning. Some of the important working areas in this field are:

- the assessment of quality and relevance in research
- the development of internal and external relationships to optimize the design and advancement of research
- the advancement of student research in the sense of research-based learning.

Project work
The modules described above serve as the foundation for work on individual projects. With a very few exceptions, the articles in this volume trace back to this core area of the UNISTAFF program. The projects are related to the concrete working area of the individual course participant in his/her specific university environment and, in this context, are meant to target concrete change. The course participants have already, at the application stage, been requested to specify a project and bring relevant data and
documents with them. It is emphasized that the projects should be conceptualized in a way that optimizes chances of implementation. At the end of the course each participant presents his/her developed project design and allows it to be submitted to a final assessment process by the whole group. Projects of special relevance and significance for a larger circle of interested parties have been published in a series specially created for the purpose (Amini, Fremerey, Wesseler 1997, 1999, 2002, 2005, 2010).

Effects
As Siawuch Amini shows in more detail in his contribution to this volume, a recently conducted tracer study manifests a substantial positive effect of the training on the personal and career development among the UNISTAFF alumni. Apart from such overall positive effects, there have also been setbacks or stagnation in individual cases, which may possibly be ascribed to participation in the UNISTAFF program. For example, two participants from the Philippines have reportedly suffered temporary constraints in their career, because they have been perceived as "troublemakers" by the university authorities. As serious as such reactions may be for the individuals concerned, they in fact illustrate the impact that UNISTAFF has, even if it may be associated in some cases with considerable frictional loss and personal sacrifice.

Another field of manifest effects are the projects of the participants, which set out to achieve concrete changes in their universities. Individual feedbacks and published papers of UNISTAFF alumni (cf. Fremerey, Amini, Wesseler 2006; Fremerey, Pletsch-Betancourt 2006) point to numerous examples of success in the realization of the projects in the intended way. Other projects underwent modifications in the course of a discussion and decision-making process in the home university. If such a process adds additional information and expertise and thus serves to adjust the planned intervention to concrete realities and to ensure sustainability of change, modifications of project designs should be welcomed. In a smaller number of cases, however, change initiatives have been turned down or procrastinated by colleagues and superiors. This indicates that the UNISTAFF program, with its explicit orientation towards innovation in universities, is operating in difficult terrain that still shows detectable reactions of defence and resistance against change. This is true especially of established people in leading positions who regard the new generation of leaders as a threat to the stability of the system, because these latter base their claim to legitimation on academic competence and willingness to innovate and not on having been co-opted, often in a rather “non-academic” process.

Networks
A particular success story of the UNISTAFF program has been the emergence of regional alumni networks. Here, initiatives are unfolding, that aim at a wide spread effect of UNISTAFF, and for which the alumni in the various countries and regions assume sole responsibility. The following is a brief account of the individual networks and their activities so far.
Under the name INDOSTAFF alumni from Indonesia, the largest single group in the UNISTAFF program, formed a network in 2005. ISOS invited 15 of them to a training of trainers, customized to their concrete requirements and plans: the training of staff from regional universities in East and West Indonesia. A series of local training programmes of the sort have also since taken place with the support of Ministry of Education. In addition, INDOSTAFF members are active in planning and executing training events for top university leaders. The appreciation shown to INDOSTAFF was recently disclosed by officially contracting this network to design a development program for university staff in Timor Leste.

In 2006 the UNISTAFF participants from East Africa (Uganda, Kenya, Malawi) founded the DAAD alumni network REAL (Regional Eastern Africa UNISTAFF Alumni Network) which, since 2008, has been extended to Tanzania, Ethiopia and Sudan. It is sub-divided into national chapters, each with its own programme. The overlapping co-ordination is done through a regional office at the Kenyatta University in Kenya. In 2006 and 2007, REAL organized international symposia cum workshops on questions of quality and relevance in teaching and research. Representatives of the UNISTAFF alumni networks in Indonesia, Central America and Iran were invited to participate. This indicates the endeavour to use regional alumni events for a continuous exchange also between the regions. After a training of trainers in late 2008, REAL is now moving towards launching a regional training scheme.

GUCAL (Grupo Universitario para la Calidad en América Latina: University Group for Quality in Latin America) was founded in 2007 as a DAAD-supported network of the Central American alumni from the UNISTAFF und UniCambio XXI programs. It started its activities in July 2007 with an international conference in Costa Rica, which dealt in particular with questions of relevance of university teaching and research for socio-economic development. Since then a series of national chapters with the support of the regional co-ordination office in Costa Rica have carried out 3-day training events for university staff members. It has its own newsletter to inform members and those interested about network programmes and initiatives.

A special situation we find in Iran: The collaboration with Iranian university staff members was motivated from the start by the desire to maintain and stimulate the previously fruitful academic co-operation between Iran and Germany, also and particularly in times of serious political restrictions. Thus, in 1998 a follow-up contact programme was initiated in Iran, even before the “German Iranian Alumni Network”

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2 Programa Internacional de Gestión de la Calidad y del Cambio en la Educación Superior. Cf. next section.
3 “Alianza universidad-sociedad como dinamizadora del desarrollo regional – En el marco de la calidad, el cambio y la relevancia de la Educación Superior”
4 The focus themes included, among others, competence-oriented teaching, quality management in teaching, evaluation and accreditation, curriculum development, university-society relationship.
5 Boletin Informativo de las Redes GUCAL Centroamericanas
(GIAN) was founded in 2002 as an alumni network linked to a consortium of the Universities of Göttingen, Kassel and Marburg. It is basically addressed to all Iranian graduates of these three (and other German) universities and is widely open in terms of its contents. However, the strong emphasis and particular commitment of former UNISTAFF participants have created a situation where problems of university development have become prominent in alumni meetings. So far four symposia cum workshops in Iran\(^9\) and a "winter school" in Germany\(^10\) have been organized. Moreover, three "Mini-Workshops" have been staged in Iran\(^11\).

**Epilogue**

Due to retirement of the three major persons in charge, the series of UNISTAFF courses were brought to an end after a sustained term of 16 years in 2009. The seeds, however, have evidently spread to the native regions of the UNISTAFF participants, and there stroke root particularly in the mentioned alumni networks. In addition to the training events and conferences which serve to adapt “classic” UNISTAFF issues to the respective country or region, these networks stand for a new and important development in their respective university systems: They create relationships of collaboration between individual universities that so far, trapped in a "zero-sum syndrome"\(^12\), have decidedly cut themselves off from each other, often in mutually disparaging fashion. In many countries, the development of the whole higher education system has been very badly damaged by this laager mentality. The UNISTAFF alumni from the various universities are counteracting this with an open interpersonal and institutional relationship marked by a specific identity that has grown within the UNISTAFF course and its follow-up programs. There is a new dynamic in which co-operative planning and action is practised and experienced in terms of synergies and reciprocal benefit.

The fact that the DAAD fosters the process of multiplication and decentralization by promoting alumni networks must be seen as contributing to a sustainable impact of the UNISTAFF program. This impact is even likely to grow in the course of integrating alumni from two other DAAD-sponsored training programs, “International Deans’ Course” (IDC) and “University Leadership Management Course” (UNILEAD)\(^13\), into the existing networks. This integration process has started recently in East Africa and Southeast Asia.

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\(^10\) "Quality Assurance in Higher Education: Preconditions for an Effective Co-operation and Collaboration between Iranian and German Universities”.

\(^11\) (1) "Entrepreneurship and Entrepreneurial University”, Teheran 2004; (2) "Information Technology”, Teheran 2005; (3) "Entrepreneurial University”, Teheran 2006.

\(^12\) The advantage or benefit of the other is my disadvantage or loss - and vice-versa.

\(^13\) For detailed information: www.daad.de (development co-operation)
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A new spirit: The innovation of quality in teaching and learning

Matthias Wesseler

“We all survive only through constant rethinking and reinvention”

Yes, ‘spirit’, ‘innovation’ and ‘quality’ are big words, you may think. I do not pretend to analyze these terms in any appropriate depth. I do however want to share some of my recent experiences and insights I was privileged to gain in many universities of many different countries, from Central America, from USA, from Eastern Africa and Indonesia, and of course from Europe and from Germany.

There are big words anyway in the international debate on higher education. Behind or within or even beyond these big words there is a growing consensus that exactly these three words: ‘spirit’, ‘innovation’ and ‘quality’ are key concepts when it comes to transforming the traditional academic culture mostly based on content and scientific rigor toward an emerging culture based on potential and social responsibility. Content and rigor will not lose their decisive importance, but they will be integrated into something ‘bigger’, which may open a door for an innovative impact of higher education teaching and learning: Potential and responsibility. We observe today the emergence of a new orientation – ‘innovation of quality’ together with a new strategy for implementation: ‘spirit’.

The following article is directed primarily at the UNISTAFF ‘family’, that is, to our UNISTAFF colleagues and their growing networks. The global quality debate with all its powerful regional, international and national agencies – like INQUAAHE, ENQUA or ANECA – basically seems to be a symptom of deep transition processes higher education is currently passing through; full of risks and dangers, but certainly also full of opportunities in order to realign the traditional academic values with the emerging social and environmental challenges: Such as poverty, hunger, violence and climate change. Some of our colleagues won’t even recognize there is a problem for higher education, and many apparently focus on addressing surface solutions rather than root causes. I believe these challenges require from universities what in the productive sector has been called “corporate social responsibility”. These challenges are not a threat but rather an enormous space to further expand the powerful potentials of universities, especially in teaching and learning.
By the way, covered by warm blankets, I am finishing this text in a Mexican provincial town – San Luis del Potosí, suffering from a minor, however very uncomfortable impact of climate change: The coldest days ever observed in the area – and no heating available.

1. “New Dynamics”: Big Challenges

Only some months ago, in July 2009, the UNESCO World Conference on Higher Education discussed issues of “The New Dynamics of Higher Education and Research for Social Change and Development”. Quality - and its evaluation and assurance - has been a prominent issue at this event. Participants declared in their Communiqué (July 8, 2009):

“Quality assurance is a vital function in contemporary higher education” (19) and “higher education must pursue the goals of equity, relevance and quality simultaneously” (9). This last quote signals a significant shift in the university value system: From an exclusive focus on academic excellence towards a vision which integrates quality, responsibility, and equity – as the emerging mission of higher education teaching and learning.

At the European Ministerial Meeting of the ‘Bologna Countries’, April 2009 in Louvain-la-Neuve, Jan Figel, the Commissioner for Education, Training, Culture, and Youth, expressed in his key-note “Check against delivery”: “We all agree on the urgent need to modernize Europe’s education and training systems. Too much knowledge remains locked up in our universities and too much talent is wasted”.

The final Communiqué of this important political meeting concluded, with a view to the teaching and learning dimensions of higher education: “We reassert the importance of the teaching mission of higher education institutions and the necessity for ongoing curricular reform geared toward the development of learning outcomes. Student-centered learning requires empowering individual learners … With labor markets increasingly relying on higher skill levels and transversal competences, higher education should equip students with the advanced knowledge, skills and competences they need throughout their professional lives …”

Also, the European Universities in their “Prag Declaration 2009” focused their attention on innovation: “10 Success Factors for European Universities in the Next Decade”, and with reference to teaching and learning: “Providing relevant and innovative study programs - reinforcing the teaching mission of universities by maintaining curricular reform and renewal by introducing new approaches to teaching, offering flexible learning paths adapted to the needs of diverse learners and ensuring that tomorrow’s graduates, also those entering the labor market at Bachelor level, have the skills and competences needed to make them employable in rapidly changing job markets.”

Work is going on everywhere. Policies may be not always fully understood, with sometimes too much rush since what is at stake is a deep cultural change – or a paradigm shift - which may need much more time; basically a change of a culture of ‘contents’ to be researched and disseminated towards a culture of ‘potentials’ to be discovered and developed. So, no wonder that the ‘Bologna Ministers’ postponed the
original deadline for the realization of their agreements in 1999 from 2010 to 2020: 10 more years, close to double the time originally planned.

One more example from my own country: There is a shift also in attitude at the rectors’ levels of German universities, who identified “quality of curricula” and “commitment of teaching staff” as second and third (after “quality of professors”) of their “most important” concerns. (Forschung & Lehre 4/09, p. 261).

To conclude: At UNESCO’s World Conference in July 2009, government and university representatives of almost all countries of the world underlined their consensus to increase the visibility and importance of the commitment of higher education to the needs of the emerging global knowledge societies. This is difficult and complicated. There are so many dimensions beyond the traditional concept of academic science: A new orientation and new strategies are needed urgently. In this context of deep transformations, quality assurance seems to be one of the most powerful tools.

2. The Controversies

The first decade of the new century is now gone. With the 1999 Bologna decisions, a new era for European higher education systems started. ‘Bologna’ initiated so much far-reaching reform – and so much deep rooted resistance. Since June 2009, in many European cities, students went out to demonstrate for a new quality of their university careers. There was for a long time – at least in Germany – little positive response by the responsible politicians, including rectors and other authorities, unless in late December students started to take the universities: “Occupied”, “Master of Disaster” or “Education is not for sale” said their huge banners.
Apparently, these students are not politicized gangs of frustrated youngsters but committed young women and men concerned about what they are supposed to learn at the university. Their vision is not to be passively filled with an ever growing amount of knowledge and skills valid to be immediately sold at an anonymous economic market, but rather to build competences to live a meaningful life in a civic, democratic and healthy environment. What they are fighting for is space to develop competence to think, and not exclusively room for the accumulation of thoughts.

The lines of argumentation of the European students – and many of their professors - are clear primarily in one aspect that is the demand for more public funding. Then there is criticism against the ‘Bologna’ process – “Master of Disaster” as one poster read – criticism against a supposed shift of universities, being transformed into strict service institutions to cope with short-term economic needs of the ‘market’, against the ever increasing study and examination load, and finally against the proliferating bureaucratization within the university system. Students – and professors – claim to defend the true values of the academia and to promote a new consensus on quality in higher education. The old European idea of the university as ‘alma mater’ – a nourishing mother – appears to gain new attractiveness.
Behind the surface of the demands for change in the higher education system, recent research has shown that students when asked for their visions of a new quality in teaching and learning express a general agreement on new forms of learning, geared towards the development of competences rather than to the traditional accumulation of knowledge:

**Higher education institutions and their study programmes**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Rather agree</th>
<th>Rather disagree</th>
<th>Strongly disagree</th>
<th>DK/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study programmes should also include generic competences like communication skills, teamwork, and learning to learn (acquire learning skills for later life)</td>
<td>55</td>
<td>35</td>
<td>7</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Study programmes should focus on teaching specialised knowledge in a given field of study</td>
<td>47</td>
<td>39</td>
<td>10</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>HEIs should do more to ensure that a variety of social and cultural backgrounds are represented at universities</td>
<td>38</td>
<td>42</td>
<td>13</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>HEIs should provide more programmes for part-time students (lifelong learning)</td>
<td>32</td>
<td>46</td>
<td>12</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Q2. How much would you agree or disagree with the following statements?  
% Base: all respondents

Flash Eurobarometer No 260 / March 2009: 31 countries, 15,000 Students, p. 11

Also within universities, within faculties and within departments there are emerging conflicts amongst professors about the diverse orientations of their scientific work not only in teaching, but also in research. They experience currently a deep polarization of the quality debate, that is between so called ‘elite universities’ on the one extreme, and the requirements of the ‘new dynamics’ at the other one; between an orientation to the Science Citation Indexes and – for example – the need of local farmers. Apparently the long traditions of an implicit consensus of what quality in higher education should be is fading away and something new seems to be emerging, causing tensions and conflict everywhere. But there is also growing evidence that the future challenge for higher education institutions and their staff will not only be to become ‘better’, but also to become ‘different’. So what do we today really mean if we use the term ‘quality’, especially in teaching and learning – and what strategies are needed to ‘walk the talk’?

3. Quality Assurance: The Powerful Tool

The debate started at the early 70s of the last century, when all of a sudden quality became an issue related not only to learning – there we had a well established system of examinations to measure the quality of our students’ learning results – but also to teaching. Students started to ‘grade’ their teachers. ‘Evaluation’ became a powerful
approach and included a whole new series of elements: quality of students’ learning results, quality of teacher performance, quality of curricula, quality of institutional leadership, quality of contextual conditions, etc. To many university teachers this caused not only profound irritation and often enough strong resistances, but the most obvious thing was that evaluation caused a lot of additional work. Questionnaires had to be designed and agreed upon. This took hours and hours in faculty board meetings. Evaluation commissions had to be set up. Students had to be motivated to fill in all these questionnaires in a fair and appropriate mood. Then the analysis of the data, with so many implicit pitfalls, the reporting - and finally the observation of impact: ‘Evaluate the evaluators’: So many hours, so much paper work invested and - at least at the beginning - with little evidence of positive results.

![Students evaluating their programs at Kassel University, Faculty of Organic Agricultural Sciences, Witzenhausen](image)

Things seemed to get even worse when the need for accreditation appeared. This happened in Europe in the late 80s of the last century, when governments started to allow universities for more independence and autonomy in designing lines of research or establishing new curricula. Accreditation agencies were founded, new ‘quality’ bureaucracies mushroomed within and outside of the universities, sets of ‘principles and guidelines’ (ENQUA) had to be designed – and approved by governments, long reports to be prepared, peers to be trained and supervised, on-the-spot visits to be arranged etc. – and, definitely not the least, universities and faculties had to find the
funds to pay for all these accreditation procedures.

To many university scholars this whole endeavor seemed to become an enormous and unnecessary waste of resources, which at the end of the day only contributed – as they argued – to distract energy from the needed scientific work. The quality assurance debate with all its supposedly necessary activities appeared as an additional burden. ‘Quality assurance is, if not unnecessary, nevertheless extremely expensive’ was one of the core arguments of the ‘resisters’, while the promoters responded: ‘Higher education without quality is much, much more expensive’.

4. ‘Quality’: An Academic Battlefield

Beyond all the additional work required by the evaluation and accreditation adventure, the topic ‘quality’ itself revealed many scientific doubts and legitimate questions:

1. The origin of the quality approach;
2. The definition of ‘quality’;
3. The methods to measure and to prove quality;
4. The tangible impacts of the whole effort.

Here is not the place to go more deeply into the different and complex aspects of these issues. Basic challenges are involved of epistemology (positivism vs. constructivism), of organization theory (functions vs. systems) and of political theory (normative vs. analytical). Nevertheless I shall try to briefly share some of the main elements of each of these diverse mental positions.

(1) It was in the early 1950s, when Edwards Deming (1900 – 1993) started the quality approach in the USA, where he did not find much response. So he went to Japan, gained success and returned to his home country to promote the innovative ideas to focus work on quality. Amongst his “14 principles” are:

- “Constancy of purpose”;
- “Drive out fear”;
- “Break down barriers”;
- “Encourage education”; etc.

Because of its origin in the economic and commercial sector, the quality debate encountered strong resistance in the territory of universities: ‘science is no business’, and what may work in enterprises will not and should not work in universities. Furthermore, quality assurance was understood as a first step to sell universities and science to the ‘market’ and its short-term needs. Thus universities would lose their authentic values and identity, and risk becoming a mere service institution without any scientific dignity. The response to these critical arguments is that universities – especially in an era of emerging ‘knowledge societies’ – need to leave their splendid isolation as ‘ivory towers’ and to learn from other organizations in matters such as efficiency and relevance.
(2) There are generally three core definitions of quality in the field of higher education:

- Quality as fitness for purpose;
- Quality as consumer satisfaction;
- Quality as academic excellence.

All three approaches have their advantages and weaknesses when applied to university programs, staff or institutions. A main concern however with these definitions is that they seem to claim universal validity. Global standards, criteria and indicators are requested for the ‘university’, based on the traditional claim of ‘universality’ for science. This leads to a somewhat political concern that perceives quality assurance as a kind of ‘academic imperialism’. The emerging answer to this critique focuses on a crucial differentiation of two different types of quality: ‘vertical’ and ‘horizontal’ quality. ‘Vertical’ quality complies with global standards and justifies international ratings, as if universities, their teaching and learning and research, were identical all over the world. ‘Horizontal’ quality is seen as the necessary particular profile of a higher education institution or program; ‘horizontal’ quality refers to contextual standards and to cultural identities. Thus, quality assurance can be taken as a powerful tool to promote identity and profile, and not only to strengthen the pressure to submit to global standards, which a provincial university like Kassel University (my own former university) will never be able to cope with completely: Kassel cannot become Harvard - and should not try to. So the challenge for most universities of the world would not be to invest in complying exclusively with global standards, but rather in balancing those standards with locally identified standards, conditions and needs. Quality assurance could be used to support this focus on the legitimacy and relevance of ‘horizontal’ quality dimensions. The open concept of quality thus appears not as a threat to scientific values, but rather as an opportunity to use quality assurance as a tool to design and agree upon authentic visions of one’s own university or faculty: ‘What gets measured, gets done!’

(3) How to measure quality? When there is no consensus in the global scientific community on what quality is, how can there be a general agreement on ‘correct’ modes to measure this unknown thing? There is a growing consensus that quality indicators need to be measured and observed by quantitative and qualitative methods. But there is no such thing as an ideal questionnaire, reliable and valid for all universities, scientific disciplines and faculties of the world. There is no general agreement of how much ‘information’ and how much ‘interpretation’ should be applied. There is no single answer to the question of how much is ‘much’. Nevertheless, each institution needs to find a way to agree upon certain appropriate ways and instruments to measure its own particular quality.

(4) After many years of apparently observing just an increase of bureaucracy, external control, supposedly wasted resources and damaged faculty social climates as results of quality assurance, recent research shows some strong empirical evidence of positive impacts.
The recent OECD’s “Education at a Glance 2009” (www.oecd.org/edu/eag2009) reports that appraisal of and/or feedback to teachers did lead not only to moderate or large change in attitudes and performances, but also to significant changes of institutional cultures, becoming more open to self-directed learning and competence development (see also GYNNILD 2007 for a Norwegian Case Study). Similar positive results – like more personal satisfaction and improvement of teaching and learning – have been found in Germany (BORNMANN, MITTAG, DANIEL 2006). The Centre for Higher Education Policy Studies, University of Twente, Netherlands, together with the Centre for Research in International Education, Monash University, Australia, published an overall study to observe the impact of rankings in higher education (MARGINSON, VAN DER WENDE 2006) and found significant positive effects (see also CHE – Centrum für Hochschulentwicklung – and IREG – International Observatory on Rankings and Academic Excellence). Also in the field of evaluating quality assurance agencies, there is increasing evidence of tangible positive results (SZANTO 2005; HOPBACH 2006).

Without any doubt, it is essential to discuss these controversial issues of the quality debate within the universities and it is necessary to collect new data to support or to weaken different positions; on the other hand, I believe, there is also a need to understand the growing impatience which proliferates not only in those open student manifestations on the streets of almost all European cities, but also in the increasing tensions within the universities and the emerging harshness of many policy statements: We cannot afford, I do believe, to invest time and energy exclusively in theoretical academic debates on methods and impacts without taking into account the urgent need for a new orientation of quality within the field of our work.

5. Towards Innovation of Quality – and a New Spirit

The main reasons quality assurance is currently running into trouble seem to be a reduced concept of quality itself and an ineffective approach of strategies. There sometimes appear to be what may be described as fences in our mind which prevent us from going beyond our zones of comfort and opening the door to a new and more promising territory.

In the early 80s of the last century I had the chance to visit Lee Cronbach at Stanford University. He – together with several other colleagues – had just finished a book which later became famous in the international evaluation debate: “Reform of Program Evaluation”. So it is almost 30 years that we have known: “Scientific quality is not the principle standard; an evaluation should aim to be comprehensible, correct and complete, and credible to partisans on all sides” (CRONBACH 1980, p. 11). However, many of our discussions today still neglect the decisive relevance of the social and emotional dimensions of our efforts to strengthen quality. There is kind of a blind spot in many academic debates focusing only on ‘scientific quality’ and by doing so we tend to risk the potential of our strategic efforts to promote innovation of quality.
If we succeed in perceiving that some essential dimensions may be missing in our debates on mental concepts and cognitive approaches, we can start to discover two decisive elements:

Firstly a missing element of what we perceive as quality, that is relevance and equity; and, secondly an element of how we proceed with our strategies to cope with the requirements of innovation of quality: A new spirit.

I call this last dimension ‘new spirit’, because it points to and covers above all a step beyond the traditional ‘spirit’ of who is right or who is wrong. The ‘new spirit’ includes decisively a commitment to the needs of mutual respect. Today I understand that the inclusion of these elements may change the whole debate and may contribute to quite an innovative and tangible impact of our discussions.

Sometimes this is very difficult and it takes lot of patience, since many scholars have trained their brains to focus on right or wrong, and on the domination of the cognitive dimensions of their synaptic networks. These neuronal settings seem to have gotten so physiologically strong that it is almost impossible to modify them and to go beyond the deeply constructed and believed patterns of perception and action. People sometimes cling to their unconscious ‘grammars’ of perception and action, they – as well as I myself may be doing often enough - tend to defend their hidden blind spots as if they were part of an objective reality. So we may hurt others, and we certainly hurt the efficacy of our institutions to cope with the emerging challenges. What is needed in these debates and actions is not a spirit of control and domination, but of attention, respect and humility: Listening, and then inviting, animating, and inspiring...

In summary, I believe that there are two essential things necessary to move toward an effective commitment to innovative quality, that is:

- **What?** Recognizing the emerging conceptual triangle of innovative quality, which maintains the traditional focus on academic excellence but integrates also ‘relevance’ and ‘sustainable development’; so the new ‘innovative’ quality is no longer just a unilateral concept, but a complex interaction of these three core elements – within a specific context:

```
Academic Excellence

Relevance                           Sustainable Development
(Equity)
```

*Corner stones of an innovation of quality*
A new spirit: The innovation of quality in teaching and learning

Academic excellence is not per se relevant; and relevance is not per se academically excellent; and both do not contribute automatically to sustainable development. This may seem to be trivial, but we find these necessary and productive interactions rarely in our discourses and even less often in our activities.

How? Understanding and acting according to the strategic triangle, balancing the traditional cognitive focus on visions and strategies with a meta-cognitive approach tapping also into the potential of the social and emotional domains, personally as well as organizationally:

![Strategic Triangle Diagram]

Key dimensions of promoting innovation of quality

Combining a strong and rigorous focus on cognitive contents with respect to diverse positions and with trust to other colleagues will assure effectiveness of our commitment at the long run. Recent research from the world of business seems to prove even a superior impact by ‘charisma’ over cognition: “It’s not what you say, it’s how you say it. It’s possible to predict which executive will win a business competition solely (!) on the basis of social signals they send” (PENTLAND 2010, p. 34).

Of course, there has always been kind of a ‘spirit’, but too often it becomes a spirit of control, power, domination or superiority, and not a spirit of trust and sharing – towards students as well as colleagues and authorities. While the obsolete ‘spirit’ of distrust and cynicism leads to permanent struggles, to internal emigrations of colleagues, to unnecessary submission of students, which, in summary, is a loss of commitment and potential, the new ‘spirit’ will cope with the challenges of meeting the needs of society. The inspired strategies may seem at first glance as slow and inefficient, but in reality there is growing evidence of powerful effectiveness of teaching and learning in the long run. Anyway, the essential challenge – as I see it now – is currently not so much in academic excellence, but rather in relevance and sustainable development – or equity. Our processes in university teaching and learning, I feel, should these days focus not so much on trying to define shared visions and goals or assuring strategies and finding the necessary resources, but rather on building a conducive ‘spirit’ of mutual respect, trust and support.
Some Consequences for Teaching and Learning

If somebody were to ask for practical consequences in teaching and learning, I would spontaneously tend to suggest – beyond the power of all the useful new technologies – the following issues:

• In teacher performance:
  1. Focus on a balance between cognitive information and inspiration for the development of emerging potentials in your students;
  2. convince your students to participate pro-actively in their journey to develop competencies;
  3. reduce transfer of content and increase room for relevant learning;
  4. reduce reproductive examinations and increase the reliable observation of competencies, oriented towards social, economic and environmental needs of a specific context;
  5. in summary, try to be a “guide on the side” rather than a “sage on the stage”.

• In student performance:
  1. Take pro-active responsibility for your own learning;
  2. increase your trust and courage to talk to your teachers – and your peers;
  3. take evaluations seriously and demand impacts.

• In designing, implementing and evaluating curricula:
  1. Strengthen the involvement of students and other stake-holders (farmers, entrepreneurs, engineers etc.) in designing, implementing and evaluating curricula;
  2. design room for methods beyond lectures, such as project work, field trips, internships etc.;
  3. reduce the academic focus (lecture halls, laboratories etc.) and increase cooperation with “real world” contexts (communities, NGOs, enterprises, unions, farms etc.) and their challenges.

These are just potential suggestions, and it would certainly be better for the quality of the reader’s work, that she or he finds her or his own personal path of doing their teaching – and learning.

In higher education, especially if holding a tenure position, we may survive without “constant rethinking and reinvention” (IGNATIUS 2010, p. 10), the quality of our teaching and learning – and the quality of our lives, I believe – will not.
Since this text was written with an eye to our UNISTAFF colleagues, all well equipped with reference materials through our ‘reading materials’ and UNISTAFF web site www.unistaff.de, only some additional readings – specifically more recent ones - are mentioned here:

References


Looking forwards – looking backwards: UNISTAFF Programme Tracer Study 2008

Siawuch Amini

Abstract
The current tracer study has been carried out to prove the impact of the University Staff Development Programme from the graduates’ viewpoint.

The main goal of the study is to find out the impact of the programme on the career development of the participants in the event of changes that may have taken place in the corresponding institutions and in order to hand over the results to the new organization of UNISTAFF since ISOS has stopped its activities by the end of July 2009 as a result of personnel matters.

The basic assumption is that UNISTAFF has been successful in strengthening the awareness of the role of higher education institutions and their staff, the utilization and expansion of information and knowledge in the corresponding societies, and anticipating the changes necessary to meet the challenges more effectively. For a better understanding of the verified results of this study, a short description of the programme is given.

Background -The Study Programme
The Institute for Socio-cultural Studies (ISOS) at the University of Kassel-Witzenhausen has carried out University Staff Development Programmes since 1994 for improving higher education management. The modules offered in this programme for staff members from universities in Asia, Africa and Latin America are

- Teaching and learning, curriculum development and quality assurance in teaching and learning
- Organizational development, university leadership and governance
- Research and knowledge management

The modules are accompanied by three further important elements, namely

- Meeting colleagues
- Projects
- Excursions to Bonn and Berlin

Finally, the programme includes a lot of extra-curricular activities, like cultural evenings, week-end cultural visits and other social events.

The University Staff Development Programme (UNISTAFF) has taken place once a year since 1994. ISOS has carried out successfully 15 UNISTAFF courses with about 300 participants from 29 countries. In its unique setting, UNISTAFF is known as an effective programme for improving personal capabilities, institutional development and quality and performance of higher education institutions. The search for the reasons of the success of the programme is an important challenge, and is the general
goal of the current study.
The study provides information that helps to understand the positive feed-backs of the respondents and to realize from which perspectives the participants react to the questions.

With its specific features, the UNISTAFF course has produced a large amount of knowledge relevant to the objectives of participants. It has increased their awareness of the role of higher education and staff in generating and anticipating necessary changes in favour of competitiveness and international co-operation in the era of globalization. It has helped to accept the reality of the role of individuals and institutions in fostering quality and relevance and has made them competent in utilizing the information shared within the UNISTAFF by the trainers and by participants themselves. Finally, the UNISTAFF has enabled the expansion of information within the corresponding institutions in which the graduates of the course have been involved after their return. The following specifications are especially important for these assumptions:

**UNISTAFF: A learning environment**
The distinction theory (Luhmann, 90, 00) understands learning as a process of differentiation of self and non-self. Among a large number of definitions for learning, this definition seems to fit into an attempt to explain the processes of learning in UNISTAFF. The distinction between self and non-self goes beyond the process of cognitive learning which is mainly focused on getting information that is structurally determined and may lead to internalized values within the frame of socialization. Important as cognitive learning is, it may - in the worst case - lead to a homogeneous goal-oriented non-creative and non-innovative group of people thinking and acting in the same way. The distinction of self and non-self seems at the first glance to produce a chaotic situation and with its reference to individualism, disturbance, destruction and anarchy with high complexity. However, at the same time it produces innovation, creativity, confidence and trust and leads to social capital (Taylor, 02) crucial to change and development. The following paper will try to examine these assumptions by analyzing UNISTAFF as a specific learning environment.

**Diversity as a base for learning**
Participants of UNISTAFF are individuals with different cultural backgrounds. They come from different countries and consequently differ in biography and socialization. In addition to this, they have different educational backgrounds coming from different academic disciplines. They speak different mother tongues and even the English language as the common language of the course is not the same, not only because of different levels of English language abilities, but also in terms of jargons, items and words with different meanings and contexts. Gender is another aspect of differentiation; beyond many other factors, participants’ expectations demonstrate a complex situation. How can learning take place in such a complex situation? This is one of the major challenges to the organization of learning in UNISTAFF.
According to the distinction theory this complexity can be taken as a great chance and therefore should be supported extended to make the diversity even more complex and not to reduce it to achieve a simple situation within which the information exchanged remains at a level of cognitive learning for all individuals and does not move to a new layer of a dynamic process of learning.

Making diversity and complexity productive is a big challenge for the trainers at the same time. Dealing with diverse participants’ experiences and knowledge backgrounds and making use of them for a better learning requires higher workload.

**Structure and function**

From the above mentioned theses it should be clear that functions play a dominant role against structure. Within system theory, the so-called functional-structural approach refers to functions as the determinants of structure. The contributions of the elements of the system to the dynamic structure, its stability and change are the condition sine qua non. UNISTAFF participants and their contributions to the genesis of a certain course structure have played a crucial role. Due to this the attempt to understand the success story of UNISTAFF from a structuralist approach will hardly reflect its real philosophy. In previous studies concerning the evaluation of UNISTAFF, the question of its so-called “chemistry” (King, 99) remained almost unanswered because all explanations have put the structure first and have tried to analyze the functions. The fact that UNISTAFF has built a certain structure by supporting the individuals’ functions and not the other way round has been felt, but not methodologically analyzed.

**Space for acquiring tacit knowledge**

UNISTAFF puts emphasis on a hidden curriculum and on the context. It respects the importance of tacit knowledge, and involves the potentials, the abilities, the skills and emotions of the participants as individuals. Based on dialogue and field building, the socialization, externalization, combination and internalization take place in a process of learning. The externalization of tacit knowledge takes place in an open system within which the explicit knowledge is not deterministic, but rather dispositional. This means that the association of the cognitive knowledge and the tacit knowledge made explicit, bear a potential of professionalism in any kind of environment that individuals may face in future. The enlargement of the information and the association of knowledge gained facilitate a meaningful selection of information relevant to any structure for anticipating and generating desired changes.

**Shared meaning**

Fostering diversity and the individuals’ self-organized models can lead to a system of individualism with a high complexity in which a solid structure cannot easily be determined. That is a major reason why functionalist conceptions and real constructive approaches have an uneasy relationship and are not practiced in learning environments. If learning is understood as the distinction between self and non-self, it
could be assumed that more distinction leads to more learning. The basis for this learning is any kind of information shared. For this distinction information is needed to distinguish from non-self. The tautological basis of this is that dependency is required for the independence (paradoxon). The more information is shared and got, the more individuals distinguish themselves from non-self and the more they need information delivered by non-self. This is the basis for shared meaning. Shared meaning does not mean to achieve a common goal or to come to a common vision and mission, but to achieve the independence in dependency. This is the synergy and the real network.

**Individual and social capital**

The training programme focuses on improving individual capital in terms of learning skills and abilities to do things which are needed (competence) in activities related to the university, like teaching and learning, research organization, university management and organization (Williamson, 93). However, the training programme UNISTAFF is very much concerned about the development of social capital in terms of sharing knowledge, processing knowledge in favour of the institution (it focuses on how an organization, either in a higher education system or the private sector identifies, creates, captures, acquires, shares and leverages knowledge). This seems to be one of the major strengths of the training programme. To achieve the development of social capital increasing trust ((Misztal, 96; Nielson, 03; Raiser 99; Ruuskanen, 03; Ganesan, 97; Buskens, 02; Canesan, 97) as a basis for social order (Burt, 92) and a lubricant of co-operation (Gulati, 95) plays a crucial role. Increasing trust itself is a difficult task which can be achieved indirectly. Networking as a tool plays a fundamental role in this.

**Quality and evaluation culture**

The quality of the UNISTAFF training programme is embedded in the development of an evaluation culture. Fitness for purpose, stakeholder satisfaction and other indicators for quality are discussed in close relation to internal evaluation. The participants are actively involved in critically discussing the quality which is structurally and externally defined and in trying to bring it into a balance with the activity of individuals from a functional perspective. Self-evaluation is seen as basis for quality assurance in higher education, especially for supporting decision makers and policy makers to anticipate necessary changes required in the era of competitiveness and globalization. Internal evaluation is seen as a basis for improvement and assuring quality.
Networking

Networking (Larson, 92; Uzzi, 97) is one of the strongest tools for increasing trust, managing distrust and regulating political and academic control. It helps to cultivate readiness for placing resources into the hands of others by taking the aspects of pay-off or interests into consideration. The action is attributed to communication at the network level; learning is expected to have its own dynamics. The dynamics of the interactions are assumed to "self"-organize the roles that are attributed to the actors. The actors (learners) carry the network at the nodes while the links of the network span an architecture which develops additional complexity in terms of its recursive interactions. The architecture of relations can be considered as a structure containing the expected information of the network’s further development (Leydesdorff, 94). It is obvious that the communication within the UNISTAFF network goes beyond the communication of individuals as a dynamic process on a second layer. Examples are the Networks INDOSTAFF, GIAN and REAL which are all involved in improving higher education management.

Methodology

More than 300 participants have been asked to fill in a questionnaire that was sent to them digitally in the beginning of July 2008. 147 responses were finally registered, after two reminders within a year. This means that the rate of responses is 49%; actually a high degree in comparison. Five questionnaires were partly useless, either for technical reasons or because they were not filled in correctly.

One of the major obstacles to tracer study surveys is that the information about those who did not react to the request cannot be checked easily and from this point of view the results are referring only to those who have responded. The reasons why many of the UNISTAFF alumni did not respond and what opinions are hidden behind that can only guessed at in vague assumptions.

However, many E-mail addresses of the alumni were not valid anymore (about 25%) and ISOS cannot update them easily. Some participants did not have easy access to internet; a few did not fill in the questionnaire digitally; some could technically not send the E-Mails from their local workplace, etc. Taking all those technical aspects into consideration, the rate of response becomes remarkable and the results are of a high value for generalization.
All these assumptions do not help to find serious arguments for the respondents’ passivity. In tracer studies in general, a black-box remains a serious methodological problem. The assumption is that the study can hardly argue whether the responses of those who did not react would be positive or rather critical and the opinion of those who have reacted is not rather positively put. Attempts to find out the reaction of non-respondents are however very costly and the output can hardly justify the input.

The developed questionnaire includes 27 questions. Nine questions are open.

The questionnaire asked about the specific current functions and positions of the alumni and their functions and positions before attending the UNISTAFF-programme in order to find out about their career planning. Since career planning is an autonomous process, we tried to find out to what extend the UNISTAFF programme contributed to it. Furthermore we wanted to find out how the alumni evaluate the programme (the modules offered) after returning home and from a distance. Besides, we wanted identify the impact of UNISTAFF on the institutional development, personal mastery and the evaluation of the curriculum. A qualitative approach was indicated to check the statements of the alumni by open questions, which are an important part of the survey.

The table here shows the number of respondents. It is evident that the number of respondents grows in relation to the time. In 2008 only one participant who returned home early could fill in the questionnaire.

The collected data were analyzed by SPSS-software 17.
General facts
Table 2 shows the number of participants in the UNISTAFF programme from 1994 – 2008. Indonesia, Kenya, the Philippines, Iran and Costa Rica have the highest number of participants out of the total number of 293. The number of respondents from the different countries is shown in the second column. As can be seen from the third column, the Philippines show the highest percentage of respondents, followed by Malawi, El Salvador, Iran and Costa Rica. 48.80% of respondents show a high rate of feed-back. Due to the low number of respondents from other countries with a low number of participants, the rate of respondents may raise to almost 58% which increases the value of representation and consequently the value of results of this survey. Nicaragua was facing severe social unrest at the time of data collection.

Table 2: The number and the rate of respondents in relation to the total number of participants (1994 – 2008)

<table>
<thead>
<tr>
<th>Country</th>
<th>No. Participants</th>
<th>No. Respondents</th>
<th>% Respondents</th>
<th>% of respondents to total No. of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>17</td>
<td>12</td>
<td>70.58</td>
<td>4.09</td>
</tr>
<tr>
<td>Egypt</td>
<td>12</td>
<td>6</td>
<td>50.00</td>
<td>2.45</td>
</tr>
<tr>
<td>El Salvador</td>
<td>4</td>
<td>3</td>
<td>75.00</td>
<td>1.22</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>15</td>
<td>3</td>
<td>20.00</td>
<td>1.22</td>
</tr>
<tr>
<td>Guatemala</td>
<td>9</td>
<td>3</td>
<td>33.33</td>
<td>1.22</td>
</tr>
<tr>
<td>Honduras</td>
<td>10</td>
<td>4</td>
<td>40.00</td>
<td>1.37</td>
</tr>
<tr>
<td>Indonesia</td>
<td>63</td>
<td>35</td>
<td>53.85</td>
<td>11.94</td>
</tr>
<tr>
<td>Iran</td>
<td>18</td>
<td>13</td>
<td>72.22</td>
<td>4.44</td>
</tr>
<tr>
<td>Kenya</td>
<td>26</td>
<td>16</td>
<td>61.54</td>
<td>5.46</td>
</tr>
<tr>
<td>Malawi</td>
<td>13</td>
<td>10</td>
<td>76.92</td>
<td>3.41</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>7</td>
<td>03</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Panama</td>
<td>11</td>
<td>3</td>
<td>27.27</td>
<td>1.22</td>
</tr>
<tr>
<td>Philippines</td>
<td>24</td>
<td>19</td>
<td>79.17</td>
<td>6.49</td>
</tr>
<tr>
<td>Uganda</td>
<td>16</td>
<td>6</td>
<td>37.50</td>
<td>2.45</td>
</tr>
<tr>
<td>Vietnam</td>
<td>4</td>
<td>2</td>
<td>50.00</td>
<td>0.69</td>
</tr>
<tr>
<td>Others 1)</td>
<td>44</td>
<td>8</td>
<td>18.18</td>
<td>2.73</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>293</strong></td>
<td><strong>143</strong></td>
<td><strong>48.80</strong></td>
<td><strong>48.80</strong></td>
</tr>
</tbody>
</table>

1) Other countries are: Afghanistan 1, Argentina 2, Brazil 2, Cambodia 1, Cameroon 1, Colombia 3, Ghana 4, Iraq 3, Lao P.D.R. 4, Mauritius 2, Mexico 2 (since 2008), Mongolia 6, Namibia 2, Nepal 1, Nigeria 3, Peru 1, Sri Lanka 1, Tanzania 2, Venezuela 1, not specified 2.

Academic Positions and Functions
The majority of the respondents are lecturers and senior lecturers (48), the number of associated and assistant professor is 40, followed by full professors as shown in the table. The figures reflect the general structure of the UNISTAFF participants: a mixed group of young and experienced staff which is a basis for effective learning from each other with different backgrounds and experiences.
Table 3: Academic positions and functions of respondents

<table>
<thead>
<tr>
<th>Academic position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>35/13</td>
<td>48</td>
</tr>
<tr>
<td>Assistant Prof.</td>
<td>21</td>
<td>14.69</td>
</tr>
<tr>
<td>Associated Prof.</td>
<td>19</td>
<td>13.29</td>
</tr>
<tr>
<td>Full Prof.</td>
<td>35</td>
<td>24.48</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>10.47</td>
</tr>
</tbody>
</table>

About 90% of the alumni do have academic positions and functions which are mentioned below:

Administrator Instructor, Lector (4); Assistant to Vice Rector for Academic Affairs (2); Coordinators (32); Dean or deputy (8); Director (12); Head of Department (28); Ministry of education; Programme Manager (3); Quality Assurance Officer (2); Researcher and Evaluator (2); About 48% have more than one function in their workplace.

Motivation of participation

The motivation to attend UNISTAFF is of course not quite clear before participation. The expectations are not quite clear and the desires are diffuse and partly frightening and unsettling. We asked about a series of motivational aspects from the course organizers’ viewpoint. The results show a high incidence of motives like personal mastery and personal development (quite an open issue), followed by university governance, improvement of teaching and learning, and a low rate for research organization (all three more concrete).

Impact on institution

98.6% of respondents rate the specific value of the attended programme of UNISTAFF between very high (72.2%) and high (24.3%). Consequently only 1.4% of respondents are indifferent to the specific value of UNISTAFF as a whole.

However, 98% of participants state that the learning results of the UNISTAFF course could be more or less applied in their workplace. How successful they have been in the application is shown in figure 1.
35.46% have been very successful, 53.19 successful (together 88.65) and moderate application was possible for 9.22%. The high rate of applicability (97.87%) means that the learning results have had a certain impact on change at the workplace.

Table 4 shows that the most successful groups come from the Philippines and Costa Rica where applicability is rated high.

The results are quite encouraging. The UNISTAFF programme offers skills, knowledge and values very relevant to local situations. One of the participants describes this as an “effective and useful transfer of knowledge without border limitations”.

As can be seen in the table below 125 respondents out of 141 (88.65 %) have applied the knowledge gained in UNISTAFF at their workplace successfully and very successfully. The specific strategies for the application can be shown partly in the qualitative part of this study.
Table 4: Cross tabulation between country and success in application of the learning results of UNISTAFF at the workplace

<table>
<thead>
<tr>
<th>Country</th>
<th>If yes, please specify</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very successfully/successfully</td>
<td>Moderately</td>
</tr>
<tr>
<td>Indonesia</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Philippines</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Iran</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Philippines</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Iran</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>El Salvador</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Honduras</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Panama</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Egypt</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Uganda</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Kenya</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Malawi</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>other country</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>13</td>
</tr>
</tbody>
</table>

Value of the programme

98.1 % of the respondents say that the training during the UNISTAFF course has been quite important or important for their activities in their workplace and 92.2 % say that the course has been important or very important for their career development.

The study was interested to find out whether the UNISTAFF has been valuable for them and if so, in what areas. The answers go in different directions which can be summarized as follows:
The respondents state that UNISTAFF has given them new understanding for approaching the work within and outside the university. In the university they have influenced the younger generation of lecturers who are more receptive to change. In co-operation with colleagues, they have gained knowledge to make them understand why and how things can happen for personal and institutional development. Many of them have worked in committees for curriculum development, as skilful designers of post-graduate study programmes after finishing the UNISTAFF. They have worked partly as university managers in key positions, organizing research teams and motivating colleagues for interdisciplinary research, and writing research proposal.

A few have been very successful as vice deans and heads of departments in their institution in organizing public services and enforcing extra-mural and entrepreneurial innovative and creative activities.

Many graduates state that they acquired tools and means and necessary knowledge to socialize colleagues and students asking for their potentials and developing dialog and field building. In this sense they have gained knowledge to deal with different ideas, tolerate and support them creatively and efficiently.

Many of the respondents appreciate the skills and views in UNISTAFF which made them better teachers and learners, better administrators, leaders and organizers as well as better research managers of both quantitative and qualitative approaches in their universities, and for achieving goals and purposes for the competitiveness and quality of their institutions. In the majority of cases they mention the increase in competence and what counts more, confidence and self-confidence for which UNISTAFF has given the space and expertise.

They could improve their social abilities for better understanding of the relationship of different components of university actions, personal and institutional capacity development for better use of participatory methodologies, and better understanding of university management which is rarely provided by other courses. They have been empowered to share visions, experiences and to understand the approaches of other countries in their struggle to improve the higher education system and its relevance for society, beneficiaries, stakeholders and economic development and to keep in mind the importance of human rights, gender issues, alleviation of poverty and rural development.

The respondents underline the lessons learnt for initiating, anticipating and managing changes in the universities according to international quality requirements, accreditation, for establishing new effective research centres, introducing evaluation and self-evaluation in their institutions, including the appropriate methodologies and strategies.

They mention the approaches related to placing trust, to managing distrust and organizing control for the measurement of performance in relation to different organizational settings and the possibility to look for and examine the possibilities of organizing internal and external professional networking systems and their coordination and maintenance in term of sustainability.

The readiness to take responsibility for themselves and their institutions as well as the
readiness to look after the activities of colleagues, even from other disciplines, and the readiness to get and share information within the frame of knowledge transfer and the development of respect for other colleagues, administrative bodies, students and stakeholders belong to the skills gained in UNISTAFF.

Some argue that the interactive learning, especially from colleagues from different cultures and disciplines during UNISTAFF was one of the most important experiences in their lives. They could get a lot of information on active learning, deep learning, cultural and cross-cultural learning, highly relevant to their professional and daily life.

 Provision with the ability to look for more opportunities, to obtain important insight about different issues, to prepare for university governance and management, and provision with new perspectives to induce the university to change into a learning organization were great experiences in UNISTAFF.

**Personal and career development**

1. **Personal development**

The respondents rate very high (39.3%), high (46.7%), more or less (10.3%) and low and very low (0.8%) the changes for career development in their universities after participation in the UNISTAFF course. They are satisfied very highly (43.0 %), highly (47.7 %), moderately (5.6 %) and finally not satisfied (1.9 %).

Beyond the opportunities for personal development, the respondents have succeeded very strongly (28.0 %), quite strongly (44.9 %), moderately (20.6 %) in bringing about a kind of change in the workplace, which could be linked to the UNISTAFF experience.

2. **Indicators for gaining abilities**

The theoretical assumption here is that certain abilities and characteristics are crucial in the career planning of individuals in higher education services. These abilities and characteristics are supportive of the norms and procedures existing in many universities. They help to make the career faster and achieve the level of performance sooner and occupy sensitive managerial positions within the higher education system.

We suggested twelve factors that are important for a career development in the university. These factors have been selected carefully on the basis of evaluations in the previous 15 courses and of experiences with all participants, discussions and group discussions as well as theoretical conceptions. These indicators are personality, accomplishment abilities, persuasion abilities, social abilities, emotional abilities, scientific abilities, self-confidence, management abilities, rationality, efficiency, communicative abilities and maintaining relations.

It is obvious that many of these categories are inter-correlated. The analysis of the inter-class-correlation on a nominal scale does not show any likelihood of the categories that would mean that the respondents differ among the categories.
We have asked the alumni to rank these factors according to their importance for the respondents; even the ranking on a scale between 1 to 5 could not verify significantly the likelihood of the categories. We assume therefore that it is possible to take these categories as single issues and relate them to the qualitative announcements of the respondents.

In a second step, we wanted the respondents to rank the impact of the UNISTAFF training programme on strengthening and improving or gaining those abilities and skills. The results are discussed as follows:

In the study the alumni were asked to rank the importance and relevance of the following abilities for succeeding in their activities in the workplace and to rank the impact of the programme in achieving those abilities. The hypothesis here is that the abilities gained by participants are embedded in the indicators above.

The summarized results are shown in the table 5.

Table 5: Aggregated total named categories of indicators

<table>
<thead>
<tr>
<th>Category/Abilities</th>
<th>Total named category</th>
<th>Total named impact</th>
<th>Achieved percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality</td>
<td>41</td>
<td>43</td>
<td>104.90</td>
</tr>
<tr>
<td>Accomplishment abilities</td>
<td>47</td>
<td>42</td>
<td>89.30</td>
</tr>
<tr>
<td>Persuasion abilities</td>
<td>16</td>
<td>17</td>
<td>106.25</td>
</tr>
<tr>
<td>Emotional abilities</td>
<td>25</td>
<td>25</td>
<td>100.00</td>
</tr>
<tr>
<td>Social abilities</td>
<td>25</td>
<td>42</td>
<td>168.00</td>
</tr>
<tr>
<td>Scientific abilities</td>
<td>65</td>
<td>52</td>
<td>80.00</td>
</tr>
<tr>
<td>Self-confidence</td>
<td>59</td>
<td>50</td>
<td>84.75</td>
</tr>
<tr>
<td>Management abilities</td>
<td>77</td>
<td>69</td>
<td>89.61</td>
</tr>
<tr>
<td>Rationality</td>
<td>32</td>
<td>28</td>
<td>87.50</td>
</tr>
<tr>
<td>Efficiency</td>
<td>45</td>
<td>41</td>
<td>91.11</td>
</tr>
<tr>
<td>Communicative abilities</td>
<td>46</td>
<td>41</td>
<td>89.13</td>
</tr>
<tr>
<td>Maintaining relationship</td>
<td>36</td>
<td>35</td>
<td>97.22</td>
</tr>
</tbody>
</table>

The figures in the table show that the participants rate highly the value of the category of management abilities, mostly followed by scientific abilities and self-confidence. Taking these expectations in relation to the impact of the UNISTAFF programme, the management abilities reach the level of 90%, the scientific abilities the level of 80% and self-confidence the level of 85%. Social abilities, persuasion abilities and improving personality reach levels higher than the levels of expectations. Especially the social abilities which refer to social interaction in terms of sharing and getting go far beyond the expectations. Generally, it can be said that the highest absolute values concerning the impact of the programme lie in getting managerial abilities, followed by scientific abilities and finally self-confidence. This empirical finding as part of the tracer study underlines the specific role of the UNISTAFF programme in preparing a
learning environment that is not focusing on getting cognitive knowledge, but on knowledge in the context of those aspects discussed above.

**Degree of responsibility**

The figure below shows the career planning of the participants in terms of their responsibilities before and after participation in UNISTAFF in relation to top management in the corresponding institutions on a scale between 1 and 10 (one = very remote from top position and 10 = very close to top position). The responsibility of the participants in relation to top management was between 4 and 5 in Costa Rica, Honduras, Uganda, Kenya and Iran, and between 3 and 4 in Egypt, Indonesia, the Philippines and El Salvador, and between 1.5 and 2 in Guatemala, Ethiopia and Vietnam.

*Fig. 2: The career development of the participants from different countries*

The career development is shown in the grey area. As it can be seen from the figure, the development is different in different countries. Egypt, Vietnam and Guatemala show high rates of career development, followed by Iran, Indonesia and the Philippines. The countries with participants with high responsibility have made smaller career advances. This is of course understandable. Low numbers of participants in some few cases make the analysis rather difficult. An analysis of the
time frame (an indicator for career development) could be neglected due to similar trends in all countries.

Since career planning is an autonomous process and can happen without external training programmes such as UNISTAFF, the study asked about the possible impact of UNISTAFF from a participants’ viewpoint. The impact of UNISTAFF is rated “very high” by 32.7 %, “high” by 48.6 %, “more or less” by 13.1% and “low” by 2.8% of the respondents. Furthermore, 33.6% of the respondents value the impact of UNISTAFF as more than 50%, and 52.8 % of them rate the impact between 31 – 50%. Only 12.1 % of respondents rate the impact as less than 10%.

Figure 3 demonstrates the impact of UNISTAFF on the career development of respondents. The light area (50 % and more share of UNISTAFF) is remarkable. Other layers from top to bottom show 41 – 50 % share of UNISTAFF, etc. Egypt, as can be seen in the lowest area, shows very little impact of UNISTAFF, probably because of the unique system of career planning.

Fig. 3: The impact of UNISTAFF in the dynamic process of career development
Impact of the modules

Many statements refer to general impacts of the UNISTAFF programme which can be subsumed under getting more confidence after participation; the majority of these competences are stated and valued positively in relation to the three modules “Organizational Development”, “Teaching and Learning”, “Research and Knowledge Management”. Selected statements from a large number are mentioned here:

63% of respondents say that the UNISTAFF experience acted as a stage on the way to further qualification and 66% say that the experience was recognized within the department or institution. 83% declare that the UNISTAFF experience has added an important facet to their CV.

Table 6: Statements to UNISTAFF and the corresponding modules

<table>
<thead>
<tr>
<th>Categories</th>
<th>Cases</th>
<th>% out of 107</th>
</tr>
</thead>
<tbody>
<tr>
<td>It acted as a stage on the way to further qualification</td>
<td>63</td>
<td>59</td>
</tr>
<tr>
<td>It was recognized within the department or institution</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td>It has added an important facet to my CV</td>
<td>83</td>
<td>77</td>
</tr>
<tr>
<td>It has changed my attitude towards research</td>
<td>79</td>
<td>74</td>
</tr>
<tr>
<td>It has changed my attitude towards teaching</td>
<td>92</td>
<td>86</td>
</tr>
<tr>
<td>It has changed my attitude towards organization</td>
<td>99</td>
<td>92</td>
</tr>
<tr>
<td>It made me confident enough to try out new approaches</td>
<td>92</td>
<td>86</td>
</tr>
</tbody>
</table>

The value for changed attitudes towards research lies at 79%, towards teaching at 92% and towards organization even at 99%. 92% however say that the experience made them confident enough to try new approaches.

The table shows how the participants have put values on different categories concerning the specific effects of the programme after returning to their workplace. A high number of participants value the changes that have taken place in attitudes towards organization (92%). It is assumed that in the majority of cases the administrative tasks are carried out in the universities by non-professionals, who did not have any training in leadership, governance and management of organizations. It is of course the high quality of the module combined with the lack of skills and the high need for them that gives the highest priority to the module on organizational development.

Almost all participants have administrative and organizational positions in their institutions, that is why the offered skills in the module Organizational Development help to achieve more efficiency in this field.
Looking forwards – looking backwards: UNISTAFF Programme Tracer Study 2008

The qualitative statements concerning organization lead in the following directions:

“The developing my style and organization my directorate, faculty with new concepts”

“Development of management and leadership skills-inclusion in the curriculum. All courses must have an ICT component”

“I have shared the materials you gave in UNISTAFF 2007 and we discussed important matters such as the learning organization model”

“I was in charge in establishing the university strategic planning, made some community development programs in cooperation with other universities, NGOs and Faith based-organizations”

“Institutionalization of quality assurance, restructuring of curriculum and organization of postgraduate programmes”

“Shifting from old paradigm of university as an ivory tower to be more learning organization”

“Starting from personal project, the alumni database is updated regularly and alumni organization was finally revitalized”

“Effective teamwork, organization and workshops”

“We always train our staffs instructional skill for all newly appointed academic staff and also we send newly assigned department heads for leadership and management for short time training”

“We were able to enhance our work on career evaluation and accreditation at my university”

The next highest values are given to changing attitudes towards teaching. The assumption here is that all participants have some experience in teaching. Improving the attitudes towards teaching is an indicator for gaining new approaches, values as well as teaching and learning methods in this module.

The qualitative statements take the following directions:

“I encouraged my colleagues to institutionalize peer-review of our teaching”

“I could develop my teaching style for better learning”

“I adopted theory from UNISTAFF in my teaching method”

“I have been able to introduce team-teaching within my department as a measure of quality control in teaching and learning”

“I established HIV/AIDS in the teaching in cooperation with hospital”

“I increased my self-confidence for new approach in teaching”

“I initiated an ongoing academic staff training in effective pedagogy and open sharing of innovation and challenges in teaching”

“I introduced Quality Assurance in the postgraduate study programmes and applied students’ oriented paradigm in teaching”

“My UNISTAFF project on students’ evaluation of teaching and learning, my recommendations were adopted by Committee of Deans. Now in the University of
Malawi there is a policy that every lecturer should be evaluated by students. I am now developing the guidelines”

“Self evaluation, beginning for change from teaching to learning, establishment of quality assurance”

“To convince great people in university especially regarding teaching ability”

“Teaching and delivery has improved. Have inspired some of the young lecturers and changed their way of thinking and approach”

“Shifting from teaching paradigm to learning”

The value for changing attitudes towards research is very high, when taking into account that only a small number of the participants are involved in research activities as can be shown in the faculty time allocation. By 61.3% of participants less than 10% of faculty time is given for research.

<table>
<thead>
<tr>
<th>Allocation of Faculty Time</th>
<th>Actual Time Allocation (% of Time)</th>
<th>Teaching</th>
<th>Advising</th>
<th>Research</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10% or less</td>
<td>12.4</td>
<td>63.2</td>
<td>61.3</td>
<td>27.0</td>
</tr>
<tr>
<td></td>
<td>11 to 30</td>
<td>38.9</td>
<td>39.1</td>
<td>34.2</td>
<td>49.8</td>
</tr>
<tr>
<td></td>
<td>31 to 50</td>
<td>31.5</td>
<td>5.6</td>
<td>4.5</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>51 % or more</td>
<td>17.2</td>
<td>2.1</td>
<td>-</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>

Table 7: Allocation of faculty time by UNISTAFF participants at the starting point of the training programme (average of 5 UNISTAFF Courses; N= 103)

10% of time is given to research and 95.5% do research between zero and 30% of their time. This requires a special curriculum which can improve the competencies and the confidence to do research and provides a lot of motivational training to overcome the serious constraints which can be recognized from the indicators (personal skills and the personal will, institutional infrastructure and administrative will).

Qualitative statements concerning research take the following directions:

“I brought changes at the University of El Salvador, in order to improve research management and assessment”

“I developed institutional research planning and performance analysis”

“Emphasizing research, forecast planning and quality management”
“I was able to acquire knowledge during my education in US by mentoring researchers and scholars of my homeland in Babol University of Medical Sciences”

“Implementation of research, curriculum and professionalism”

“I improved postgraduate programmes, training of staff and promotion of multidisciplinary research encouraged team approach management”

“I prepared for Participating in other research and education courses in Germany”

“I shared my research topic with HoD for implementation. Plans are underway!”

“The change is very gradual. I am slowly introducing the culture of research in a department that is not productive in scholarship compared to others”

“There has been changed attitude towards mature students as I asked colleagues to institutionalize research that would change the way we have been doing things”

“Through an internal evaluation that I initiated at my research centre to see how the centre has performed in 10 years of its existence, members were able to see how individual responsibilities affects the centre’s overall ability to achieve goals”

“Research management, academic quality assurance is not an easy task at all”

“Taking care of academic research and extension areas”

Qualitative statements

a) Application: Many statements mention the applicability of learnt skills. It is mentioned in more than 60 cases out of 107. Different statements lead in different directions depending on participants’ specific challenges in their workplace. Methodologically, it is difficult to reduce them to a framework of categories. This would mean that the diverse applications of the learnt abilities and skills are dispositional and verifies our thesis above.

Participants could apply different aspects of their UNISTAFF experiences throughout their university lives.

“I applied what I learnt in the organization of department under my responsibility. Also, I applied it on a process of curricular changes we were already planning. I really understood what internalization of the universities meant and created policies according to international requirements”

They applied the methods of active learning into teaching; and applied the principles of shared vision and work based on competence into teamwork development.

“I can apply the theories from UNISTAFF in my work in the university”

b) Improvement: The applied skills refer to what was improved in UNISTAFF programme. Out of a variety of improved items, especially important were networking with scholars worldwide, the use of the knowledge in personal life and efficiency of internationally recognized research for their career.

Management and organization, teamwork, initiation and management of change in the university, writing research proposals, leadership skills and ability on how to empower people were the issues mostly mentioned by the participants.
c) Learning: A lot of skills and abilities are learnt by giving lectures. However, those lectures are mostly combined with intensive discussions and critical feedback and finally workshops within which the participants can exchange experiences and knowledge, especially with regard to the meaning of the items and their applicability for different workplaces. Learning has taken place in general but the special areas mentioned by participants are workshop-planning, variety of teaching techniques.

“I learnt to understand people as human beings since the human behaviour is the main ingredient to take into account when we are leading”

“I learnt about research management—research (that) has to contribute to career growth. I liked the teaching simulations which expanded my teaching strategies to go beyond the lecturers I was used to…”

d) Change: It is evident that changes are necessary in higher education institutions. However, the specific changes anticipated or generated by participants are quite diverse and of different priority and impact. The knowledge how to generate changes without serious negative effects for individuals (structural changes) is the basic approach for effective changes: the participants could initiate changes at faculty level, especially important have been here the skills in building consensus over proposed changes.

“UNISTAFF enabled me initiate change in the faculty…and helped me to manage very rebellious staff”

“It provided a new perspective to induce the university change into learning organization”

“I got more confident on proposing new ideas, new approaches and start change (when even needed)”

Many have been encouraged to lead and ask for support from colleagues to implement significant changes in a short time”

“It gave me a big transformation professionally”

“I have brought some changes in the University of El Salvador, in order to improve research management and assessment. Besides, I have been collaborating in building up a system for quality assurance in higher education in Central America”

“Advocacy to change culture in the university but difficult with the different orientation in the university itself”

e) UNISTAFF provision: UNISTAFF has provided participants with means to develop their competences in different directions related to the above-mentioned indicators.

UNISTAFF has provided many participants to feel more confident with their positions, like in advisory roles to academic staff and students, in teaching and learning, in becoming more rational and critical at the same time, in dealing with ICT in higher education, in fostering broad networks with DAAD, in entering new areas in the world of sharing knowledge, in networking and finally in dealing with the national development plans and making practical use of it.
Conclusion
The paper demonstrates the selected results of a tracer study carried out in July 2008. The objectives were to prove the impact of the DAAD supported UNISTAFF Training Programme on personal and career development of the graduates at the local level.

The results show the high impact of the UNISTAFF Programme on increasing individual capabilities, competences and confidence of the trainees and on improving capacities and field building in the corresponding institutions.

The study gives a critical answer to the question about the performance of similar training programmes if care is taken to develop a relevant learning environment to achieve efficiency, effectiveness, competitiveness, co-operation and finally happiness and satisfaction in the frame of international development.

References


LINKAGES:
UNIVERSITY AND SOCIETY
The dialectics of innovation

Caro Lucas and Emilia Nercissians

Abstract
We investigate the role of cultural inclusion and dialogical governance in the promotion of innovation. The contradictory relations between the counterculture movement of the sixties and the emergence of disruptive technologies during the past few decades are examined as a motivating example. The critique of the non-sustainable materialistic and status oriented ideologies is shown to be an important prerequisite for the emergence of novel attitudes based on identities as well as the development of a new economic sector of intangibles consisting of services as well as knowledge and cultural goods. It is argued that alternative value networks are crucial for successful implementation of innovations.

Keywords: Counterculture, identity, innovation, status, technology

Introduction
This analysis is an extension of a discussion of the relations between counterculture and disruptive technologies presented by the authors in the framework of a recent GIAN meeting dedicated to the analysis of knowledge management and innovation in higher education (Nercissians and Lucas, 2006; Lucas and Nercissians, 2008). The journey from counterculture to disruptive technologies, and a serious consideration of how the two concepts should be analyzed as basic categories important not only for the discipline of entrepreneurship, but also engineering and anthropology, which constitute the main specializations to which the authors affiliate and place their academic claims of scholarship, have their starting point in nostalgia (Brown and Ulijn, 2004), followed by the occasional meeting with some distant acquaintance from the Bay area, who would narrate fascinating stories about how this or that activist from the counterculture movement had now become a respectable business person, whose spectacular success, however, stemmed from the very counterculture ideas that singled out that person as not belonging to the mainstream culture. Stories about how certain dropouts of the sixties dared to entertain the vision that using a computer could be as easy as taking a bite out of an apple; and in addition, dared to try to materialize their dreams, and succeed in convincing small investors of the feasibility of hitherto nonexistent fantasies, such as user friendly personal computing and its potential profitability. Next came web pages and then published books, going a step further, claiming that the counterculture movement had a lot to do with the ICT revolution and it was not coincidental that Silicon Valley was geographically situated in the same Bay area that used to provide homes for the counterculture activists (Rheingold, 2000; Turner, 2007). It was claimed that the counterculture experience endowed those activists with the ability to dream and to entertain new visions; and that this was the crucial skill, the required cultural trait, to be successful in a business environment where hurricanes of change and paradigmatic shifts blow with increasing frequencies. The critical stance that used to characterize counterculture activists as
radicals and outfits has suddenly become the most demanded outlook in the very mainstream business environment against which the whole counterculture movement seemed to be directed. Now that the century and indeed the millennium have moved on, and it is no longer strange and unusual to see the international donor organizations such as the World Bank, draw upon the most radical theories from critical philosophy, often serving reactionary purposes, it is perhaps the time to appreciate those connections as something more basic than strange ironies that happen to be true. What if we regard that irony as one of the most fundamental aspects explaining our era?

The counterculture
There are many scholarly works examining the causes of a sudden cultural revolution that took place mainly in the sixties (James, 2006; Frank, 1997). When people in the early 2000s think about the 1960s, they might think first about the hippies, along with the civil rights movement, and antiwar protests. In continental Europe the major event was the spontaneous revolutionary events of May 68. But counterculture was most of all a global phenomenon stretched across the Atlantic (Gair, 2007; Grunenberg et al., 2005; Turner, 2005). The war in Vietnam was evidently the most important conflict against which people reacted all over the world, but there were many others like postcolonial wars in Africa, Soviet occupation of Eastern Europe, hunger catastrophes in Asia and Africa, and race riots in the United States. A global youth culture had already become a reality during the previous decade. The same music, same movies, same cultural icons were everywhere. This fashion driven transformation was vanguard in particular by music, and most of all by the enormous popularity of the Beatles. And everywhere this youth culture had the same characteristics: it wanted to be a counterculture, it staged itself as counterculture, but in the end it was engulfed by mass culture and consumerism. The seeming contradiction can be explained as follows. The initial spread and popularity of all cultural manifestations striving to become the fashion could only stem from the fact that they included elements of vernacular and working class subcultures with which popular masses could easily and naturally identify; mainly subconsciously. However, as the fashion was spread and commercialized beyond the territorial confines of the conflicts underlying those subcultures, the particular class or social character was lost and dissolved into a larger common subculture that could appeal to the young generation of the sixties, the so called baby boomers who were the main consumers of fashion. Two broad outlooks came to compete: the outlook of order and the outlook of anarchy. The abrupt rise in the political and cultural alienation felt by the critical minded strata among the new generation made them reexamine the dominant norms and values that seemed to have been the root cause of the wrong path taken by the ruling classes (Garan, 1975). The Beats and the emerging counterculture represented a major backlash against the placid rigidity and regularity of the conformist 50's mentality, unquestioning in its own smug righteousness, values, and pursuit of privilege. The conformity of the age called for accepted codes of behavior, dress, and belief. One important element of the 60s was the anti-war movement. Many of the
Beat writers and their acquaintances were known for stirring up anti-military and anti-government sentiment in the forties and fifties. Another important 60s element was the drug culture. Third and perhaps most important, there was consumerism and materialism as a global phenomenon, and a global value. More was always better and the key to happiness was in your possessions. The counterculture stood against the traditional values of middle-class society, and manifested its rebellion in several ways: long hair, rock music as showcased at Woodstock, tie-dye, free sex, drugs, and riots are only some of the vehicles through which the counterculture asserted itself. The universal love and truth, a mixture of exotic religious practices and almost anything non traditional, found its place among like-minded people who began to form communities in both urban and remote areas. Similar movements have, of course flourished at other times and in other places as well. The journey to Monte Verita to participate in the conference devoted to the fiftieth anniversary of Artificial Intelligence held two years ago, for example, was an occasion for appreciation of some important continental and especially German countercultural heritages that seemed to have come together in that small and beautiful community that had almost all the components of the counterculture movement of the sixties: the critical intellectual and political though, the love of nature and the questioning of the materialistic lust for accumulation of wealth, the art and dance, the drugs, and the flowers and love for peace (Fonooni et al., 2007; Daneshvar et al., 2007; Helmreich, 2000). It was strange how that historical setting served as an ideal place for the discussion of disruptive technologies and revolutionary visions for shaping the future in global scale leveraging business rationality. Along the footprints of the anarchists and the nudists and the philanthropists and the other founders of the free community, now set their steps the new visionaries, who likewise argued against the extreme rationalism and anthropocentrism of the early AI, and called for more bioinspiration, interactivist approaches, and self organization in trying to shape future intelligent environments that would not be based on the central command and control systems and single utility optimization based decision making mechanisms typical of today's technologies (Barbour, 1980).

**Disruptive technologies**

It has been noted (Lucas and Nercissians, 2006; Alexander, 2002) that while technological advance used to be a stabilizing factor for the social order in the past, it has become the most important agent of disruption in contemporary society. The importance of epoch making technological advances in long term business booms has been most significantly articulated in long wave theory of Kondratiev (Alexander, 2002). According to this theory major technological innovations leading to sustained business profitability tend to be clustered in distant temporal positions. It seems, however, that the time spans between successive Kondratiev waves are shrinking. Attention is also shifting from the celebration of successes and sustained benefits associated with the introduction of new technologies to disruptions, economic and even socio-cultural upheavals, and collapse of hitherto successful business entities that miss the opportunities and continue to adopt old technologies. Recognition since the
mid 20th Century that technology is the key driver of innovation has stimulated multidisciplinary management of technology research dedicated to better understanding and improving industrial innovation through collaborative industry-university-government initiatives. Nevertheless, the complexities inherent in innovation have hindered the development of qualitative and quantitative models for forecasting and prediction. Recently a consensus has emerged that a more rapid and effective approach to radical innovation is needed for future industrial and societal competitiveness. Existing innovation strategies for cost reduction and continuous improvement over the two decades have been disappointing. Continued reliance on technological forecasting methods may prove counterproductive in creating the high growth rate industries and sustained economic development and job creation required for business success in contemporary world. It has now been widely argued that innovation economy differs fundamentally from industrial or even information economy, and that it will require a new relationship among companies, government, educators and workers to assure creation of an effective innovation ecosystem that can successfully adapt and compete in the global economy (Christensen, 1997; Caldwell, 2000). Trying to discover the factors underlying a successful company’s failure to detect a disruptive technological innovation, however, Christensen made a shocking discovery: successful practices eventually lead to failure to innovate (Christensen, 1997). Leading business entities fail to detect a disruptive technology not because of poor engineering or business practices, but because they are too loyal to the best practices and fail to appreciate the potential of niche technologies that cannot be rationalized in the existing value network in which the business entity is embedded. Technologies are disruptive because they change the existing value networks based on which all engineering and business decisions are to be made, or because their rationalization depends on an alternative value network. He observes that as companies go about the business of sustaining their successful products and processes, invariably something new arrives on the scene, flying under the radar because its price is too low and its market is too small. Over time, disruptive technology becomes the next innovation, but by then it is too late to capture the opportunity. The significant market share goes to those who properly resourced the opportunity at the disruptive technology stage. To put the matter in terms of culture: organizations that want to remain innovative must create and properly resource a counter-culture for disruptive technologies, distinct from its sustaining technologies. A disruptive technology comes to dominate an existing market by either filling a role in a new market that the older technology could not fill (as more expensive, lower capacity but smaller-sized hard disks did for newly developed notebook computers in the 1980s) and then successively moving up-market through performance improvements until finally displacing the market incumbents. To that analysis we add the more likely route that the niche market grows, in part by the gains caused by all disruptive technologies that could be rationalized within that niche, so that it becomes more important than what Christensen designates the up-market, thus transforming the old value network.
The dialectics of innovation

A conflict theoretic approach
The theoretical characterization of disruptive technologies explains the role of counterculture in leveraging the opportunities for entrepreneurship and knowledge based development. In order to assess the opportunities for disruptive technological innovation it is necessary to think beyond the functionalist rationality. Large multinational corporations fail to respond to new opportunities not because they are too narrow minded to know that their business success cannot be sustained forever without keeping pace with technological progress. Case studies show that these companies have not failed to notice the advent of new technologies the non adoption of which eventually has lead to their loss. Rather, their analysis based on the best practices under the assumption of the existing value network has led them to believe that the new technology is not feasible. What they have not taken into account is a new niche with a different value network for which the new technology is feasible. If we take into account the postmodernist convergence tendency of the spheres of culture and the economy, then one can make a more general argument about the need to think in terms of alternative cultural value systems as well. It has been pointed out that in parallel to the commoditization of cultural items, there exists a stronger process of semioticization of economic items. In other words, goods and services are purchased not just for their consumption value, but because they mark specific identity for the consumer (Lucas and Nercissians, 2006; Nercissians and Lucas, 1999). The economic value network according to this view will depend on the social value network. A new niche will appear when new values will lead to new identity markings and therefore, new brandings. An entrepreneur is therefore one who can promote new brands that can appeal to specific communities of potential customers. It is the conflict between the value systems that drives the process of innovation.

Conclusion
It is sought to demonstrate through the examination of how counterculture might be related to the emergence of disruptive technologies that the interplay between different world views embedded in local and vernacular subcultures is essential for sustained innovation. A key to continual production of innovation in an information society is how companies can network different knowledge created from strategic communities formed inside and outside the company, and acquire the synthesizing capability through dialectical leadership (Kodama, 2005). The goal of attaining a shared vision in a learning community in this light is perhaps too restrictive. Instead, creative management should strive for continuous synthesizing of multiplicities of world views through shared practice and shared experience. A sense making perspective recognizes multiplicities of selves even for a single individual. Access to different selfhoods is crucial for flexibility and adaptability. Instead of a single shared vision, this perspective advocates shared practice and shared experience. A co-evolutionary approach is needed for achieving business success in an environment characterized by rapidly evolving user needs on the one hand and technological possibilities on the other. The contemporary postmodern and postindustrial era is
characterized by omnipresence of signification (Nercissians, 2003), (Nercissians and Lucas, 1999). Whoever controls the sign controls the process of semiosis. No entrepreneurial spirit can exist in this world when values are totalized. There is an infinite play of signification and with every signifier-signified pair, there comes the moment of a new signification via connotation. It is because of this dialectic that the counterculture activists, who had a critical attitude towards business materialism and entertained alternative visions, turned out to be the successful entrepreneurs who defined the mainstream culture via leveraging disruptive technologies. In the global environment of today, it is access to local knowledge and the value system embedded in local subculture that is required for materialization of a disruptive vision at a world scale. The cultural network of that minority or niche community provides the means through which potential consumers identify with the new brand. In contemporary world, it is no longer access to resources or even human capital that impedes socio-technical development. The main factor that conditions development has become the organizational capacity to innovate. Business success will increasingly require a management that can, from a multiple variety of viewpoints, use networked strategic communities to synthesize superior knowledge that is open and spread out both inside and outside the organization, including customers (Kodama, 2005). The culture of celebrating diversity and promoting inclusiveness and participation must be learned in contemporary universities, which themselves have a diverse composition of faculty and students from multiple subcultures. The engagement of the universities in their surrounding social and ecological environments and the interactive nature of the curriculum are important elements of capacity building for appreciation of the different value systems and capability of adequately responding to the needs and wants of the different sections of the outside worlds. Increased networking will facilitate the diffusion of the different views and create excellent environment for practicing the creation of co-specialized assets with the help of which an innovative approach can become feasible.
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The new role of universities: Societal and intellectual entrepreneurs

Abraham Simatupang

Abstract

"Change or perish" is a well known idiom which also has a certain resonance in universities, the so-called knowledge provider, although it is not widely recognized or implemented. Considering themselves the guardians of science and knowledge, universities have acquired a new title as "diploma mills". This phenomenon is true in developing countries for several reasons. First, since education should be accessible for everybody, not only for the elites, so the government facilitates anyone who wishes to pursue higher education, or any institution that is willing to help government in providing education to the society. Thus, mass education is recognized. Secondly, quality has not yet been prioritized and considered unimportant although Indonesian government introduced an accreditation system around 10 years ago. Thirdly, more people - even from the rural areas - want to go to tertiary education to get a university degree. Therefore, the number of higher education institutions (HEI) has grown significantly to meet the demand. The society is now very demanding, not only because they demand that graduates achieve good grades and skills, but also passion to solve the societal problems. In addition to that, the Indonesian Department of National Education has promoted and challenged top rank universities to increase their capabilities to be world class universities. To achieve these ambitious objectives, universities have to equip themselves with (new) mindsets and capabilities. Universities which stand for their "classical" tradition and keep their distance from society should transform themselves completely into intellectual entrepreneurs and social entrepreneurs. In this networked and interdependent world, the transformation process of the universities can be accelerated by incorporating "protagonists". A protagonist is a person that will bring a “wind of change.” Not necessarily a structural leader of the institution, he or she can be someone from outside the university, a new person that will help the institution cope with the rapid change outside. Examples of lively interactions raised in universities which changed their virtues are also discussed in the paper.

Keywords: Good governance, change management, collaboration, internationalization, higher education

One type of education for all purposes?

Higher education or tertiary education is a continuum of education that people should pursue as much as they possibly can. However, according to the history of higher education either in the western or eastern hemisphere, higher education institutions which were established in the beginning of 14th century were only for the benefit of the few or privileges, which, at the end, also produced a class of elites. The purpose of the universities was firstly to inquire, distribute and preserve the “truth”. The long tradition of HE institutions as “truth seekers and preservers” is confirmed by the rigid specializations of sciences and knowledge. A “myopic” way of seeing of all phenomena has been the traditional approach of HEIs to serve the community, which, unfortunately, is a web of complex systems. This, of course is an extrapolation
of reductionism instilled by Russel. Possibly, this has been the key factor of shoving HEIs into the ivory tower, and HEIs become busy for themselves but utterly isolated from the environment. However, this model of education has been changed due to the high demand of the society for a new role of the university (Hildebrand 2005:30-31).

**Wind of change**

Unlike any other (business and industrial) institutions, which are very open and ready to adapt to continuing change of their surroundings, higher education institutions seem to be rigid in their position as the only knowledge gathering and preserving. Higher education institutions received such a privileged status, because they were established for the benefit of the elites. But, society has its own course. Societies are changing with enormous development of science and knowledge. Information Technology (IT) i.e. internet and World Wide Web have made the change become fuller in speed. The world has become a global village and everybody is in some way interconnected (Buchanan: 2002, 30-33). Until the last decade, the ability to use technology to enable people to be connected was very limited. Nowadays, people are no longer hampered by space, time, even language through the help of IT, when they want to communicate. Many types of software which are embedded in the computers, for example, can simultaneously translate any language we receive from our counterparts. And this kind of change has been firstly and significantly influenced the business-alike spheres than HEIs.

As discussed above, the main objective of the HEIs is to inquire, explore, disseminate, and preserve the knowledge, "the truth" with their rigorous methodologies of which the under- and graduate students have to pass all these “hurdles”. When they go into society afterwards, they assume that they are prepared for their professional lives or to serve the community. But, unfortunately, most of them encounter very different realities than that they imagined as students.

**Intellectual entrepreneurship**

The term Intellectual Entrepreneurship shows that intellectual is a term not limited to the academy as entrepreneurship to the business. As we see inside or outside of the university, intellectual entrepreneurs have some characteristics such as taking risks and grasping opportunities, and they discover and create knowledge, utilize innovative approaches, and solve problems in diverse social and cultural realms, including corporate, not for profit, government, and education (Cherwitz & Sullivan: 2002, 23-27).

The hearts of IE are vision and discovery, ownership and accountability, integrative thinking and action, and collaboration (Cherwitz & Sullivan: 2002, 23-27).

Vision and discovery

Developing a vision is a basic step in IE. They have to visualize through reflection the realms of their academic and professional lives. Individuals continually and regularly
learn and relearn, invent and reinvent themselves and their areas of expertise. To achieve this, IE needs individuals to do more than simply perform their tasks (examples: heading corporation, conducting research, performs community service, taking care patients). It is advised also that individuals contemplate who they are, what matters most to them, and what possibilities are available to them. In the class, this can be brought to students by giving them cases which lead them to reflect what is important to them both professionally and personally. This learned and internalized experience brings them into another stage, which, at the end, develops new perspectives and insights. For example, a teacher can begin by asking students to think about what matters most to them and then use their answers to create research programs, while concurrently exploring possibilities for using that knowledge.

Ownership and accountability
In the old paradigm of knowledge acquisition, knowledge is handed over to students, a spoon-feeding method. The more facts and data you throw at them, the more “knowledgeable” the students seem to be. However, by developing the vision and discover about themselves and their disciplines, the intellectual entrepreneurs take responsibility for acquiring the knowledge and tools needed to bring their vision into reality. Therefore, the genuine ownership and accountability of discovering new approaches are developed in the visualization and by exploring the possibilities. When a student graduates from an IE-based program, jobs are no longer predetermined outcomes or entitlements acquired after completing an education or a certain degree, but jobs are seen as “possibilities” that challenge them to be explored and to be discovered regarding their own virtues. Controlling one's future is a major part of ownership and, therefore, has enormous implications for professional success. The link between ownership and accountability is important. Once individual gain control over their own destinies, it follows logically that they will assume greater responsibility for decisions and their outcomes.

Integrative thinking and action
In IE, one should acknowledge that there is no single answer for all questions, or one should know the boundaries of partial knowledge and particular perspectives. Therefore, synergy is more than a catchphrase in the context of IE. This means something greater than the sum of the parts can be generated when people employ in integrative thinking. People have to move beyond the conventional notion of discrete academic disciplines in search of the truth. In the IE class, students from multi-disciplined backgrounds are challenged to give inputs actively and solve the problems that reflect an integration of thinking and perspectives. For example, a medical graduate exposed to IE has to learn that the research questions she/he selects are of critical importance since they have direct implications for real setting and people.

Collaboration and teamwork
Individual professionals, even though they have achieved their maximum achievement, cannot even try without substantial support from other people. It is
really very important to bring up students with a capability of building and nurturing relationships. People and relationships are intellectual capital that makes possible integrative thinking and synergy. Ideas are the commodity of academic institutions and, therefore, have been the traditional focus of the delivery of graduate education; intellectual entrepreneurs understand that creativity and ideas are generated when people and networks are viewed as the primary resources. In IE class, students learn to work collaboratively in undertaking scholarly projects and deal with complex tasks. Obstacles that are pronounced in every problem-solving will be touched comprehensively by the synergetic effects that emerge from the group (Rodriguez and Solomon 2007: 3-13).

For short, IE describes the new form of union between the academy and the world and between the academy and its own deepest traditions.

![Diagram](image)

*Figure 1. Delineating the notions of intellectual entrepreneurship (modified from Johannisson et al., 1997)*
Social entrepreneurs

A growing number of non governmental organizations (NGOs) and for-profit organizations are implementing new approach to international development jointly stressing entrepreneurship and technology. The main objective of such an approach is to use technology for the benefit of the community. Ashoka, an example of a non profit organization which incorporates the approach was established in 1981. Since then, Ashoka has elected nearly 2,000 fellows working in over 70 countries. These fellows are important social entrepreneurs who have initiated inventive solutions to societal challenges. As agents of change, these individuals have been as inspiring as they have been useful. As Ashoka has grown, it has faced a new challenge: to leverage the collective knowledge of Ashoka fellows and galvanize members of the broader community in order to identify, envision, and realize the many untapped possibilities to effect positive social change through social entrepreneurship (Brown, 2007: 125-136).

Another living example is Rodrigo Baggio from Rio de Janeiro, Brazil. He is a computer consultant with a passion for giving the young people in favelas an opportunity to access the digital world. Rodrigo provides computer, software and training. The community does the organizing, finding space, recruiting the students and faculty, and affording ongoing administration. Consider the impact Rodrigo has on a community when he introduces his programs. Muhammad Yunus, a professor in economics from Bangladesh, introduced a micro-credit system to women in the poorest areas of Bangladesh, which enabled them to increase their socioeconomic status. Now, micro-credit has also impacts in Brazil, Poland, some African and Asian countries.

In 1995 Institute for Socio-cultural Studies (ISOS) - University of Kassel, Germany launched a training offered for academic staff from developing countries such as Eastern Africa, Central America, Iran, Iraq, Asian countries like Indonesia and the Philippines. The contents of the training are organizational development, curriculum planning, teaching and learning, and research management; however, the training emphasizes self-discovery, creativity, teamwork in a multi-cultural and interdisciplinary setting. Now, there are more than 100 academic staff members from those respective regions that play key roles in their own context as agents of change. Thanks to the three ISOS’ “protagonists”: Michael Fremerey, Matthias Wesseler and Siawuch Amini who instilled this invaluable training.
Table 1. The Movement’s Jujitsu: Four Levels of Leverage (Drayton, 2006)

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<tr>
<th>Actions</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>In any school, community or country each year, ½ of 1 percent of the young people have a dream and create a lasting venture.</td>
<td>By leading, these young venturers become lifelong leaders. They have mastered the essential skills of empathy, teamwork and leadership-and irrefutable know it.</td>
</tr>
<tr>
<td>Each venture engages a team (typically 3-5 in the core group plus 20 who tutor, coach, broadcast, etc.):</td>
<td>Everyone learns what teamwork, that they can lead, and how to do so. This further multiplies the next generation's proportion of &quot;natural&quot; leaders.</td>
</tr>
<tr>
<td>1% of a school or youth community launches ventures with on average 25 participants. Over two years: 20% to 25% of the whole institution are engaged, likely &quot;tipping&quot; its youth culture.</td>
<td>As venturer peer groups recruit and sell their work, they can both tip their school or neighborhood youth culture and also will wear down old attitudes and logistic barriers (e.g., space, insurance).</td>
</tr>
<tr>
<td>Society questions the current disempowering pattern, builds a women's/disability movement for young people. Youth Venture participants provide role models and champions. The press joins in.</td>
<td>Everyone redefines the youth years and lives them as a time of expected initiative, competency, and contribution.</td>
</tr>
</tbody>
</table>

Youth Venture’s experience in the U.S.

That is how (social) entrepreneurs work. Having decided that the world must change in some important way, they simply find and build highways that lead inexorably to that result. Where others see barriers, they delight in finding solutions and in turning them into society’s new and concrete patterns (Drayton, 2006: 80-96). This means that the entrepreneur is to a larger or lesser extent the co-creator of the very context which makes her/his envisioned project enactable. Entrepreneurs vary with respect to capability of grasping and controlling the context which makes this partially self-fulfilling enactment process happen (Johannisson, 1998). As it is also shown in a study on academic entrepreneurship in Duke University and John Hopkins University by Bercovitz and Feldmand (2004: 1-34), there are three important factors that foster academic entrepreneurship. These are training, leadership, peer or cohort support. Loscalzo (2007: 1504-1507) also showed that the medical profession, engendered as a “noble” profession based on trust between doctors and their patients, was offered lately lucrative incentives by moving towards commercialization of (health) research discoveries. Those afore mentioned examples of intellectual entrepreneurship and societal entrepreneurship are indeed a challenge for any university which has been asked by stakeholders to take a new role for the community by producing graduates who have the capability as intellectual entrepreneur and compassion to be a society entrepreneur.
Indonesian context

In the Indonesian context, the higher education institutions were established and intended merely for the benefit of the Dutch colonial government. The institutions recruited students from the local upper-class, namely, the sons of regents or the local high-ranking officers, and at the end this education system also produced elites. After the Independence, the HEIs carried the role of educated labour providers for the new emerging country. Therefore, education was no longer elite but was intended for mass education. Private sectors were also urged to get involved in education sector. Later on, not only did they establish primary and secondary schools, but also tertiary education institutions. A great numbers of colleges and universities are mushrooming all over the country. To date, there are 2865 private and 82 state higher education institutions. Although government has laid quality norms in terms of accreditation, there are still great numbers of universities and colleagues that do not pursue it. Regardless of the quality of the education offered by these colleges and universities, the demand of people pursuing higher education - only to get a university degree – is increasing. The people still believe that a university degree is a passport to get a better job.

A high unemployment rate is one of the major problems in Indonesia. According to BPS-Statistics Indonesia, the total number of unemployed attained by educational background was 9,394,515 in August 2008 of which 961,001 had academy and university degree (BPS-Statistics Indonesia 2008). According to the recent survey reported by Kompas (2008: 5), a leading Indonesian newspaper, more than 60% of university graduates are unemployed. Those who are employed, however, work in the areas far from their specialization/field. Customers and employers' dissatisfaction rate also increase. It shows clearly that the qualification or competences of the graduates do not meet the societal demand. In spite of this condition, some universities, fortunately, strive to excel by introducing and implementing change management (Simatupang & Sitepu, 2005: 183-195; Msiska, 2005: 227-238). Institutions should address this by bridging the gap. What Universitas Kristen Indonesia (UKI), Bogor Agricultural University (BAU), Institut 10 November, Surabaya (10 November Institute of Technology, Surabaya) do, are examples in creating IE-based graduates.

Since 1999, the management study program of the Faculty of Economics–Universitas Kristen Indonesia, introduced and add entrepreneurship to the curriculum. Students are challenged to set up or write down a “business proposal” which suits to their vision and discovery (Ganda Hutapea, 2009: personal communication). Inviting alumni to meet students and to share their experiences of setting up their own enterprise or building up their professional careers is also one of the important steps in IE class.

The majority of the graduates reported back to the Department that they have their own small/medium scale enterprises like event organizer, catering, printing shop, etc. They acknowledge that after leaving the school, they did not look for job but created one. Intellectual entrepreneurship is also flourishing among universities in Indonesia.

At the Faculty of Medicine - Universitas Kristen Indonesia, Competence-based
curriculum based on student-centered learning and adult-learning is implemented. The objectives are producing medical doctors with certain competences, such as, explorative and integrative thinking, collaboration and team work (Maxwell, 1998 and 2002; Clark, 1996: 106-107). The development of the curriculum was made possible with the cooperation with the Faculty of Medicine of Gadjah Mada University, Yogyakarta. At the moment we are seeking collaboration with the Faculty of Medicine in Maastricht, the Netherlands to further develop the curriculum.

Institut Teknologi Sepuluh 10 November, Surabaya, a technological institute in East Java, has recently launched a techno-socio-entrepreneurship program which strongly emphasizes the building of the students’ entrepreneurial capability by blending technological and sociological aspects as well as arts into the curricula and field practices. The program is also supported by the local government and local industries supervised by the regional Chamber of Commerce (Utama, 2009; personal communication).

In Bogor Agricultural University, students are encouraged to take an elective program of entrepreneurship. The program is directed by the Directorate of Career Development and Alumni of Bogor Agricultural University. The students have to follow three consecutive phases: firstly, a preparation phase in which students are recruited and selected; secondly training (2-3 months) on principles of entrepreneurship, writing a business plan and field work in designated small and medium scale industries. In the third phase, a student or group of students are ready to start their own business according to their business plan(s) with a seed money start from Rp 8,000,000 per person to Rp 40,000,000 per group (from around 750 USD to 3,700 USD). Besides, they are also supported, monitored and evaluated by mentors from the university and the small and medium scale industries (Directorate for career development and alumni, 2009: 1-24)

Widyagama University in Malang, Bina Nusantara University in Jakarta, Gajah Mada University in Yogyakarta and Bogor Agricultural Institute in Bogor, to name a few, are successful in implementing IE-based curriculum and/or programs.

Conclusion

In this networked society, universities have to involve themselves in the transformation of the society by, among others, producing graduates with IE competencies. Universities become more contextual. Not only that they produce science and knowledge but also graduates who can utilize their knowledge contextually and further create their own networking for their own virtues. Successful alumni returning to their alma mater is a proof that networking does take place. Besides sharing knowledge and experiences, they create network with their juniors and vice versa.
Acknowledgement

The author wishes to thank Ms. Ied V. Sitepu, MA for the inputs that have enriched the paper and also for proof-reading the manuscript. The author is also fully indebted to Widya Utama, Ph.D (Institut Teknologi 10 Nopember, Surabaya), Ms. Illah Sailah, Ph. D. (Bogor Agricultural University) and Ms. Ganda Hutapea, MBM (Faculty of Economics – Universitas Kristen Indonesia) for sharing their valuable experiences on developing entrepreneurship in the university context.

References


Bringing planning education to the local level: The extension program of the University of the Philippines’ School of Urban & Regional Planning, 2007-2010 phase

José Edgardo A. Gomez Jr.

Abstract

As one of the units of the University of the Philippines, SURP has been the sole public provider of graduate-level formal city planning education in the country. Because planning is a practice-oriented discipline, SURP has offered training programs to practitioners in various local government units (LGUs) since the 1970s, and has recently attempted to extend workshops outside of the capital Metro Manila, to include ethnographic clusters of learners from distant LGUs who need the education for their daily work, but who may have neither time nor financial resources to come to the university to get a graduate-level Diploma or Master’s Degree. The overall concept is to create an appropriate pedagogic vehicle that will decentralize and extend planning education to where it is most needed in the field as well as in public universities in peripheral regions, so that a critical mass of practitioners who speak a common planning language may coalesce/form.

Introduction

The School of Urban & Regional Planning, or SURP, located in the flagship campus of the University of the Philippines remains the sole institution in the country that offers graduate-level education in urban and regional planning, with a bias towards the public sector. Aside from its missions to do teaching, research and policy advocacy, the school is mandated to provide capability-building in areas related to urban and regional planning. This is accomplished through its Training and Extension Services Division, which is normally headed by one faculty member, and assisted by at least 2 graduate student employees. In recent years, SURP has decided to improve its extension services by offering more regular training courses to learners from different cities and municipalities in the Philippines. The concept for improvement of this training and the use of networks of learners is one important step towards bringing classroom lectures to practitioners in the field. Academically, the extension of training represents the dissemination of mature concepts and “packaged” knowledge that has already been derived from research, and tried in the crucible of conference and classroom discussion. This paper discusses the potential merits of the school’s reconceptualized training program and the challenges that the faculty of SURP have been facing in making it both feasible and relevant, in the light of principles that this author learned from his UNISTAFF participation nearly three years ago, in 2006.
Brief survey of literature

According to the literature, there are several reasons why distribution of knowledge, diversification of teaching content, and use of networks make sense. First of all, learners nowadays live in a world that is increasingly linked together by communication technology, which allows a wider audience to access information that previously was unavailable to the masses. This context opens up opportunities for academic institutions to offer a diverse array of extension courses that foster professional learning, formally and non-formally, among those who practice a profession as well as among those who teach it. Events, such as workshops, away-days, courses and conferences are conducive to learning, although the problems of then embedding that learning in the workplace are notorious\(^1\), for not all knowledge is instantly translated, *per se*, into the daily work of learners. Where this learning takes place is also a consideration. Changing the learning environment does have some effect on absorption\(^2\). This was applied for instance in the case of SURP, where training was done in Metro Manila, far from the provincial work sites of participants, following the assumption that proximity to their offices would cause distraction to the applicants.

Eventually, the intention was to take learning beyond the confines of the classroom, towards the formation of a learning community. The literature indicates that generic skills tend to be best developed in contexts of high interaction, collaboration with peers and faculty, and engagement in a community of learning\(^3\). This being the case, educational or training programs that promote social exchange both during and after the formal lectures would tend towards improving the learning for participants. Moreover, the use of technology such as the internet to facilitate and maintain interaction nowadays adds another dimension to the possibilities for learning through social exchange.

Another aspect of innovation that has just been introduced to the structure of training is the assembly of a network of learners from similar ethnographic regions (though they may possess different educational backgrounds) who exchange information on spatial planning problems. This is consistent with literature that tells us that networks may typically form in response to turbulent environments, or at least those that experience sector-failure, where previous solutions have failed, and the experience of peers in other contexts may help\(^4\). The idea here is that problems that may overwhelm planners from one locality may be solved jointly by networking with other planners who can offer solutions from neighboring settlements. Collaboration in learning

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Bringing planning education to the local level: The extension program of the University of the Philippines’ School of Urban & Regional Planning, 2007-2010 phase

Through networks is not a panacea however, as most work to be done remains within organizational hierarchies. Nevertheless, bringing together a network of peers (planning practitioners, in this case) enables a kind of mutual learning and decision-making\(^5\). Moreover, the application of collaborative networking is particularly suited to public sector knowledge management, of which spatial planning is a part.

**A problem of access in planning education in the Philippines**

As of September 2007, there were 1,493 municipalities, 135 cities, and 82 provinces in the Philippines, most of which have been in frequent need of assistance in spatial and development planning. There is often only an engineer or an architect to fill the local government unit’s planning officer position, yet he or she may not have the proper education to do rational, comprehensive, and responsive planning that is consistent with national growth or the activities of adjacent areas. There is only one educational institution in the country that is dedicated to instruction in spatial – or more specifically, urban and regional planning, and this is located in Metro Manila, on the main northern island of Luzon, making access, travel, and expenses difficult for learners in other islands. Although there are other universities that offer classes in urban and regional planning, they neither specialize in this field nor offer the most up-to-date planning paradigms and techniques that are available to practitioners in the more advanced cities.

Moreover, the practice of planning in the Philippines is regulated by a law, Presidential Decree 1308 of March 1978 that technically requires practitioners to pass a national exam to be licensed. This implies that many of the mentors and documentary sources of knowledge that would be helpful in enabling one to pass this exam are limited to the University of the Philippines (Diliman campus), its planning graduates, and a handful of other universities, public and private, that offer similar courses, such as environmental science or environmental management. Nevertheless, the concentration of knowledge remains in the capital and major cities. This exposes a need for planning education to be disseminated more widely to islands in the central and southern part of the archipelago – particularly to those public officials who must do plan development and implementation as part of their daily tasks. Meanwhile, the lack of planning education contributes to irrational and politically-charged decision-making about the use of space and land resources.

**The concept: Assembling regional clusters to spread planning education**

Although SURP had been offering training since 1971\(^6\), the present package of extension services differs somewhat in its attempt to make learning more participatory by drawing on the experiences of planners who work in a common region. For

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\(^6\) Viloria, Leandro (August 1973): The Training Programs of the Institute of Planning. *Institute of Planning, University of the Philippines, Quezon City.*
instance, clusters of participants have recently been taken from provinces like Bulacan and Iloilo, or from a city like Tagbilaran, thereby capitalizing on the shared background of the learners. The selected persons are thus sometimes invited to take up the training course by batches according to their regional or ethnic affiliation, so that they are able to relate to common issues among themselves. That is not to say however that complete homogeneity prevails; there are also planners from other regions who join the group, thereby injecting an element of contrast and external input to the learning group. Typically, the learners are composed of local planning and development coordinators, counselors in the local legislative council, or environmental and natural resource officers – these being positions mandated by law to be directly involved in development planning. All of them are at least college-level graduates, and most are regular employees who have passed the standard Civil Service Examination of government, thereby ensuring a minimum degree of competence as learners able to grasp the concepts in the training.

**Figure 1: Concept of training program for geographic (regional) clusters**

As part of extending its reach, SURP also makes use of its close relationship with the Department of the Interior and Local Government – this latter agency having personnel in all municipalities and cities in the country. This public sector engagement is another dimension that allows the school to invite groups from distance regions, as long as funding can be found. The per-capita cost of 10-day training is about $400 USD.
First, since 2007 the training programs have advocated a home-grown Philippine planning paradigm that has become a common denominator for all graduates of the school. This program is legally anchored in the Local Government Code (LGC), a landmark law that was promulgated in 1991 and that gave definitive powers to local governments to control rational, technically-sound development planning at the municipal and city level. The Rationalized Planning System framework based on the LGC was developed by Ernesto Serote, a professor in SURP. This replaced the wholesale adoption of western paradigms that favored fixed and highly technical master plans for local government units (LGUs) – a tradition largely influenced by introduction in the 1960s of paradigms from Australia and the United States. Each regular training package is designed for a minimum of 25 participants and consists of 10 full days or 80 hours of learning sessions, most of which are lectures, but with some interactive workshops. There are also customized packages for special planning topics such as Urban Planning with Emphasis on Fiscal Management, Travel Demand Forecasting and Traffic Impact Assessment.

Second, this base of useful data is augmented by encouraging learners (who are themselves field practitioners) to share indigenous knowledge and skills while inside the workshops. This is an improvement over traditional, one-way teaching, and can also be construed as an indicator of growing assertion on the part of practitioners. In fact, some participants join the training with a lot of experience and professional knowledge already – thus enabling the workshop moderator or lecturer to elevate discussion to a more advanced level, where the participants discuss how they can impart and implement their new knowledge when they return to their home LGUs.

Third, an element of mentoring, or trainer-development was introduced, as the training director, a senior professor, encouraged his regular staff to eventually take over some lectures, after they had imbibed the models and processes being used throughout the course. These staff members consisted of high performance graduate students who had been hired by SURP for probable development into faculty members. After only some 3 weeks of implementing the training, these young staff members came on board to team-teach with the older professors, and are now handling certain lectures on their own.

Lastly, this concept of extending planning education also required some adaptation of teaching material to suit the specific physical environs and the prior education of the audience. Courses were provided on transport planning as well as urban planning, and where possible, lecturers used local examples to highlight their lectures and to attract learner reaction. Seasoned lecturers from within the faculty as well as from government agencies were invited to speak in teaching “modules” on topics including institutional frameworks, development of communities, participatory methods, and comprehensive planning. In order to increase relevance, participants were encouraged to narrate and share lessons from their own experiences within the framework provided by the lecturer. Where appropriate, content was delivered in the form of workshop-type activities rather than through traditional lectures.
The present training therefore attempts to incorporate more participant-centered methods that will ensure education that is relevant and lasting for learners who must eventually return to their home regions.

### Table 1: Comparison of training practices

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Previous Practices</th>
<th>Pedagogy &amp; Learning Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Knowledge Content</td>
<td>2. Use of “fixed” classroom knowledge and adaptation of Western Paradigms.</td>
<td>2. Knowledge deepening by encouraging expression of tacit knowledge and local processes.</td>
</tr>
<tr>
<td>3. Spatial Impact</td>
<td>3. Limited to the capital and urban areas proximate to, or with transport access to regional capitals.</td>
<td>3. Includes participants from other islands, and even rural municipalities.</td>
</tr>
<tr>
<td>4. Actual Follow-Through on Network of Learners</td>
<td>4. Use of telephone contact and informal network of colleagues.</td>
<td>4. Contact is maintained with participants, who are further encouraged to participate in an online forum: <a href="http://www.pinoyplanners.com">www.pinoyplanners.com</a></td>
</tr>
</tbody>
</table>

**Implementation and its challenges**

Putting this concept into action has been a learning experience itself for the trainers, as the packaging of modules and the conduct of the course had to consider the following:

1. **Relevance** – data on various planning and governance topics have to be updated and matched against the latest laws and national agency ordinances, so that planning strategies taught would be consistent with the latest policies. Relevance of content will eventually have to be closely tied to national-level development preferences. This will presuppose some knowledge of priority economic sectors, as well as international issues, such as urban growth in the ASEAN region and even climate change.

2. **Continuity and lesson preparation** – there was a need for maintaining a stable roster of lecturers familiar with the paradigms taught in SURP, and it was not always possible to get the same resource person for the minimum of two trainings per annum. According to the training staff interviewed, it would usually take up to one month to prepare the modules – inclusive of lessons and invitation of speakers, but
now one week lead time is enough to get a committed speaker, and to edit his/her presentation for consistency with the framework for the overall program. This is possible because a regular roster of resource persons has already been built up. Educational materials consist of a plastic portfolio containing printed handouts of the lecture, as well as diagrams and other graphic aids.

On a more macro-level there appears to be a need for continuity as well in the overall development of the extension program, as the appointed training directors and their staff tend to change with the ascent of each new Dean, and data is not always archived meticulously for transition purposes. This also has implications for long-term sustainability of the network, as a longer-term director may be able to look after sustainability of the program. The key is to maintain, if not increase the chances of cooperation and coordination, so that participants and alumni will continue to contribute, and interact – preferably in face-to-face settings, rather than exhibit the tendency to reduce cooperation to zero when a terminus to activity is foreseen.

(3) Geographic or spatial reach – the training should eventually reach planning practitioners in all the major cities of the Philippines’ three island groups. At present, the regional groupings of participants are selected through professional and personal referrals to the training director, the Dean of SURP, or other faculty members. There is still some difficulty in securing a sustained participation rate, but the linkage with government is helping to reach those most in need. Eventually, however, as the program is developed and word gets around, a more purposeful selection may be pursued, especially one that prioritizes peripheral areas that need some rationalization of growth in the face of urban pressures like rapid in-migration, as well as educational institutions in those areas.

(4) Financial sustainability – although largely non-profit, this activity nevertheless had to break even on operational costs, meaning a minimum number of trainees (the break-even point is currently at 25 persons) had to be enlisted, and in some cases, cost-cutting measures on materials were necessary – without sacrificing quality of content. There was in fact a brief cash squeeze in mid-2007, when a number of participants backed out without making full payment, thus necessitating the practice of requiring deposits and assembling a minimum number of trainees. So far, groups from the same region, city, or municipality have been able to secure lump-sum funding from generous sponsors or local public treasuries, and this is what covers the operational costs of the program, which amount to at least $300 U.S. per trainee, inclusive of meals for the day, a learning kit, honoraria for the lecturers, and other related expenses.

On the whole however, implementation appears to be successful, with positive feedback from the participants – many of whom are able to immediately apply what they have learned in actual situations. Aside from the continuous development in substance of the lectures, it is noteworthy that the conduct of training since 2007 has increased in rapidity as well as density of content. That is, there used to be only 1 lecturer for each of the morning and afternoon sessions respectively, but now 2-3 are accommodated, thus intensifying the delivery of planning education over the course of 10 full-day sessions. The use of computer technology has contributed to the faster delivery. The impact of the training program is derived to a large extent from its continuing relevancy and the immediate applicability of lessons learned to development problems in urban and rural areas.

Lessons learned
Although the experience of redeveloping and enhancing the extension course is still in its early stages, lessons on appropriate didactic methods and knowledge application can already be learned. These include:

(1) There is a need to maintain the primacy of substantial content. That is, a working paradigm should not only be useful and updated, but it should also have good logical and theoretical foundations, amid the plethora of competing training courses from other disciplines – which may or may not offer a similar quality of practitioner-oriented education. The present paradigm, called the Rationalized Land-Use Planning System, may be further elaborated on, or possibly even challenged by other local models (though there are no strong contenders yet), in order to make the training program more robust. Ultimately, training is dependent on the outputs of continuous research as well as pedagogic refinements developed in the classroom setting.

(2) The management of regular lecturers and other human resources (such as the graduate student staff) will require close attention, as this will be one foundation of the program’s continuity and development. Resource persons come and go, hence creating a need for a system to pass on knowledge and best practices learned along the way by the administrators of the training. There is also an opportunity here to apprentice graduate students and potential teachers who have demonstrated the aptitude for lecturing and handling groups of learners.

(3) No matter how altruistic the intentions, financial viability will remain a condition for program continuity. Proper and timely funding will sometimes be needed to match inflationary costs and other unforeseen spending during the course of the training. But more than this, it will be useful and forward-looking to accumulate modest savings, in order to build up adequate funds for improvement of the training program, as well as to feed back to the research function of the school.

Next steps
There is a clear need for maintaining the linkage of the training program to a greater overall vision of education and the development of human settlements. That is, training should be seen as a branching out of education that enables both practitioners
and other Philippine universities to benefit from the concentration of knowledge and pedagogy in the capital. This type of evolutionary networking will eventually have benefits for the nation, as education becomes more collaborative, and compels researchers to produce more new knowledge. National development will also benefit, as planners learn to speak a common language after having been trained in similar ways.

The further development of the training concept and its effective implementation will depend a lot on the ability of SURP faculty to ensure continuous development and improvement of their present frameworks (i.e. quality and relevance of content), as well as establishment of a system for continuity in administering the program. In order to achieve this, the author recommends establishment of a reliable archiving system, as well as a regular review of content that will compare the consistency of concepts and methods imparted by the various lecturers.

There appears to be a need for a more formalized feedback method that monitors and evaluates lecturers’ efficacy and participant learning. Such a system will enable the training director to pinpoint exact areas for improvement. Also, much later on when funding permits, a tracer study of some kind would be useful in gauging the outcomes of the various trainings on a per city or per province basis. This latter will be the true measure of effective teaching that impacts on spatial growth and quality of life.

Technology will also play an important role in extending knowledge through an Electronic Learning Network, which will make use of the official website of SURP's Training and Extension Services division to store lecture files and make these readily available to on-line learners and field practitioners.

There is still much geographic ground to be covered, in terms of the delivery of formal planning education in the Philippines. Beyond training courses, SURP occupies a particularly important position as it has the potential to educate teachers from the different State Universities and Colleges (SUCs) scattered throughout the Philippines, so that planning classes can be encouraged at the undergraduate level, and may be integrated into courses on Community Development, Public Administration, or Rural Development. The idea is to build a critical mass of planning-educated youth outside of the capital that local governments can hire. This will likewise compel SURP in the long run to raise its standard of teaching to include more cutting-edge concepts at the graduate level, as new students from other provinces may already enter equipped with basic planning education.

To increase the diffusion of this type of knowledge on a wider scale, logistics, funding, and personnel will have to be expanded correspondingly in the future. At this point therefore, it is important to see that effective didactic method must be coupled with an efficient managerial strategy in order to reach those who would benefit most from the SURP's lessons.

Note: Grateful acknowledgement is made to Professor Ernesto Serote, Training Director and his staff, Ms. Kristine Follosco for sharing their knowledge and experiences in running the Extension Program of SURP.
References


Viloria, Leandro (August 1973): The Training Programs of the Institute of Planning. Institute of Planning, University of the Philippines, Quezon City.
Annexes

List of SURP Training Programs for 2007

<table>
<thead>
<tr>
<th>Training Program</th>
<th>Program Description/Theme</th>
<th>Date</th>
<th>Venue</th>
<th>No. of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Short Course in Urban and Regional Planning</td>
<td>Improving the Local Planning Process</td>
<td>January 27 – March 31, 2007</td>
<td>UP SURP</td>
<td>39</td>
</tr>
<tr>
<td>2. Training/Seminar-Workshops on SCP/EPM in Tagbilaran City (UN-HABITAT)</td>
<td>City Consultation on Environmental Issues</td>
<td>January 30, 2007</td>
<td>Tagbilaran, Bohol</td>
<td>60</td>
</tr>
<tr>
<td>3. Special Course in Urban and Regional Planning (10 Saturdays)</td>
<td>Rationalizing the Local Planning System</td>
<td>October 13–December 15, 2007</td>
<td>UP SURP</td>
<td>36</td>
</tr>
<tr>
<td>4. Special Course in Urban and Regional Planning (2 Weeks)</td>
<td>Rationalizing the Local Planning System</td>
<td>November 26 – December 7, 2007</td>
<td>UP SURP</td>
<td>21</td>
</tr>
</tbody>
</table>
### List of SURP Training Programs for 2008

<table>
<thead>
<tr>
<th>Training Program</th>
<th>Program Description/ Theme</th>
<th>Date</th>
<th>Venue</th>
<th>No. of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Special Course in Urban and Regional Planning (10 Saturdays)</td>
<td>Rationalizing the Local Planning System</td>
<td>February 9 – April 19, 2008</td>
<td>UP SURP</td>
<td>28</td>
</tr>
<tr>
<td>2. Special Course on Comprehensive Development Planning for Local Governments (2 weeks)</td>
<td>Customized Training for the Department of Interior and Local Government</td>
<td>March 3-14, 2008</td>
<td>UP SURP</td>
<td>39</td>
</tr>
<tr>
<td>3. Special Course in Urban and Regional Planning (2 weeks)</td>
<td>Rationalizing the Local Planning System</td>
<td>August 4-15, 2008</td>
<td>UP SURP</td>
<td>27</td>
</tr>
</tbody>
</table>

Additional Reference: www.upd.edu.ph search for “School of Urban & Regional Planning”/ “SURP”
Quality education in Central American rural areas: A challenge undertaken by the Universidad Nacional, Costa Rica

Alicia Díaz

Abstract

Problems detected in the Central American Rural Education prompted the Universidad Nacional (UNA), Costa Rica, to create the Master’s Degree Program in Central American Rural Education (MERG, by its Spanish acronym); a program intended to improve the quality of rural education in the region. Some innovations of this program, compared to the traditional university education are the Central Americanism approach, module-based curricular structure, semi-virtual methodology, and itinerancy throughout the countries for classroom-learning sessions. Such innovations provide potential conditions for developing a Central American Network in Rural Education, which could have a positive impact in the scientific dimension and in teaching-learning practice. This network is in its initial stage; its further development poses a challenge for the near future.

Keywords: Rural education, Central American education, internationalization of higher education, training of rural teachers

Introduction

As centers for knowledge generation and dissemination, universities should have a positive impact on social development. From this perspective, university programs should respond to the social needs, aiming at a fairer and equitable society. This would be an important achievement for society, but particularly for universities, since it represents relevance, social commitment and, consequently, quality in education.

For over 30 years, the Universidad Nacional (UNA), Costa Rica, has provided training programs for teachers in rural areas, as well as research and outreach projects that help to raise awareness of the rural situation (Díaz: in press). Consequently, there has emerged a need to strengthen the specialization of rural teachers. Such a specialization program should include the social, political, economical, productive, environmental, cultural and family contexts of rural communities, to guarantee that education would suit the specific needs of rural children and young people, according to their environment.
The professional training of teachers in rural areas was carried out nationwide at first, and when the program was stronger, it was expanded throughout Central America. The starting point was the project: “Reinforcement of Rural Schools in Costa Rica and Central America” (Universidad Nacional, Utrecht University: 1996). Considering the quality-related problems detected at all levels of formal and non-formal education in the Central American rural areas, the project concluded that improvement actions were necessary (Aguilar et al.: 2003, Angulo et al.: 2008).

The following were the main problems found:

- Lack of coordination between the curricula and the social-productive context
- Predominant rote learning
- Insufficient participation of parents in educational curriculum and school management
- Lack of student participation in the classroom
- School curriculum lacking coherence and a comprehensive view; low consideration of gender and environmental aspects
- Didactic material not adjusted to rural context
- Inadequate application of intercultural processes
- Few well-prepared teachers
- Teachers lacking knowledge of rural community context
- Lack of follow up processes and continuing education
- Poor conditions in school buildings and general infrastructure
- Diverse institutions offering non-formal education programs and lacking coordination among them
- Non-formal education programs without pedagogical training

In response to this situation observed, the Universidad Nacional created the Master’s Degree Program in Central American Rural Education (MERC), a program intended to improve the quality of rural education in the region. The program targets all individuals interested in the educational processes of rural communities: teachers, sociologists, agronomists, community leaders, social workers, university professors, normal school teachers and members of NGOs (División de Rural: 2005).

**Main innovations of the Master’s Program**

*Central Americanism approach:* The subject areas and methodology of the modules are based on a Central Americanism approach, which breaks with the local-focused approach and the isolation of the traditional higher education provided in these countries. This follows the current trend of university internationalization, where the active participation of professors and students from different countries of the region enhance the learning processes through a cultural diversity impact. The Central Americanism approach contributes to a higher knowledge and harmony between the
Central American people and institutions. It also helps to improve coordination among the universities, and promotes networking – including students, professors and universities – furthering the Central American integration of education.

Module-based curricular structure: The program is structured into five theoretical and practical modules. Each module focuses on a main subject, which is studied from different perspectives – social, cultural and economic – providing a comprehensive view of the rural situation. For example, the community participation module focuses on different perspectives including elementary school, secondary school, normal school, the community itself, teachers, and students. It is also analyzed considering the interaction among community issues – employment, productivity, income, economical activities and literacy rate.

Semi-virtual methodology: This international distance program combines a 10-week virtual component (through a virtual Moodle platform, e-mail and other electronic media) and 2-week classroom-learning sessions (including conferences, panels, group analysis, and fieldwork in rural communities). Most of the participants do not use computers or the internet regularly, but they need to be familiar with these technologies to work in the program. This “electronic culture” is a process; it takes time and energy, and it involves some frustration at the beginning as well. However, after a few weeks, students are able to communicate with each other and the teacher through the Internet. This may be seen as a simple achievement, but it is a fundamental step on the creation of education networks. As a basic skill, individuals should master the Internet to get in touch with peers who work in other countries, thus sharing tips, worries, achievements, research results, and general information.

Itinerary: The classroom-learning sessions are held in various countries, not only in Costa Rica. In this way, students are able to visit schools, universities, normal schools, families, communities, NGOs, education ministries, and others, in the different countries. They are encouraged to talk to local people; ask questions on the module’s subject area, rural education and rural development; share information about their own country; pay attention to learning and rural conditions; discuss the efficiency of certain methods or techniques; and learn from the whole situation.

The following table includes the modules and country of the classroom sessions (the country is selected according to the subject area and the country’s characteristics).

<table>
<thead>
<tr>
<th>Modules</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural education trends in Central America</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>Rural education and labor</td>
<td>Honduras</td>
</tr>
<tr>
<td>Rural education and interculturality</td>
<td>Guatemala</td>
</tr>
<tr>
<td>Rural education and community participation</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>Rural education pitfalls in Central America</td>
<td>El Salvador</td>
</tr>
</tbody>
</table>
The program's itinerant method is fundamental throughout the process. It facilitates the student observation and fieldwork, in the context of the visited country; and makes possible the participation of local professors and speakers. In addition, people have the opportunity to meet other individuals and make contacts, which promotes professional networking, both locally and internationally.

**Main achievements of the Master’s Program**

For the purpose of this paper, only the educational innovation and education quality improvement, and achievements will be included (Carvajal: 2007).

1. **Professionals specialized in rural education.** The first graduating class of the Master’s Program is a group of professionals specialized in rural education, working in different institutions of their home countries including ministries of education, rural schools, normal schools, rural projects and non-governmental organizations. The specialization program includes theory, research, and proposals addressed to the rural institution or community chosen by the student. The program contributes to raise the student awareness on the rural situation, draw attention to it and stray from the urban focal point, and find new ways to examine the rural needs.

In addition to the theoretical principles of rural education, the Master’s Program works on the particular needs of rural communities. Students are encouraged to apply the theory to the rural field, in specific communities, according to their particular social, economic and historical contexts.

In general terms, this is a recent program. There is only one group of graduates, but we expect the number to grow as these specialized teachers are applying their knowledge to society.

2. **Theoretical construction of the Central American rural education.** Theory on rural education is built through the interaction of students from different countries in the same classroom, reading texts by Central American authors, visiting rural areas in different countries and doing fieldwork in the rural context.

The wide range of experiences is our input for theory. As the Master’s Program grows, the number of graduates increases, and the theoretical construction expands thanks to the contribution of those generations.

3. **Sharing experiences on rural education.** The opportunity of sharing the multiple international experiences of students and professors, serves as a learning method and a communication channel to spread knowledge throughout the Central American region.

4. **Knowledge and commitment through itinerancy.** Although itinerancy involves organizational efforts and high costs, it is one of the most valuable innovations in the program. Students become interested in learning not only about the country’s rural education, but also about local hospitality, economy, culture, art and politics. The direct contact of students with the host country experience raises their commitment to the country, the program, the visited institutions and the rural communities.
5. **Virtual education.** Notwithstanding the short experience of both professors in virtual teaching, and students in the use of computer and internet technologies, the program has succeeded in the virtual-related aspects. Sometimes, students and professors have difficulties in accessing technology in rural areas; and some of them are not familiar with these resources. Therefore, students and professors participated in training sessions on the electronic platform and virtual education techniques, which helped them to meet the requirements of the Master’s Program.

6. **Network on rural education.** Although Central American countries are geographically close to each other, there are significant professional differences among them. The Master’s Program has stimulated the interaction including teachers at all education levels, and personnel from the ministries of education, normal schools, and NGOs involved in non-formal education. Students have collected contact information from these participants. This information will be useful for the Master’s Program as well, when planning and organizing the modules for the following years.

Although this is a very new initiative, there are evident achievements. For example, the members of this network were contacted to participate and share their work at the International Seminar on Rural Education Experiences, held at the Universidad Nacional (Universidad Nacional: 2007). In this way, the network is very useful to identify authors, documents and experiences, as well as governmental, municipal and institutional contacts, contributing to the educational development.

Certainly, the network should be improved (more information and a cooperation culture are required). Networking involves constant interaction with peers, exchange of ideas, working together toward mutual scientific objectives. In this sense, there is much work to do on education, together with the Central American universities.

7. **Strategic alliances.** Important alliances were established with the following universities:

1. **Utrecht University, the Netherlands:** Experts from this University have contributed since the beginning of the research activities, and were present throughout the first phase of the Program, which concluded with the first graduation. With their economic assistance, many academic activities were developed for a period of ten years, including training programs and internships both in Costa Rica and in the Netherlands.

2. **Centro Universitario de Occidente, Universidad de San Carlos de Guatemala:** The Western University Center (CUNOC), University San Carlos of Guatemala provided the necessary infrastructure for a classroom session, and their professors shared lectures and activities with the students in the “Rural Education and Interculturality” Module.
3. Universidad Rafael Landívar, Guatemala: This institution has shown a great commitment to intercultural and multicultural characteristics of the region. It has published books and journals on rural education, and has set up a team of professionals in this area. Professors and researchers from the Rafael Landívar University facilitated the results of their projects to be used in the development of the “Rural Education and Interculturality” Module.

4. Universidad Nacional Autónoma de Nicaragua in León (UNAN; León): An important number of professors from the National University of Nicaragua contributed to the “Rural Education and Community Participation” Module; and the University facilitated a classroom for discussion sessions. In addition, University members requested the cooperation of MERC, for the Master’s Program in Rural Education that is being implemented between the National University of Nicaragua and the University of Zaragoza (Spain). For this purpose, two professors from MERC visited Nicaragua, offered two training courses for two weeks and provided assistance through virtual means afterwards.

5. Universidad de Costa Rica (UCR): The University of Costa Rica has provided important contributions to the Master’s Program, including lecturers and materials, as well as the support to activities in indigenous communities, and in a remote region of Costa Rica (for this, the University facilitated professors, coordinators, transportation, and lodging). In addition, the University funded the participation of one of its professors in the “Rural Education and Interculturality” Module, held in Guatemala.

6. University of the Balearic Islands, Spain: A joint teacher-training project was implemented between MERC and the University of the Balearic Islands. A professor from MERC was accepted in the Ph.D. Virtual Education Program of this University, and is currently in the final phase of her Ph.D. thesis. Through this training project, professors became familiar with the virtual learning platform, and the best teaching-learning activities for virtual education.

7. Universidad de las Regiones Autónomas de la Costa Caribeña Nicaragüense (URACCAN): Experts from the University of the Autonomous Regions of the Nicaraguan Caribbean Coast participated as lecturers, and shared the results of their projects in rural education. Since the University is interested in having an expert in rural education, it is financing the Master’s Degree studies of a faculty member.
8. Bluefields Indian and Caribbean University (BICU): BICU provided its facilities for the “Rural Education and Community Participation” Module, held in Nicaragua. The University members were interested in having the advice of MERC in the development of their own programs. Both universities are currently working on signing an agreement.

Other relations have been established with the following institutions:

1. Centro Nacional de Educación para el Trabajo, Honduras (CENET): The National Center on Education for Work has contributed in the areas of non-formal education, education for work, and educational planning. This institution had an important role for the success of the session held in Honduras.

2. Plan International. This is an international organization with programs throughout the Central American countries, except in Costa Rica. Plan provided financial support for students, research activities, internships and training, as a way to have a major positive effect on the Central American education.

3. Other Costa Rican institutions: There were also different opportunities to cooperate and exchange information with other Costa Rican institutions, including: The Ministry of Education, Omar Dengo Foundation, Agricultural Development Institute (IDA), Chorotega Regional Center of the Universidad Nacional, Projects: State of the Nation and State of the Region, Inter-American Institute for Cooperation on Agriculture (IICA), and Central American Educational and Cultural Coordination (CECC).

This list of institutions and the cooperation achieved is the result of networking. Certainly, improvements are necessary to have a well-functioning networking; however, the support received by the program has been a major step.

8. Solidarity and identity through the Central Americanism approach. There was an environment of companionship between students and professors after sharing their daily activities and visiting rural communities. This professional relation does not mean the union of the Central American region, but is a valuable step to change attitudes, especially considering the influence of teachers on students, parents, educational institutions and communities. These personal interactions have not only contributed to the learning process, but they have also strengthened the commitment and have enhanced awareness of the rural needs, rights, and potential, and of the possibility of making use of the rural resources available. The experience generated by this process is not only intellectual, but emotional as well; and this emotional experience may be more representative.
Final remarks

The Master's Program in Central American Rural Education is an innovative experience, with a Central Americanism approach. It is a semi-virtual program, addressed to improve the quality of rural education in the region. The improvement of quality would result from the combination of the following facts: professional specialization of rural teachers, focus on the characteristics of rural areas in each country, exchange of experiences and ideas, theoretical construction of rural education, and a well-functioning network of professionals. Making alliances is important to promote the exchange of knowledge, facilitate communication, provide upgrading opportunities, work on the curricular homogenization and favor future cooperation.

The Master's Degree Program in Central American Rural Education has been an opportunity of educational development, which also made close professional relations possible. As this initiative, other channels should be created to strengthen rural education development and promote, at the same time, the quality of education in rural communities.

References


Reforming research at Haramaya University, Ethiopia: The role of institutional linkage in technology transfer

Tadele Tefera

Abstract
Haramaya University, College of Agriculture, established in 1951, is the center of excellence for agricultural education and research in Ethiopia. However, research performance has become an important issue for Haramaya University as it faces increasing demands to demonstrate that it generates relevant and quality outputs for stakeholders. The purpose of this study was to evaluate the research performance of Haramaya University according to the perceptions of farmers and researchers. Most of the researchers (86%) are not satisfied with the impacts of their research results on the local community. However, researchers mentioned constraints to research results communication including lack of clear mandate, capacity, proper orientation and motivation and dissemination strategy. The proportion of the farmers who benefited (9.2%) from the University’s research results were very low. About 80% of the farmers perceived the contribution of the University’s research to solving local problems as poor. In responding to the problem, the University established institutional linkages with government and non-government institutions directly or indirectly involved in technology generation and transfer. The success and challenges associated with institutional linkages in technology dissemination are discussed.

Keywords: Reform, research, technology transfer, institutional linkage, Haramaya University

1. Introduction
Haramaya University, College of Agriculture, established in 1951, is the center of excellence for agricultural education and research in Ethiopia. The University, besides, teaching and extension services, is actively involved in national research programs in collaboration with national and international organizations (Belay, 2000). The research activities predominantly encompass socioeconomics, food science and post harvest technology, crop improvement, livestock improvement, natural resource conservation and pastoral and agro-pastoral studies. The University, however, is criticized for not performing to the expectation of the local farming communities. Thus, assessment of research performance has become an important issue for the university as it faces increasing demands to demonstrate that it generates relevant and quality outputs for stakeholders. Therefore, the objectives of this study were to determine the perceptions of farmers and researchers regarding the University’s research performance in impacting local farming, to assess strengths and limitations of Haramaya University's research system and to explore ways to reform the University’s research to make it responsive to local/national needs and priorities.
2. Situation analysis
In order to assess the University’s research performance, researchers and farmers perceptions were studied. To study the perceptions of the researchers structured questionnaires were used. The questionnaires were then distributed to and collected from 42 researchers in the College of Agriculture, with a qualification of M.Sc./M.A. and PhD. The questionnaires addressed areas of research interest, sources of research ideas, goals of conducting research, communication of research results, constraints to research and over all contribution of research results in solving local problems. Besides, informal discussion was held with key informants.

In the case of farmers, data were collected through interviews. Six peasant administrations (PA), 2-7 km away from the University, were intentionally selected. The PAs were selected based on the assumption that they are immediate beneficiaries of technologies generated by the University. Each PA is estimated to have a total of 500-700 farmers. From each PA, fifty farmers were randomly selected. The PAs were Damota Jalela, Efa Bate, Finkile, Qerensa, Tinke and Tuji Gebissa. Focus groups (5-10 farmers) were also conducted with the farmers during final stage of data collection. Different reports including annual reports, progress reports, proceedings, occasional papers, working documents, strategic plan, ad-hoc committee reports and bulletins were obtained from the Research and Extension Office of the University, were examined and analyzed.

3. Research focus and outputs
The University conducts research activities in the areas of livestock improvement program (beef cattle, dairy cattle, dairy goats, sheep, animal feed and nutrition, camel, and poultry), crop improvement program (maize, sorghum, wheat, barley, teff, sesame, groundnut, pulses, vegetables, fruits, and plant protection), natural resources conservation (soil and water management, soil fertility management, forest and forest products), post harvest technology and food sciences, extension and outreach, and socioeconomics. About 120 improved crop varieties were developed along with their agronomic packages, different cross bred dairy cattle and goat, evaluated and recommended locally available feeds (Annual Report, 2006). Besides, similar research achievements were made regarding natural resources conservation and utilization, post harvest technology and food sciences, extension and outreach, and socioeconomics.

4. Researchers’ perception
Most of the researchers (86%) are not satisfied with the impacts of their research results on the local community (Figure 1). Most of the researchers believed that they conducted applied research than basic research, thus, i.e. to generate new technology that solves farmers’ problems; however, some researchers are interested in doing for publication, personal and donors’ satisfaction, and for provision of alternate policy. However, researchers mentioned constraints in research results communication including lack of clear mandate (36%), capacity (62%), proper orientation (62%), motivation (36%) and dissemination strategy (40%) (Table 1).
Reforming research at Haramaya University, Ethiopia: The role of institutional linkage in technology transfer

Figure 1. Researchers’ perception of research results impacts on local farming

Table 1. Researchers’ constraints in research results dissemination

<table>
<thead>
<tr>
<th>Constraints in research results dissemination</th>
<th>Percent respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of clear mandate</td>
<td>35.7</td>
</tr>
<tr>
<td>Lack of capacity (finance &amp; manpower)</td>
<td>62</td>
</tr>
<tr>
<td>Lack of proper orientation</td>
<td>62</td>
</tr>
<tr>
<td>Lack of incentive</td>
<td>36</td>
</tr>
<tr>
<td>Lack of dissemination strategy</td>
<td>40</td>
</tr>
</tbody>
</table>

*Values may be > 100% because of respondents’ multiple response

Farmers’ perception

Most of the farmers (90.3%) interviewed knew the Haramaya University (Table 2). However, the proportion of the farmers who benefited (9.2%) from the University’s research results was very low. The farmers (56%) perceived that the University is conducting problem solving research and aware (84.4%) that technologies generated by the University perform better than their own (local). Most of the farmers (83%), however, neither attended training, paid visit nor obtained technologies from the University. About 80% of the farmers perceived the contribution of the University’s research to solving local problems is poor (Figure 2).
Table 2. Farmers’ perception of HU’s research target and technologies generated by the University

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Percent respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know HU?</td>
<td>Yes: 90.3, No: 9.7</td>
</tr>
<tr>
<td>Have you benefited from the University’s generated technologies?</td>
<td>Yes: 9.2, No: 90.8</td>
</tr>
<tr>
<td>Is the University doing problem solving research?</td>
<td>Yes: 56.0, No: 44.0</td>
</tr>
<tr>
<td>Are the University’s generated technologies better than yours?</td>
<td>Yes: 84.8, No: 15.2</td>
</tr>
</tbody>
</table>

Figure 2. Farmers’ perception about University’s research contribution to solving local problems

5. Strengths

One of the strengths is that the commodities and problems that the HU research addressed were relevant to farming in Ethiopia. Furthermore, most of the HU research programs were done in collaboration with the Ethiopian Institute of Agricultural Research (EIAR), regional agricultural research institutes and regional bureaus of agriculture and rural development, and local non-government organizations. The research emphasis given to crop, natural resource and livestock research seems justifiable because agriculture in the region is predominantly subsistence and characterized by tree-crop-livestock mixture. The interest and involvement of researchers in conducting applied research appeared encouraging.

The other strengths are that the HU is fairly well staffed and relatively has rich experiences in areas of agriculture. Furthermore, most of the HU research programs are done in collaboration with the Ethiopian Institute of Agricultural Research,
regional agricultural research institutes and regional bureaus of agriculture and rural development, and non-government organizations. The research emphasis given to crop, natural resource and livestock research seems justifiable because agriculture in the region is predominantly subsistence and characterized by tree-crop-livestock mixture.

6. Weaknesses
The major weaknesses of HU are proved to be poor transfer of technologies, limited financial and lack of motivation by the researchers. In Ethiopia, agricultural research is conducted by universities and research institutes; while agricultural extension (technology transfer) is the mandate of ministry (bureau) of agriculture. The fact that agricultural research and extension are carried out by two separate bodies with limited contact and working relationships, has made it difficult to develop and disseminate agricultural technologies suitable to farmers conditions. Although HU had generated several technologies, poor linkage and lack of synergy between the HU and the relevant ministries affected the research performance of the University and consequently the livelihoods of the subsistence farmers remained unimproved.

7. Institutional linkage
The University established Research-Extension-Farmer-Linkage Advisory Council (REFLAC) to create a forum for networking and foster dissemination of technology. The REFLAC includes all the key government and non-government institutions directly or indirectly involved in technology generation and transfer. It includes the Haramaya University (HU), Local/District Administrator, the Head of Bureau of Agriculture, the Bureau of Planning and Economic Development, international and local NGOs, researchers, farmers’ representatives and unions, extension workers and investors. The Head of the Bureau of Agriculture is the Chairman of the REFLAC and the Research Director of HU is the secretary. The REFLAC convenes quarterly. These institutions were involved right from the project preparation stage and have a considerable sense of research project ownership. There is close cooperation in planning, implementing, monitoring and evaluating the technology generation and transfer related activities. The REFLAC has considerably changed the research direction of the University to make it more demand-driven and need-based. Therefore, the University revised its research strategies and priorities accordingly.
The Haramaya University is taking the lead in activities such as facilitating joint meetings of REFLAC. The creation of such a forum also helped to create a joint stakeholder understanding of technology transfer to improve the institutional linkages. The purpose of the forum is to bring together organisations and individuals involved in research for development-related activities in order to share experiences, lessons and challenges. It includes farmers, who describe and discuss their experiences. The forum is based on practical cases and helps to review the quality of the research process from different perspectives and in different settings. Suggestions and recommendations drawn from the forum are disseminated through forum reports. Thus, the forum provides an opportunity for networking that could support transfer of technology. Dissemination of technology related information from the specific activities and from the experience are disseminated to staff of the partner organisations and others through meetings, visits and publications (pamphlets). The REFALC fostered the dissemination and adoption of improved technologies including crop varieties and animal breeds (Table 3).
Table 3. Some of the technologies disseminated through the REFLAC in 2007/2008

<table>
<thead>
<tr>
<th>Technology distributed/trainings given</th>
<th>Number of farmers benefited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved crop seeds</td>
<td></td>
</tr>
<tr>
<td>Potato</td>
<td>93</td>
</tr>
<tr>
<td>Beans</td>
<td>1168</td>
</tr>
<tr>
<td>Chickpea</td>
<td>30</td>
</tr>
<tr>
<td>Sorghum</td>
<td>30</td>
</tr>
<tr>
<td>Groundnut</td>
<td>3</td>
</tr>
<tr>
<td>Improved animal breed</td>
<td></td>
</tr>
<tr>
<td>Poultry and poultry house</td>
<td>101</td>
</tr>
<tr>
<td>Training farmers</td>
<td></td>
</tr>
<tr>
<td>crop production &amp; management</td>
<td>136</td>
</tr>
<tr>
<td>poultry production &amp; management</td>
<td>45</td>
</tr>
</tbody>
</table>

8. Lessons learnt

It is clear that when agricultural research is strongly linked with technology dissemination that fruitful results could be achieved. Successful research for development also depends on the active participation of the farming community and concerned stakeholders in planning, execution and evaluation of agricultural research and extension activities. Linkage is used to channel information between groups and to coordinate required tasks in the process of getting relevant technologies to farmers. Linkage activities help to improve resource use by avoiding the duplication of effort and ensuring that critical tasks do not fall through the institutional cracks. By and large, strong and functional linkage between research, extension and farmers should be established in order to achieve successful technology transfer. Staff members at various levels in the partner organisations recognised clearly that changes are occurring with respect to technology transfer, generation, and research review procedures.
9. Challenges
At the time of the meetings and mid-term review, the verbal commitment of the key players to institutionalisation of REFLAC was judged to be good, but the changes needed in institutional procedures had still not taken place. There were still problems related to funding the REFLAC activities in the field, especially travel and per diems, and for facilitating (e.g. through transportation). Very often the University organizes REFLAC meeting, however, the extension workers did not show up as they are busy with non-extension activities.

The University is the only responsible body to organize and facilitate the net-working system. The other actors appeared passive participants in the entire activities of the linkages. Some members come to the scene during the review and monitoring and evaluation meetings. Absence of accountability and responsible is often reflected by certain members of the group. Thus, most of the linkage activities are undertaken on the goodwill of actors.

10. Conclusion
In conclusion, Haramaya University should be agents of change among the resource limited farmers. This entails the responsibilities such as training farmers, working with farmers to solve problems and developing their capacities to evaluate and analyze sustainable technologies. In an effort to improve and effectively meet the needs of the farmers, HU should play catalytic role in bridging the gap between technology and farmers. Results of this study can be utilized and offer ideas and recommendations to design effective research strategy in agricultural education, research and extension.

11. References

Dancing with change: A tango to a successful outcome

The case of the development of the Biotechnology Service Unit at Faculty of Mathematics and Natural Science - University of Sam Ratulangi Manado

Trina Tallei and Sitaresmi Ismangil

The Biotechnology Service Unit (BSU) at Faculty of Mathematics and Natural Science (FMIPA) – University of Sam Ratulangi (UNSRAT) Manado is the result of implementation of a project proposal developed during UNISTAFF Summer Course at ISOS - Wittenhausen in 2007. This paper reveals what happened during the development of BSU, and supported with organizational and psychological background theories that provide the basis for the discussion. Introduction of BSU required a dynamic of introducing change into an established institution as a sort of natural choreography of a ‘Tango dance’. The importance of an effective team is highlighted. Actual steps and strategies towards the establishment and development of BSU are discussed and development of networking is shared briefly. All activities have resulted in successful and promising outcomes. A possibility of bottle-neck in networking is also taken into account.

Keywords : Biotechnology Service Unit, networking, tango dance analogy, dance with change

Introduction

Institutional capacity, as well as quality and relevance improvement in higher education, needs to be developed through several strategies. In line with the demand for universities to move towards more autonomy and develop capacities to manage change, the university is committed to the development of a skilled and motivated workforce. A workforce’s motivation and excellence are best attained through training, development, and educational activities. The University Staff Development Program (UNISTAFF) organized by ISOS at Kassel University is one program that values staff development as a vital aspect of the growth and effectiveness of the individual employee and the university as a whole. During the course, participants were encouraged to develop a project proposal relevant to their respective institutions and to be developed further upon returning to their institutions.

An individual project proposal developed during UNISTAFF Summer Course in Wittenhausen in 2007 was the Establishment of the Biotechnology Service Unit (BSU) at Faculty of Mathematics and Natural Science (FMIPA) University of Sam Ratulangi (UNSRAT) Manado. Issues raised by the establishment of BSU among other things include the promotion of interdisciplinary and coordinated research effort and service in biological science and any other related applied sciences; and also to educate teachers, students, and the public about the promise and challenge of biotechnology. Moreover, the progress in biotechnology field in the world is
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extremely fast so that it is believed as a new wave of world economy after information and communication technology. Modern biotechnology was born in the 1970s and has undergone revolution due to the shifting of paradigm of natural resources utilization from cellular level to molecular level.

The problem
So far, all biotechnology centers established are in Java region while the in eastern part of Indonesia it has not been established yet, especially in North Sulawesi Region. There have been various biotechnology laboratories spreading in North Sulawesi area but there is not one such laboratory that focuses on learning. The laboratories have only focused on research and services. Some of them are not in operation yet since there is no expert staff in the laboratories.

The general aim of establishing this unit is, in line with the Biology Department's mission, to become the center of excellence in biotechnology in northern part of Indonesia. This unit also shall support the implementation of higher education reforms that are designed to produce better and qualified university graduates. This is also in line with government efforts to accelerate the competitiveness amongst university graduates with the ability to compete in the regional as well as the national market.

University of Sam Ratulangi Manado as one of well-known public universities in the eastern part of Indonesia is located in Manado city. This location has a strategic position that is at the Pacific Rim. It is hoped that UNSRAT shall be able to make use of condition and excellence of its area to trigger national development in the arena of globalization through the role of higher education.

The dance began: From a dream project to the implementation
After all, introducing change into an established institution is not an easy task. The biggest challenge was to deliver the idea to the Dean and colleagues and convince them that the unit would be beneficial to the development and the implementation of mission statements of FMIPA-UNSRAT. There was resistance from some colleagues, but it was diplomatically handled by the Dean. Resistance included the plan of taking over the equipments needed for the establishment of BSU and of moving them to the advanced laboratory.

The project was realized soon after completing the course and officially established by the Decree of Dean of FMIPA Unsrat on 3rd January 2008 (No. 05/H12.28/PP/2008). Figure 1 reveals the organizational structure of FMIPA which shows the current position of BSU, while Figure 2 shows the internal organization of BSU. FMIPA consists of four departments, i.e. Mathematics, Biology, Chemistry, and Physics. Basic laboratory provides services to all practical activities in basic sciences (Physics, Chemistry and Biology) while advanced laboratory provides services to all the research activities (FMIPA, UNSRAT, and other institutions).
In the future, as proposed earlier, the internal organizational structure of the BSU shall be as in Figure 3. The unit will be coordinated by a coordinator who shall be assisted by Treasurer, Steering Committee and Head of the following departments: Research, Training, Service and Cooperation. The duties of each individual in the organization shall be as follows:

- **Coordinator of BSU**

  The Coordinator shall be appointed by the Dean after consultation with other interested faculty members. They shall be responsible for the day-to-day operations of the unit. They also shall arrange long term plan and create annual work program or plan. They shall serve an initial two years term followed by subsequent renewable 3-year term intervals. Re-appointment shall be subject to a comprehensive review.

- **Steering Committee**

  This committee shall serve to assist the Coordinator of BSU in the administration of the Unit and shall consist of 8 members chosen from the Faculty of Mathematics and Natural Sciences (1 member from the Dept. of Mathematics, 1 member from the Dept. of Chemistry, and 2 members from the Dept. of Biology), 1 member from
Faculty of Agriculture, 1 member from the Faculty of Fisheries and Marine Sciences, 1 member from the Animal Science Faculty, and 1 member from the Medical Faculty. The members shall serve a rotating 3-year term and be appointed by the Coordinator of BSU with the approval of the Deans of those Faculties involved. The members shall meet when required to discuss activities and business of the unit and shall actively be involved in general activities of the Unit.

- **Treasurer**
  The Treasurer manages the source of funding and performs financial administration. Treasurer shall be appointed by the Coordinator of BSU after consultation with the Dean of Faculty of Mathematics and Natural Sciences.

- **Heads of Department**
  Heads of Department shall be chosen amongst the Advisory Board. They shall execute work program in their departments.

Figure 3. The proposed internal organizational structure in the BSU

The proposed organizational structure has not been elaborated further due to predictable resistance by most of faculty members. This predictability was entirely based on the assumption that faculty members are not ready yet to involve colleagues from other faculties in internal organizational structure. This assumption will be elaborated further later on.

What was done to move from the dream project to the implementation was to find out the essence of the idea and find a way to make it workable. The saying is that "It takes two to tango". This means that in order to respond and accept change, external support was needed. Also, a sense of urgency has to be introduced. In this sense, external supports were all aspects inside departments and faculties, i.e. colleagues, administration staff, and students. Urgency refers to the possibility that this kind of unit would occur somewhere else outside of FMIPA and would later serve as a competitor, and BSU is no longer as a pioneer in UNSRAT and North Sulawesi at large.
Dancing with change: A tango to a successful outcome

This particular "Tango", like the dance, consisted of several steps which relied on a sequence of events happening naturally. The steps included (1) developing a questionnaire to gain information about how far there is participation and support from colleagues, administration staff and students towards establishment of the unit, (2) conducting intensive dialogue with the Department of Biology, (3) convincing people that the unit belongs to everybody to avoid denial and resistance, (4) conducting a national seminar cum workshop for the team and the faculty in order to make them feel that they are involved in a prestigious event.

Into the leap of change
Introducing a new unit at FMIPA was like introducing a change. The introduction consisted of small but hopeful steps. This is something like implementing changes and watching the dynamics of the change. According to Laske (in Fremerey 2006: 3) change will happen only when enough members of the system can agree on a guiding melody. In this case, the authority of the agent-of-change was challenged. The processes of the change are discussed below:

Step 1. Taking-off from the comfort zone
Taking an initiative leap that leads to a productive environment is like dancing with change. In order to introduce and survive the change one must blend in with it and be able to create a nice dance with good choreography. One step at a time then more steps at other times. Without having prior knowledge of how to dance, taking an initial step is frightening. This step is very important since it will determine whether one will be able to proceed or will have to stop.

The first real problem faced was to introduce the BSU at FMIPA-UNSRAT, without knowing how would be the reaction of colleagues, administration staffs, and students. Most people do not like to leave their own comfort zone. People tend to be feeling secure in their own position without any particular motivation. Therefore a questionnaire was developed to gain information about how far would be the participation and support from them towards the establishment of BSU.

All of the students were positive and enthusiastic towards and also proud of BSU and hoped that this unit will provide new insight on modern biology. Administrative staff perceived that even though BSU will not give direct impact to them, still it will provide a positive environment for teaching and learning. Some colleagues thought that a questionnaire was not necessary since without it the unit would in any case be established. Even so, they gave a positive response and agreed to the establishment of BSU, and hoped it would provide a new research environment, i.e. inter-/multi-disciplinary research collaboration. They were optimistic that this unit was to be implemented consistently and professionally with the support from every aspect and stakeholders involved. Some advice was given by colleagues that BSU shall provide a real and a concrete biotechnology application. It could not be predicted that no one would give a negative response to the establishment of BSU. Would it be because no one had the courage to show it or probably a trust had been built among the colleagues towards the establishment of the unit.
Step 2. Conquering the fear

There is no pattern and no preset sequences of steps in the Tango. It is just a simple style. It means after gaining information through questionnaires, and since it takes two to tango, and yet all equipments needed for BSU are in the Biology Department zone, then each party must do each part to the fullest in conducting a dialogue. Senge (1994: XI-XV) laid stress on the importance of a dialogue over a discussion in a learning organization, as dialogue is a process by which meaning comes through. Here there is no more fear to go where. As in Tango, the agent-of-change never pushes or presses the partner anywhere. The partner moves entirely on his/her own. BSU and department have their own power and keeps on own balance, go to where they know. This is a working together type to create a Tango dance.

Dialogue runs smoothly if each partner knows when they will lead and when they will follow. Leadership, then, is a relationship with others and is specific to circumstances. Therefore, someone who is a leader in one circumstance, may not be a leader in another.

This step consists of deciding to take a change as our partner. One needs to acknowledge the change in order to be able to dance nicely with it. To avoid denial and resistance, colleagues had to be convinced to start recognizing and understanding that the change had already begun, even though according to the questionnaire they gave positive feedback towards the establishment of BSU. It is always, however, critical to begin with individual movement and then shift to the team, departmental, and faculty level. According to Lewin (1954 in Kritonis 2005: 1), all organizational behavior is the product of two forces (a) one striving to maintain the status quo, and (b) one pushing for change. The (a) had to be reduced, so in the step of convincing colleagues, a small and effective team was built, which consisted of 6 colleagues from the Biology Department. This team served as an elite team to secure the establishment of BSU, and to create it as (b). Without this team, the agent-of-change would end up being a single dancer. Each team member was introduced to the dance. By being able to understand the situation, the team moved towards creative and positive interactions, in such a way as to increase productivity and team-working.

As explained above, implementing change therefore means either reducing the forces for the status quo or strengthening the forces for change. Three steps in the process of change according to Lewin (1954 in Kritonis 2005: 2-5) thus:

1. **Unfreezing**, means reducing the forces which are striving to maintain the status quo, by conducting dialogue and convincing colleagues. This was accomplished by presenting a provocative problem to get them to recognize the need for change and to search for solutions. Without unfreezing, change shall not occur. The provocative problem included to show them about the possibility of competitors arising.

2. **Moving**, which aims to shift or alter the behavior of the individuals in the faculty where the change is to occur. In other words, moving as developing new behaviors, values, and attitudes.

3. **Refreezing**, to accomplish reinforcement to new state of equilibrium. This includes
instituting new systems and procedures that would support and maintain the changes that have been made.

Formation of trust is essential to the group dynamics as a basis for the development of the effective team, and communication as well as conflict-resolution (if any) in a team. Basic trust means acceptance of self and others (Hohn 2000: 3-4). Creativity of each team member was built by encouraging them to speak freely within the group. Constructive self-change was undertaken. The team knew how to adopt its norms and values to accept the perspective and input of the members. The team also realized that trust needed to be earned and it took an investment of time.

**Step 3. Precision is the key to progress**

To lead an innovative team is a paradoxical challenge for a leader. On the one hand the team needs time to create and to destroy, needs freedom to take risks, and freedom to break with procedures and rules without being punished. On the other hand, a team must work efficiently toward a goal within the constraints established by internal resources and culture. These paradoxical elements have to be somehow ‘managed’ by the leader. Maslow (1970 *in* Hoy and Miskel 2005) developed a fascinating theory of human needs: (1) Psychological needs, (2) Safety and security needs, (3) Belonging, love, and social needs, (4) Esteem needs, and finally (5) Self-realization. These needs are related one another and are arranged in a hierarchy of prepotency, or urgency for survival, of the individual. Self-realization is the need to be what an individual wants to be, to achieve fulfillment of life goals, and to realize the potential of his/her personality. By understanding that this particular need is a process, not an end state, the new formed team used this to motivate colleagues by an attempt to satisfy their need to become important at that time. To fulfill colleagues’ needs to feel important, a scenario was set up, namely national seminar cum workshop on Multidisciplinary Application of Polymerase Chain Reaction (Figure 4). Colleagues at Department of Biology were involved in the committee. According to theory there is a clear relationship between the capacity to play (*dance*) and the development of basic trust in the individual. This assumption can be traced back to a large extent to theories on playing (*dancing*) in psychological development and psychodynamic theory (Hohn 2000: 6-7). By analogy, this idea was therefore transferred and extended into successful innovative teams and their capacity to be creative. In addition, the seminar cum workshop was designed to introduce to the university and society at large the existence of BSU in the community. Also it addressed the essence of the idea that is to foster a pervasive, powerful interaction between those on campus and those in society that in multiple ways benefits both parties. This strategy reflects the effort made by university to introduce the scientific and technological progress that have brought about significant transformation and continue to drive change in every aspect of life. This aim of seminar cum workshop made a huge impact on the colleagues.
Figure 4. Diagram of development of Biotechnology Service Unit FMIPA-UNSRAT and the development of its network. Broken lines indicate unestablished network.

To keep the team connected to the shared interest sometimes hard work was needed, while others just came about naturally. Basically the main steps in maintaining the flow of the change are as follows:

1. Internal Communication

Internal communication was implemented. On the Tango dance floor, the leader (the team) invites people to dance (follow), but the followers choose whether or not to accept it. Colleagues chose whether or not to be involved in the Committee. Hence, the ultimate power lies with the followers. But, good leaders may attract many followers. All interested staff/colleagues were asked to become involved and to let them know what was going on in the hope that they would support the effort. This was mainly through informal communications. So, most of them joined. Questions and advice were invited so as not to let the colleagues feel left out or ignored. Good communication skill was certainly needed to show them that together the committee would be able to overcome obstacles.

2. Local Communication

In the frame of networking, an internal network was developed by involving colleagues from other faculties to join the committee. This had a great effect on the team and the committee.
3. External Communication

On the national level, the Indonesian UNISTAFF alumni network (INDOSTAFF) was actively involved from the early stages of the preparation, namely development of the proposal. Conference was set to attract participants from diverse backgrounds. On the international level, German colleagues (UNISTAFF and Science Bridge at Kassel University) were also involved so together hand in hand to assist in securing funding from DAAD. This part plays an important role as the key to success.

The journey in Tango involves taking risks, venturing into the unknown, stepping firmly but not knowing what will come next. It is a way of dealing with reality that we foresee what is coming based on a deep perception of there and now rather than anticipating reality based on already fixed paradigms or patterns since the people are evolving in ways that cannot be anticipated with orthodox paradigms. Thus, this Tango helps to provide insights into new ways of coping with changing paradigm (Grant 2007: 1).

The purpose of introducing Tango is that through energy, vision, clarity, communication and attention to detail, every individual will feel supported, accelerated, and empowered to overcome their perceived limitations and to achieve their highest potential in an efficient, effective and sustainable manner, whilst having fun on the dance floor. The goal is for the team and the committee to move across the dance floor as a single, harmonious entity (Schy 2008: 1).

Dancing is, in a way, the inner expression of what one perceives on the outside as freedom, challenge and risk taking. In terms of analogy, dancing is important for the development and creativity of teams. The team developed into a more creative, mature unit using this Tango analogy to step out of standard patterns. On the dance floor, the team members were given freedom to improvise. When they moved naturally, they were going in the same direction and not to crash each other, as being in a synchronized movement, with each member as well as with the environment (committee and faculty). It means that working well with team members requires paying attention to the environment in which one works as this is the music to which people must move together (Schy 2008: 1). Another main challenge was to recover natural movement and coordination until no adjustments of it were necessary in order to dance. In other words, the environment where the team works in, no matter how complex it is, should be accomplished easily through natural movement, without sacrificing partnership/connection that has already been established.

The network

Networking is largely about relationship. If network is done with integrity, a relationship with people will be created, those people who will truly benefit from our offers. Every person has a potential inside that is used to engage people in conversation so as to give other parties a room to get to know what our work is and to get to know us. A room shall be given to them to evaluate how they can benefit from what we do and what we are going to do.
During the course of time, the aim of the conference grew and developed from "only" introducing the unit to local academia and community to something beyond expectation, that is the development of a cooperation offered by Science Bridge (Kassel University) and University of Indonesia. This was due to the shared vision of concerned parties, namely to increase the awareness of society about the promise and challenge offered by biotechnology. Science Bridge at Kassel University is a public laboratory devoted to teaching and training in modern biology, with more than 20 years of experience in the development, organization, and supervision of courses at high school and undergraduate level, as well as public courses for non-scientists. The collaboration of the above mentioned parties has been proclaimed on IGN TTRC (Indonesian – German Network for Teaching, Training and Research Collaboration) (http://www.sciencebridge.net/projekte/)(Figure 4). This will be elaborated further elsewhere in this International UNISTAFF Forum. The involvement of German colleagues in biotechnology field has significantly improved the networking atmosphere between FMIPA-UNSRAT and German Institutions.

Other networks also have been established informally between BSU and other parties as follows:

- Research collaboration with the Faculty of Marine Science and Fishery, Sam Ratulangi University;
- Research collaboration and consultancy service with Freshwater-fish Breeding Bureau (Balai Budidaya Air Tawar / BBAT) Tatelu, North Sulawesi;
- Fish Health Examination Service with Quarantine Unit, Sam Ratulangi Airport Manado. This service is a collaboration between BBAT, FMIPA Unsrat and Quarantine Unit and still in the stage of negotiation, although several activities have been carried out together.

In the networking, however, one has to consider the bottleneck. In a communication context, bottleneck is a point in the network where the flow of information is impaired or stopped entirely. It means that effectively there is not enough information or handling capacity to handle the communication traffic. A bottleneck can occur in all parties involved. As a result, communication flow slows down to the speed of the slowest point. This effect in turn affects the whole performance of networking and can even cause the networking to crash. A bottleneck frequently arises from poor communication or mismatched vision. This has to be anticipated since the very beginning of the formation of network and to find a way to avoid or to reduce it.
Dancing with change: A tango to a successful outcome

Concluding remarks
It can be concluded that individual and organizational beliefs are correlated significantly to the commitment of an organization and are amongst the very important factors to the achievement. It has to be stressed here, however, that this successful outcome is not the end of the dance. There is the challenge of harmonizing all interests of the internal and external parties involved. In addition, support from the university and the availability of funds for the sustainability of the unit as well as the network is integral for success, even though in the long run the unit shall be self-sustained. Active participation and effective communication of each party will attenuate stagnation in the internal and external networking. Lesson learnt: motivation and planning are essential to success. While it takes two to tango, still it can only take one to trigger change.

References

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Capacity building: Nurturing practitioners - cultivating preceptors through a higher education institutions partnership

Diana Lyrawati

Abstract
Relevancy of higher education (HE) should partly be tied to the ability of the HE teaching and research to offer solutions for society's problems or other demands including the change of paradigm faced by the professional community. Such a challenge has recently become apparent to us now that the Department of Pharmacy of Brawijaya University at our affiliated teaching hospital setting has a new responsibility: developing clinical pharmacy service for the poorer patients. A participatory project in collaboration with an international HE institution was initiated to short cut the immediate hurdles i.e. human resources (number and competencies of professional pharmacists/academic staff) and funding. This kind of partnership facilitates our capacity building, acquiring new and necessary knowledge and skills delivered by international partners who have more advanced experience than us. We started the program with local hospital practitioners at their real circumstances who act then as preceptors for students at pharmacy internships. Having implemented their up-dated knowledge and skill directly in the local context as professionals and research fellows, these practitioners are more equipped to revise courses -- more contextual -- for the students.

Keywords: Capacity building, practitioners, pharmacy, preceptors, HEI partnerships

Introduction
Ensuring that the University makes the fullest possible contribution to the social, economic, cultural and environmental well-being of communities, points to one of the higher education (HE) features, namely being relevant. Relevancy of HE means that the HE teaching and research should be able to offer solutions for society's problems or other demands including the change of paradigm faced by the professional community. Such a challenge has recently become apparent to us now that the Laboratory of Pharmacy of Brawijaya University at our affiliated teaching hospital setting has a new responsibility: to assist the Department of Pharmacy of the hospital to develop clinical pharmacy service for the poorer patients. At present, the immediate hurdles are the lack of human resources, facilities, policies and funding.

In this study we report our experience in bringing about the necessary transformation. A project in collaboration with an international HE institution was initiated aiming to solve the critical problems, i.e. improving the knowledge and skills of the pharmacists (academics and hospital pharmacists in both the university setting and teaching hospital) through staff training and curriculum development, sharing experience and
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bench-marking through staff exchange, developing evaluation system and conducting joint research. As there was no chance to recruit new academic staff, we proposed to start the program with the available academic staff and pharmacist practitioners who act then as tutors for colleagues and preceptors for students at internships.

Main settings
Laboratory of Pharmacy of Brawijaya University is offering clinical pharmacy services in the hospital and related internship education for students from Faculty of Medicine Brawijaya University and Faculty of Pharmacy from other universities (State universities: Airlangga University - Surabaya and Gadjah Mada University - Yogyakarta, and private universities: University of Surabaya, Widya Mandala University - Surabaya and Setia Budi University - Solo). In the hospital setting, in our affiliated teaching hospital the General Hospital Dr. Saiful Anwar Malang, parts of our responsibilities are in the provision and distribution of drugs for patients including those from financially poor families. Since 2005, a government policy has been implemented to help the poor to obtain the health service which is being increasingly expensive and unaffordable to the poor. Included in the policy is that the provision of medicines for the poor patients through certain health care providers (such as hospitals) are subsidized by the government of Indonesia i.e free and almost unlimited in term of choices and types. The government budget for such free medication is limited and rather fixed, whereas the actual spending is increasing every year. Our data in Dr. Saiful Anwar hospital, the number of prescription for the poor increases from approximately 56,134 to 98,695 (drugs) and 42,547 to 57,781 (medical supplies) equal to IDR 4.2 billion to 10.9 billion (drugs) and IDR 1.1 billion to 3.6 billion (medical supplies), in 2005 and 2006 respectively. We did not have an appropriate evaluation system to monitor and evaluate whether the drugs prescribed (medication) by physician and other health care professionals were rational, achieved the goals of therapy, targeted the eligible patients and were cost effective. However, we realized that to develop such an evaluation system we faced some problems including the lack of human resources (number of pharmacists and clinical pharmacy competencies), facilities, policy and funding. At that time we had 2 academic staff members - pharmacists responsible for education - and 7 hospital pharmacists, each supervised 2-8 assistants, the front-line workers directly dealing with patients in the wards. Each assistant, mostly with a diploma degree, was responsible to cater for 28-46 beds. All pharmacists and assistants had only very limited background, if any, in clinical pharmacy and patient-oriented service. The existing pharmacy practice in place in our hospital was the traditional drug dispensing, the conventional drug-oriented service. Recruitment of fresh graduate pharmacists with clinical competencies was not seen as a solution, firstly because both the university and the hospital would not accommodate new employment, secondly because there was no clinical pharmacist with required competencies available as yet.

In Indonesia, pharmacist practitioners were practitioners at general level, whereas in other developed countries such as in UK, Europe and US pharmacy practitioners categorized into general and higher level (specialist and advanced consultants).
Developing competencies in specialties area would take some time. Even then, it is impossible to learn everything and teach everybody everything, and at the same time put into practice all the acquired knowledge and skill to solve the existing problems when the full-time academic staff is limited (only two persons in our Laboratory of Pharmacy of Faculty of Medicine Brawijaya University). Hence, to engage practitioners in education would be very helpful. Required competencies may be developed through experiential trainings. The specialist pharmacists, who really do the work, could subsequently provide the required training for the students at their actual workplace in specialist clinics or wards in hospitals. Thus, a scheme was proposed: the pharmacist practitioners in hospital should join in providing education for the students while the academic staff in the university would be responsible for its quality assurance. It is necessary, then, to equip both the practitioners and academic staff with clinical pharmacy knowledge and skills which will be delivered by partner HEIs from developed countries.

Responding to the situation, particularly for our capacity building, we decided to search for a candidate partner, a higher education institution (HEI) from a developed country which has relevant credentials in education and service in the area of clinical pharmacy as well as experiences working with partners from developing countries. The partner from developed country, who responded to our invitation, was from School of Pharmacy, University of London, United Kingdom. Financial support was secured by submitting a three-year project proposal, drafted by both partners, to an international agency offering core grant funding supporting HEIs partnerships.

The proposed project mainly aims to improve the knowledge and skills of the academics and hospital pharmacists in the university (Laboratory of Pharmacy, Brawijaya University) and teaching hospital (Department of Pharmacy, Dr. Saiful Anwar Hospital) through (1) staff training and (2) curriculum and modules development for new and/or revised courses in clinical pharmacy; (3) staff exchange for sharing experience and benchmarking; (4) developing evaluation system; (5) conducting joint research in managing provision of drugs for the poor in developing countries (in this case at our hospital in Indonesia). The proposal, written by the academic staff directly involved in the project, was signed by Deans of both HEIs and served as Memorandum of Understanding between the partner institutions and the funding agency.

Role of the partners
The partner from the developed country, School of Pharmacy, University of London, UK, provides support and guidance in the teaching and learning activities and curriculum development components. With extensive experience and expertise in a wide range of health services research methods, both quantitative and qualitative, the UK partner would also collaborate in the development of appropriate protocols and methodologies to achieve the research objectives.

The Indonesian side, academic staff of Faculty of Medicine Brawijaya University and pharmacist practitioners of Dr. Saiful Anwar Hospital – Malang-Indonesia, as the lead
partner, identified the main goals of the project and ensured the realization of the proposed project in the main setting, Indonesia, to benefit all stakeholders. The stakeholders here were categorized into three: primary, the pharmacists and assistants; secondary, the HEIs and students; and as external stakeholder the hospital.

Activities
Actions planned to achieve the objectives were:
1. to develop accredited clinical pharmacy training opportunities in Indonesia where both HEI partners can jointly participate.
2. to develop clinical pharmacy service for the poorer patients in Dr. Saiful Anwar Hospital.
3. to develop research design to evaluate (self-assessment) the pharmacy practice in the hospital.

However, due to the time-constraint of the developed country partners and language (English proficiency of our academic staff, hospital pharmacist and students), the activities for capacity building in the first year of this project were actually involving academic staff exchange visits to the partner countries, training and case reports for updating knowledge and skills, research, and participating in international conferences.

Exchange visits
Exchange visits to the partner countries, seminars and informal meetings conducted during the visits, are in fact indispensable as they provide insights into differences of the system, policy and practice of education and health service in UK, US and Indonesia. The visits allowed partners and the invited guests (Director of Hospital, Dean of the Faculty of Medicine, colleagues of the academic staff and practitioners non-pharmacists, and students) to share experience and enabled all to reflect on how and why practices and outcomes were different.

Seeing the actual practice and education provided as an experiential learning, inspires us the pharmacists in Indonesia to benchmark, set similar services and improve education to achieve international standard competencies, along with some adaptations to answer local needs.

Trainings and case reports
Experts from both countries were invited to deliver state of the art related to pharmacy knowledge practice (basic concepts, principals and research methods) and policy. These experts comprised pharmacists from the developed country and physicians (specialists) from local hospitals (Indonesia). The trainings were arranged into (a) knowledge-update seminars catered for the academic staff (pharmacists and pharmacologists from the Faculty of Medicine of Brawijaya University) and pharmacy practitioners in Dr. Saiful Anwar Malang teaching hospital (tutor trainings), and (b) followed by a seminar for dissemination of the knowledge to the wider academics including pharmacists and other health care professionals from other universities and
regional hospitals, pharmacy assistants and students. Clinical trainings to achieve “fitness for practice” were arranged by HEI partners in UK hospitals (St Bart and Guy’s/St Thomas) for one academic staff and two pharmacy practitioners from the Faculty of Medicine Brawijaya University.

After a series of clinical trainings, pharmacists began to be involved in patient bedside visits (ward-rounds) together with clinicians, nurses and nutritionists. Moreover, despite being pharmacists only, they also tried to do morning- and case-reports once in a week discussing clinical cases and together review patient medication. The case reports served also as a platform for pharmacist practitioners to understand and experience problem-based learning. All of this indicates that the belief, attitude and actions of the pharmacists have been shifted towards patient-oriented and pharmaceutical care, instead of drug-oriented and dispensing-distribution only, with particular emphasis on rational and cost-effective drugs for the poorer patients.

**Research**

In these activities we implemented the knowledge acquired and developed skills to identify parameters and performance indicators to measure the quality of pharmaceutical care for the poor patients, in particular in Dr. Saiful Anwar hospital setting. These activities facilitated the pharmacist practitioners, who were not used to conducting and reporting scientific research, to learning how to collect and analyze data, disseminate research findings with pharmacist colleagues and other health professionals (physicians and nurses). Doing that, the pharmacists practitioners also learn how to communicate and effect necessary changes in medication and improve pharmaceutical care for the benefit of the patients.

Another output is that, as one of our research projects showed that rational prescribing has not been fully achieved in our teaching hospital, pharmacists were asked to give lecture for all medical students (for general practitioner/Program Pendidikan Dokter and specialists programs/Program Pendidikan Dokter Spesialis) doing internship in hospital. Moreover, research collaboration has been developed with physicians in Paediatric Wards to promote rational drug prescribing and use.

Additionally, collaboration was also asked by nephrologists from Haemodialysis Unit, one of Internal Medicine Wards, requiring pharmacists to begin or extend the clinical pharmacy service and research in their Unit, helping in drug dose adjustment for patients with renal dysfunction.

**Participation in an international conference**

The international conference for clinical pharmacists was held in Indonesia. The conference offered a forum to explore and share issues in pharmacy education and pharmacy practice in other countries, e.g. how to deliver education to the students in order to achieve the current set of standard competencies in clinical pharmacy worldwide. The UK partner was invited to give plenary lectures, whereas we -the Indonesian partner- participated in oral and poster presentations. For the first time ever, our hospital pharmacists whether they are pharmacist practitioners in the wards,
and those who hold key position in management (Head of Depo/Pharmacy Outlets of Dr. Saiful Anwar Hospital; Officer of Drugs and Medical Equipments Purchasing; Officer of Committee of Pharmacy and Therapy) and education (Head of Laboratory of Pharmacy Brawijaya University, Head of Study Program of Pharmacy) did attend an international conference on clinical pharmacy (ACCP8). The immediate benefits were “an eye-opening” of what clinical pharmacy is all about and what have been achieved in Asia and worldwide. As this was the first international conference where pharmacists from Dr. Saiful Anwar Hospital presented communication to the scientific communities, it served also as a learning medium to compose, structure and communicate findings of their research and case reports at international level. This resulted in 5 posters and 1 oral presentation on clinical pharmacy, considered as a remarkable achievement even in Faculty of Medicine Brawijaya University. Most importantly, following the conference, a meeting was conducted and culminated into a resolution from all the pharmacists attending the conference - including those who were initially skeptical and opposed this project - to continue the work or project and plan what will be done in the future.

Challenges

As all pharmacists practitioners in the hospital were already engaged in many managerial positions, acquiring their commitments to attend the training and its subsequent implementation of knowledge and skill up-dates were quite a challenge. This led to the decision of the Department of Pharmacy of Dr. Saiful Anwar Hospital to recruit 10 new pharmacists, fresh graduates, for clinical pharmacy service. In positive note, it is good to have additional pharmacists intended for clinical pharmacy service development. In negative note, all the new pharmacists were recruited, paid by and responsible to the Head of Pharmacy Outlets of the hospital only, with main responsibilities providing pharmaceutical care in the wards. Due to the high load of their work in the wards, these newly trained pharmacists could only help as tutors for students during their internships in certain wards for a very limited time. Therefore, for the following years of the project another two fresh graduates were recruited, this time through the Faculty of Medicine, trained in and sent to the hospital to assist in delivering pharmaceutical care. These two new staff members are now actively carrying out research in clinical pharmacy and involved in providing suggestions for curriculum development and revising courses.

Another important barrier we faced in this international HEI partnership is language. In collaboration and networking, most communication with partners from international community is English, but the English proficiency of our students and pharmacists is currently not satisfying. Two approaches were applied to solve this, translating everything - English into Indonesian and vice versa -, and providing English courses for the currently employed pharmacists. Both approaches were used to speed up the transfer of knowledge and skill during this particular project, and to encourage pharmacy staff to learn and use English, develop competence and self-confidence to communicate and eventually network with partners from other countries.

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Conclusions
Showcasing all the benefits of networking to provide education relevant to the society’s needs, we conclude that HEI partnership did improve the quality of higher education in education and research in the aspects of contents, organizational and management and accommodate the delivery of necessary knowledge and skills to be used in the local context - in this case, the provision of medication to the poor. Exchange visits from and to HEI partners are necessary to understand the actual condition (differences between education and health care systems in developed and developing countries) and to develop research design and further collaboration between higher education institutions. The visits also inspired, encouraged and served as benchmarking points in particular for the developing country partner. As starting point, the partnership was designed for the professional health careers, i.e. the practitioner pharmacists, to enhance the knowledge of both parties and fostering the share of experience between staff from developing and developed countries. Practice skills were developed initially in the developed country partner hospitals, then implemented and adjusted in our local hospitals. Research skill was acquired through data collection, analysis and case-presentations during their professional works, while developing clinical pharmacy service for the poorer patients. Publications of the research findings to the scientific community also offered an avenue to learn about research communication skill and dissemination. Having implemented their up-dated knowledge and skill as practitioners and research fellow, these practitioners would then disseminate their experience- enriched knowledge and skills to the students through revised courses and actual practices which are more relevant to the local and real settings.

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QUALITY ASSURANCE:
CONCEPTS AND STRATEGIES
Transforming higher education practice for a sustainable future: A paradigm shift from teaching to learning

Joyce A. Asiimwe

Abstract
The paper aims at providing a synthetic overview of the teaching-learning practices in one of the public universities in Uganda. The United Nations Decade of Education for Sustainable Development (UNDESD) has underscored the importance of all forms of education in ensuring change towards sustainability. Higher education, in particular, has been identified as an important vector in the whole process of Education for Sustainable Development (ESD). However, if education is to act as a springboard for sustainable development, it is imperative that higher institutions of learning have to be transformed. One of the areas where transformation is needed is pedagogy, which is the focus of this paper. To teach for sustainability, this paper argues that there is a need for faculties to transform their current practices from teaching for instruction to teaching for learning how to learn. This is a paradigm shift which, among others, can be realized through networking.

Keywords: Sustainable development, higher education, pedagogy, paradigm shift, networking

Introduction

"Increasingly, movements to consider student outcomes … and to refocus institutional missions onto student learning are gaining prominence" (Schuyler, 1997: ERIC Digest-online).

In December 2002, the United Nations General Assembly adopted resolution 57/254 and consequently launched a United Nations Decade of Education for Sustainable Development (DESD), spanning from 2005-2014. The promulgation of DESD has given an enhanced profile to the pivotal role of education, especially higher education in the pursuit of positive societal transformation, which more than ever before, has become a crucial social priority. It is however, important to realize that if education is to act as a springboard for sustainable development, that is, development which meets the needs of the present, without compromising the ability of future generations to meet their own needs, it is imperative that higher education institutions must themselves be transformed (UNESCO, 1995; Harvey & Knight, 1996: in Mukiibi, 2008: 9).

Increasingly, there seems to be consensus that education for a sustainable future requires a paradigm shift from teaching to learning. This requirement has implications for both individuals and institutions of higher learning. At individual level, there is a need to focus on the competences of individual university teachers, especially with regard to pedagogy. Whereas at institutional level, the shift needed is two pronged:
First, there is a need to shift the vision and mission of the university from a limited emphasis on education for knowledge reproduction (instruction) towards a broader goal of educating people ‘learn how to learn’ (Mukiibi, 2008: 2). Secondly, there is an urgent need for universities to shift from being closed and static institutions to institutions operating as learning organizations (Senge, 1990: 14).

This paper will focus on the teaching-learning practices in higher education institutions, taking one of the public universities in Uganda as a case study. Research has shown that there are two distinct approaches to teaching. The first is surface teaching and the second, deep teaching. Accordingly, a teacher, who engages students in learning a task with the purpose of memorising information, is said to be engaging in surface teaching. Teaching from this perspective views the educative process as strictly intellectual and largely concerned with reproducing ideas got from textbooks and passing them on to students without critically reviewing that knowledge within the specific context.

There is evidence to show that teaching and learning in Uganda, is still largely characterised by surface teaching and learning. In the last decade for example, the author has observed that in higher institutions of learning, students generally lack initiative in creating their own knowledge, let alone being to think for themselves. In other words, there is apparent intellectual laziness exhibited in teaching-learning processes. This situation is increasingly becoming worse with the increasing student numbers in tertiary and other higher institutions of learning. This has been vividly portrayed in Asiimwe (2004: 124) who quoted a writer commenting on the rampant cheating in examinations in one of the institutions of higher learning in Uganda:

…You find students cramming notes so as to impress their examiners who happen to be their lecturers. At the end of the semester, a third year student asked me whether Latin America was among the Asian Tigers. I was shocked…

It is evident that the above quote fits in the domain of surface teaching, which is generally associated with lower quality outcomes. This approach to teaching has duly outlived its usefulness in the 21st Century, which has ushered in a world whose development is now driven more by critical knowledge and skills (ideas, innovations and inventions) (Smith, cited in http://www.Itsco.co.uk/citizenship/reports/global).

On the other hand, a teacher who engages students in a learning task with the intention of making them seek meaning, is said to be adopting a deep approach to teaching (Entwistle & Ramsden, 1983 cited in Asiimwe, 2006: 19). In this kind of teaching, the teacher creates space to make a student internalise the concepts in relation to her/his experiences. This in turn offers an opportunity for the development of students’ potentials to learn, un-learn, and re-learn. In the author’s view, this approach to teaching is fundamental to the tenets of ESD.

The question is, four years down the road of DESD, what transformation has taken place in higher institutions of learning with regard to pedagogy? This paper is thus an attempt to answer this question, based on a synthetic overview of the teaching-learning realities in a public university in Uganda.
Methodology

The primary data used for writing this paper was derived from two sets of self-administered questionnaires: one set of questionnaires, containing both closed and open ended questions, was distributed randomly to academic staff in the three Faculties: Science, Medicine and Development Studies. The response rate for this category of the number of respondents, however, was low. Out of the thirty questionnaires which were given out, only 15 respondents completed and returned the questionnaires. The second set of questionnaires was administered at one sitting, to third year students of the Faculty of Science, reading for the Bachelor of Science with Education degree. All the students at the time, totaling 41 in number, filled in the questionnaires. In all, this paper was constructed using the perspectives from 56 respondents, the author’s own experiences of teaching in the same university, and insights from other researchers acknowledged within the text and in the reference section.

Data from the structured questions were analyzed descriptively, using descriptive statistics. The results were first expressed in frequency counts, after which they were tabulated and presented pictorially by use of column and bar graphs and in some cases in percentages. Responses from the open ended questions were presented verbatim as recorded in the questionnaires.
Results
In this study, an attempt was made to discover the purpose of teaching at university level as perceived by academic staff who participated in this study. Their responses were as presented in Fig. 1:

![Fig. 1: The purpose of teaching at university as perceived by faculty](image.png)

Perhaps as expected, the above thinking was evident in the way academic staff discharged their duties in the classroom. Students’ responses as is clearly shown in Figure 2 below indicated that in their classrooms, it was the lecturers who were more active during teaching and learning.

The above results notwithstanding, 77.0% of faculty and 90.0% of student respondents however, indicated that in their view both lecturers and students should be equally active during teaching and learning. Only 8.0% of faculty and 10.0% of student respondents noted that students should be more active during classes.
When further asked to identify the current teaching methods used by their lecturers, which students felt were least beneficial to them, their response was as shown in Figure 3:

![Fig. 3: Teaching method disliked by students](image)

The reasons students gave for disliking the lecture method included:

- “The lecturers only give what they know and there is no way I can know if my opinion is relevant and can be used in class”;
- “It is more of teacher/lecturer centred and some lecturers don’t want challenges for they take themselves to be bosses”;
- “Individuals are not catered for in the lecture method and it does not allow for participation”;
- “Not a lot is explained and by the end of the lecture I cannot understand the notes that were given”; and
- “Sometimes I want to ask for clarification but this is not possible because the lecturer is so fast”.

Therefore when asked which teaching method(s) the student respondents thought would best enhance their learning, their responses were as illustrated in Figure 4:

![Fig. 4: Teaching method liked most by students](image)

The main reasons given by the same respondents for preferring the interactive method were as follows:

- “It helps me to build the lesson from my own ideas”;
- “It helps me to share experiences and hear from different sources rather than sitting and getting from one person (lecturer)”;
- “It allows me to build confidence by expressing my views in class without fear”;
- “It gives enough room for the lecturer to give explanations and for students to ask questions”;
- “I write what I have understood”; and
- “It creates a friendly atmosphere between the lecturer and students”.

When asked what in their view should be done to improve undergraduate teaching in their own context, the student respondents gave the following suggestions:

- “Lecturers should be more friendly and concerned about students. Not just coming to lecture and stopping at that”;
- “Lecturers should be offered teaching training to enable them to be learner friendly in their classes”;
- “Asking for students’ opinion on key issues like assessment and evaluation”;
- “Giving students the right to evaluate their lecturers”;
- “Make teaching more interactive rather than using the lecture method only”;

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- “Improve on laboratory apparatuses so that more practicals are done”;
- “Make internet more accessible to students” and
- “Lecturers should use ICT for teaching”.

On their part, all the academic staff (100%) who participated in the study indicated that there was a need for faculty to undertake professional development on pedagogy in order to enhance their capacity in teaching and research. Some of the areas which the respondents identified for professional learning included:

- Interactive teaching skills;
- E-Learning;
- Research methods;
- Using ICT for teaching;
- Curriculum development and evaluation;
- Communication skills;
- Lesson planning; and different methods for assessment.

Discussion
Teaching and learning is a core strand of work in higher education institutions. This is evident from the fact that teaching occupies the greatest amount of most faculties’ time. In actual fact, with the changing trends in higher education, especially with regard to increasing student enrolment, it is not unusual to find academic staff spending almost all their time teaching at the expense of research and other extra-mural activities. In view of ESD, the above result raises one basic question: what is the implication of the teaching-learning practices and processes in our universities?

Results of the survey, as presented above point to one basic fact: most academic staff still teach within the traditional instruction paradigm. This is notwithstanding the fact that students’ responses as shown in Figure 4 clearly indicate that students do not learn much simply by sitting in classes and listening to their teachers. Therefore, the implication of the current teaching-learning practices in our universities is almost predictable. If our students are made to sit in through school without questioning anything, but dutifully memorising and copying down pre-packaged lecture notes, then it would be unfair to expect them to have some of the key qualities demanded by the labour market in the 21st Century, that is, personal drive, self-initiative, critical thinking, and creativity. The question therefore is, how do we get faculty to transform their teaching practices from merely teaching students to pass examinations to helping each student develop an empowering self-awareness, personal development, and the ability to apply the knowledge and skills learnt to harness the resourcefulness of their environment? This is one of the biggest challenges in the education system of most developing countries.

It is important to realise that with the increasing development of information technology, the role of faculty is fast shifting from that of an information provider to that of a learning facilitator. This is in tandem with the relatively new discourse of
learning, where, the core function of a teacher is not to teach things but to teach students to learn how to learn. In other words, to enhance sustainability of learning, it is imperative that the focus of teaching shifts from the teacher to the student. This in turn has implications for didactic and methodological competences of academic staff.

From students’ suggestions for improving undergraduate teaching in the context of this study, and from available literature, it is clear that learning appears to be influenced by two processes: the first process is the interaction between the learners and their external surroundings (social, cultural, material), and this calls for a teacher to be cognizant of the factors that influence learning; the second process is that which takes place internally in conjunction with a learner's mental processes, such as emotions, the self, and other in-built patterns. These two processes, therefore, suggest that the focus on empowering learners requires university teachers to develop competencies to be able to arrange teaching in an appropriate way, and to create suitable framework conditions to facilitate optimum interaction at the two levels.

Indeed from students’ responses as presented in Figure 4 and in the subsequent reasons given for their preference for the interactive method of teaching, it came out clearly that students subscribe to the view that learning is an active, social, situative, constructive and emotional process (Stähli, 2008). In other words, in order for learning to be successful, the knowledge that is being given must be integrated into already existing knowledge structures and interpreted on the basis of individual experiences, and the learners must feel positive emotions, such as joy during the learning process. Negative emotions such as fear and stress represent obstacles to learning as such emotions tend to inhibit optimum interaction within the internal processes.

The above teaching-learning option is clearly a departure from the traditional teacher centred method, which has been pronounced as inefficient, and ineffective in helping to solve the challenges of the 21st Century. In the relatively new discourse of learning, learning needs to be conceived of as something a learner does, not something that is done to a learner (Fosnot, 1989; online). This is in tandem with the changing dynamics of the 21st Century, where, employing organisations need people who can contribute to the transformation of the organisation in the face of rapid and continuous change. Ultimately, this whole new focus on empowering learners will require that universities undertake fundamental changes. As already alluded to, in the case of this study, one major action among others required to support teaching within the learning paradigm is transformation in didactic and methodological re-orientations. As shown by results of this study, there is a need to update and upgrade the skills of faculty in order to achieve sustainable learning and consequently sustainable education.

One of the possibilities of responding to the above imperative is through professional learning and re-training. From the author’s experience, this strategy offers a powerful opportunity for networking with both government and non-government institutions and international actors, given that individual universities may not have adequate capacity to re-train staff effectively. In pursuit for continuous improvement towards quality assurance for sustainable development, such networks are highly commendable.
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and recommended to meet the challenges of the 21\textsuperscript{st} Century.

It is however important to recognize that training workshops should not be considered as an end in themselves, but just one element of a support structure for the professional development of faculty.

Conclusion

In conclusion, this paper has shown that the teaching-learning practices and processes in this particular university and by inference in many universities in Uganda is still dominated by the lecture formats. However, in the 21\textsuperscript{st} Century, it is becoming increasingly clear that intellectual knowledge is not enough; we must possess both knowledge and multiple skills such as technical and soft skills in order to be able to participate actively in the development of our societies. This inevitably calls for multi-methods of teaching and learning and implies a paradigm shift from teacher-centric content delivery methods to student-centric lesson delivery methods. This change in educational paradigm among others, calls for a continuous process of professional development in higher institutions of learning.

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References


Quality assurance in higher education: Collaboration or competition among institutions?

John T. Githaiga and David R. Tuigong

Abstract

Demand for access to higher education in the Eastern Africa region transcends the national borders. This has led to mushrooming of institutions scrambling for students and implementing programmes without supporting infrastructure and expertise, thus threatening the quality of education. Universities hunting for institutional take-overs and mergers, sometimes noncompetitively, have caused resistance as these are not necessarily guided by a profound shared vision, but seen as challenging prevalent organizational, contextual and disciplinary orientations of the acquired entity. Structured collaborations could however lead to a sustainable quality enhancement and transparent demonstration of quality competition, through promotion of diversity of quality and institutional identity hence strengthening the impact of higher education. There is need to intensify national, regional and international collaboration to minimize expertise deficiency and optimize knowledge-based information sharing for sustenance and propagation of quality in higher education. This paper deals with the emerging scenarios of expanding of access to higher education in Kenya, highlighting the opportunities and challenges encountered.

Keywords: Collaboration, education access, institutions, quality of education

Introduction

The Eastern Africa region has seen the emergence of a community among its member countries which has provided many economic and social opportunities, and challenges during the growth. The East African Community (EAC) is the regional intergovernmental organisation (established by the ‘Treaty for Establishment’) of the Republics of Kenya, Uganda, the United Republic of Tanzania, and recently the Republics of Burundi and Rwanda respectively. The EAC aims at widening and deepening co-operation among the partner states and other regional economic communities in, among others, political, economic and social fields for their mutual benefit. The realization of a large regional economic bloc encompassing the said member states with a combined population of 120 million people, land area of 1.85 million square kilometres and a combined gross domestic product of $41 billion, bears great strategic and geopolitical significance and prospects of a renewed and reinvigorated community [1]. The education sector in the region is no exception and is therefore equally affected by the increased market. However, considering the background fact that most of the concerned nations share a common culture and pitifully coloniser, higher education issues are relatively common amongst the states.
In the last two decades, there has been a rising tide of interest in leveraging Africa’s development through education. While visibility continues to be given to basic education as espoused at the Dakar Forum of 2000 and the provisions of the Millennium Development Goals (MDGs), there is an upsurge of focus on higher education as a catalyst for high-level human resource development in the region [2]. As a dynamic process, those trained at the basic level are supposed to proceed to secondary schools and eventually to higher education institutions for the actual goals to be achieved. If anything, the demand for higher education and well educated citizens in the region will continue to increase. The emergence of knowledge societies where higher education plays a pivotal role provides the stimulus for the new thrust. Although basic education has been the focus, only limited success can be achieved unless the role of universities and the higher education delivery system (as the source of expertise for both basic and secondary education levels) are recognised. The fact that Sub-Saharan Africa has a very low university enrolment rate of about 5 per cent compared to 20 per cent in East Asia, 29 per cent in Latin America or the world average stand at 24 per cent, there is an urgent role that governments and universities must play to increase the pool of university graduates in the region [3]. There is a positive response as rapid growth of academic institutions has been witnessed in the region, as demonstrated by the Inter-University Council of East Africa (IUCEA) whose membership is steadily increasing as new universities get admitted and stood at 65 public and private universities and university colleges distributed within the EAC countries at end of 2008 [4, 5].

While the responsibility for education and training lies with national governments, some challenges are common to all regional states: a workforce that needs more of the right skills for tomorrow’s jobs, growing youth population, local and foreign competition. Some regional goals like students and learners mobility between countries cannot be achieved by individual countries acting alone. Other goals will be easier to achieve if countries learn from each other and develop common tools, which can then be adapted to meet the specific needs of each country. However, in the region, efforts to expand access still face serious challenges, including those relating to, financing, equity, quality and relevance. Cooperation and collaboration other than competition among member states is expected to promote student and staff mobility, integrate cross border education, encourage joint research, joint degree programmes, interactive networking and establish qualifications comparability criteria.

Some key questions that now become clear when dealing with the challenges and opportunities presented through the heightened need for quality higher education in the region is that globalisation is bringing about new forms of cross-border provision of higher education and the prospective liberalisation of trade in educational services. This calls for a revisit of existing mechanisms and the development of new initiatives likely to enhance quality provision of higher education at all levels by further strengthening quality assurance, accreditation and recognition of qualification schemes that already exist at national and regional levels.
Kenyan review

In Kenya, the demand for education has consistently been increasing over the years. At independence in 1963, the enrolment was 30,000 pupils in 151 secondary schools, rising to 600,000 pupils enrolled in 3,000 secondary schools by 1991. Yet during most of this period, there was only one university level institution, the Nairobi University College, which between 1963 and 1970 had an enrolment of about 1,000 students. On becoming a fully fledged university in 1970, the University of Nairobi gradually increased its enrolment to 8,900 in 1984. The rapid growth and expansion experienced in the sector necessitated the need to regulate, coordinate and assure quality in higher education, leading to the establishment of the Commission for Higher Education in 1985 through an Act of Parliament (The Universities Act Cap 210B). The pressure on the government to increase university enrolment increased such that it became necessary to establish more universities. By 1987, four public universities had been established and enrolment increased steadily to about 20,000 students by 1989/90. A university intake of 21,450 students marking the end and beginning of ‘A’ Level and 8-4-4 education systems respectively in 1990 increased the total enrolment to 41,000 students, making it difficult for the Government to cope with the increasing demand or even provide the adequate resources required [4-6]. This marked a turning point in university education as the government introduced the cost sharing policy for university students.

The thirst for university education and opportunities in the sub-sector was not lost on the private sector. It is therefore not surprising that, between 1970 and 1984, ten privately funded institutions offering University level education were established. These institutions however, offered limited enrolment and few programmes. By 2002, the number of private university institutions had increased to 17 with an enrolment of nearly 9,000 students. In addition, public universities had introduced part time (module II or parallel or self-sponsored) degree programmes, which targeted both the public and private sector employees and school leavers. Consequently, enrolment in the entire university sector rose from 59,193 in 2000/2001 to 91,541 in 2004/2005. By 2007/08 private university institutions had increased to twenty (20) [5]. Following implementation of the free primary education, enrolment there increased at primary level, in secondary level and eventually demand increased further for university admission. In 2008, over 690,000 pupils sat for the Kenya Certificate of Primary Education (KCPE) with about half of them joining secondary schools. Again about half of this number attaining the minimum university admission requirement of C+.

Those who cannot access the local universities turn to tertiary institutions although an increasingly large number are turning to foreign universities. It was estimated, for instance, that there were 10,000 Kenyan students attending post secondary institutions abroad in 1991, increased to approximately 30,000 students in 1999 at a cost of Kshs.40 billion [4, 6].

The realisation of the current university enrolment capacity has been achieved through expansion of institutions including mergers and or take over of public and private tertiary institutions (middle level colleges). The desire to claim a bigger share in the
student market has seen the introduction of many new courses in advance of capacity to offer them. The basis of the expansion and its consequences are further dealt with in this paper. The study concludes that by seeking unstructured collaboration for economic self-determination through fees payment, in advance of a well-developed institutional capacity leads to academic pressure therefore tending to worsen the quality of education.

**University - institutional collaboration**

The response to the need for higher education is also evident universities seeking collaboration and networking opportunities with tertiary and middle level institutions offering certificate, technician and diploma certificates to broaden university access especially the fee-paying self-sponsored students - the de facto market source of revenue for public universities today. Collaborations should enhance the following key variables that impact on quality of education; curriculum, instructional materials and equipment, physical facilities, instructors/lecturers/tutors, assessment and examinations, institutional management and institutional environment among others [7]. The unfortunate part is that the collaboration is predicated on a political dispensation that ignores the compatibility, capacity and suitability of the two institutions and is therefore dependent on political and ethnic acceptability.

**Opportunities**

- **Growing demand with population increase**

The economic competition and scramble for scarce jobs in Kenya has changed the education landscape. Due to the many graduates rolling on to the market every year, the bachelor’s degree has become a minimum requirement in the jobs market. This has raised the bar for most people especially those aged above the normal university student bracket with diploma and certificate qualifications seeking promotion or new jobs. Most people are being compelled to upgrade their skills and competencies. Also, among those graduating with bachelor’s degrees are seeking diploma and post-graduate certificates at universities to outdo others through scholarship and professionalism. Consequently, in an effort to satisfy the clamour for degrees and diplomas, universities have expanded their academic menu in terms of courses [6]. Low academic achieving students are encouraged to start climbing the academic ladder from the certificate level to diploma and eventually rising to enter into a degree programme. This therefore creates increased enrolment at the universities.

- **Collaborations**

The Kenyan government has developed a policy framework on education, training and research in technical industrial, vocational and entrepreneurship training institutions that is supposed to guide the expansion of these institutions [8]. According to the policy for instance, polytechnics are supposed to retain their character and status but offer degree programmes accessed through the credit transfer. A public university would be selected to midwife the transition in an arrangement, in which the polytechnic will serve as a constituent college for three
years. Thus as the polytechnics plan their upgrade that would see them build staff capacity (improve qualifications) and expansion of infrastructure, including laboratories, classrooms, libraries and requisition of modern equipment, these would be in harmony with implementation of existing and reviewed academic programmes to ensure relevance and applicability [6].

- **Competitive higher education**

Until recently, public universities in Kenya have been producing quality graduates matching the global challenges. Many of those that have proceeded for post-graduate courses or secured jobs international always excelled underpinning the country’s quality of higher education. Though it may be argued that Kenyan universities have been operating in a strong quality framework, the landscape has been changing as access becomes competitive. Since university education has to pursue quality improvement to instil professional responsibility in deregulated market places, a collaborative initiative on quality assurance would enhance efficiency and give universities and those in the region a competitive edge in the global arena. Although financial repatriation by the Diaspora has had a positive effort on the economy, it's rather unfortunate the region has become a fertile hunting ground for talent by institutions and universities in developed countries. According to the UNESCO, people with higher education are leaving Sub-Saharan Africa in droves to the detriment of the exporting countries. Brain drain has significantly contributed to scientific backwardness, severe shortage of technological skills, and even failing universities and institutions of higher learning. Sub-Saharan Africa, with its abundant resources is in dire need of workers with high quality cognitive, technical and scientific skills to push the frontier of knowledge and efficient decisions necessary to promote economic development [2, 3]. The move by universities to introduce internal quality assurance in regional institutions of higher learning as envisaged by Inter-University Council for East Africa (IUCEA), with the support of the German Academic Exchange Services is seen as a move in the right direction [9].

- **Increased access – more institutions to choose from**

The expansion of institutions has increased university accessibility. This has helped those in the rural areas, otherwise with little chances for furthering their studies. Civil servants posted to the countryside have had little opportunity to boost their career through further development of skills by virtue of the nature of their work. Opening up of institutions creates awareness to the area residents and therefore motivates them to work hard and join ‘their’ university. With closer access, the labour market, society and individual as well as groups of learners require much more flexibility in their acquisition of (new) knowledge and skills, universities are recording an ageing student population as more working class venture to upgrade their expertise and competencies.

- **ICT development and promotion**

The expanding scope of information and communication technology (ICT) is contributing to innovations in education, facilitating a variety of mixed modules of on-site and on-line learning without necessarily demanding for the elaborate physical
infrastructure needed for the on-campus learning. New concepts and instruments are emerging that are really opening up education for all, which is a major global ambition as formulated by UNESCO. It is worth noting that most African countries are embracing open, distance and technologically-mediated learning as a cost effective and efficient means of democratising access to education. With ICT, the huge unmet demand for higher education can be addressed, if institutions collaborate with the relevant institutions and industries. Globalisation is a real challenge for education as it is a driver for international competition, although also a catalyst for new and rich forms of collaboration, institutional, interpersonal and intercultural, where ICT again is a key factor [3, 11]. Recognising that cross-border provision of higher education offers students/learners new opportunities essential for academic knowledge, social and economic wealth, need to be managed appropriately in order to limit low quality provision and stop rogue providers. Consequently, institutions require the re-focusing of accreditation and quality assurance mechanisms to additionally address the innovative mode of open, distance and technology mediated learning emerging worldwide [12].

Challenges
The following aspects have put the quality of higher education in sharp focus as the market forces play their role in the expansion process.

- Funding
The public universities in Kenya like in most developing countries have been subjected to diminished public capitation; as the numbers of students increases the funds available to educate each student has decreased drastically over the years. This has forced them to plunge into marketing themselves to attract more fee paying students while still adversely strained in terms of institutional capacity with insufficient physical facilities. The ratio of academic staff to students has to date fallen significantly, producing overcrowded lecture halls and unrelenting workloads for teaching staff [12, 13]. This poor funding of universities and other tertiary institutions has caused more damage to the regional economic development agenda. These problems are compounded by governance issues and lack of accountability.

- Accreditation
There is lack of an accreditation system in the region to harmonise the student movement. Each country has its standards for admission and peg validity and relevance on acquired degree and diploma certificates on this [12]. Employers in respective countries embrace country standards and conflict between institutions and employers has been hurting the graduates. Crafting of a regional accreditation process to ensure credit transfer within and between institutions in the regional would offer better opportunities and enhance quality of higher education through regulation and control, certification and accreditation. Collaboration between learning and teaching institutions with the Commission for Higher Education (CHE) which is mandated to deals with above functions in Kenya would enhance the process.
• Relevance of courses offered

There have been opportunities for collaboration between established employers with a vision of in-service staff development and universities in the regions. Organisations like the military, police force, Teacher Service Commission (TSC) in Kenya, etc. have pegged basic academic requirements and specific skills for the upward mobility of their wide range of staff. As institutions grapple with the opportunities of these staff offer, they must model the courses they offer to fit the curriculum requirements for the employer. This has not been the case and many staff with insufficient information on promotion requirements have gone ahead and enrolled in all kinds of institutions only to discover upon graduation that they have studied courses irrelevant to their career progression. For instance, the basic TSC requirement of each student is two teaching subjects, with a focus on ‘core’ areas of school curriculum. Those graduating in other disciplines other than the prescribed are therefore, according to the TSC, not qualified [14].

• Relevance of skills developed

Universities have been focusing on the number of students admitted and therefore paying fees to balance their books other than the relevance of the skills to be acquired. Consequently, the region faces a challenge in that there is a mismatch between skills acquired by university graduates and those demanded by the industry, an imbalance between the number of students studying sciences and those in arts-based courses, leading to a chronic deficiency of training programmes suitable for the market. There is a considerable imbalance between the high number of students in the so-called ‘literary streams’ – arts, law and business – and the small number of students in the scientific, technical and vocational streams. This is due to the ease with which the arts-based courses are administered and the infrastructure they require. Other challenges include rigid admission criteria, absence of modalities for credit transfers between universities and post-secondary institutions that could help the constrained situation. The consequence is reflected by high rates of unemployed graduates, while some sectors of the economy still experience critical shortage of qualified staff.

• Mismatch in the collaboration

The Kenyan government embarked on the establishment of tertiary institutions prior to and after independence with the specific objectives of creating a middle level human resource base to provide practical, technical and administrative support for governance, manufacturing and industrial processes, besides capacity building for extension services to agricultural, livestock among others. They form an important connection between the semi-literate and semiskilled workers at different setups. Such institutions include the technical and vocational education and training (TVET) institutions that are at the school level, and provide vital practical education and training [15]. The current trend in institutional collaboration in Kenya is being driven by a ‘grabbing’ syndrome devoid of the tenets of synergetic collaboration. Although educational expansion is fundamental to the country’s development, political patronage, ethnicity and client rewards are some of the factors influencing allocation and redistribution of institutions and public universities [16]. This robs better placed
and better academically-oriented institutions from gaining the collaboration hence an opportunity lost. Furthermore, the Minister for Higher Education, Science and Technology was quoted: “While the rapid expansion of our universities is positive, we need to maintain high standards even as we strive to take higher education closer to the people. We have resorted to upgrading technical colleges into university colleges yet the country cannot do without the institutions. We are suspending the upgrading of technical and teacher colleges to universities until we establish others. All our best tertiary colleges have gone”. This follows the establishment of nine university colleges by the government through upgrading of tertiary institutions [17]

• Admission criteria
Some universities have been faulted for lacking a credible admission criterion. Some organisations have hierarchy for staff based on qualification, and some are considered inadmissible for being nowhere near meeting the basic minimum university admission criteria. Conflict has been looming between employers on one side and their staff and universities on the other hand after some universities enrolled some staff that the employers considered as unqualified for university education degrees. Some have warned that they would not recognise some of the degrees acquired by their staff. While in Kenya, the grade C+ in Kenya certificate of secondary education (KCSE) or two principal passes in Advanced “A” level are considered as the minimum university entry qualifications [10], foreign universities don’t necessarily observe this minimum entry requirement. Moreover, for public universities, students can only enrol in subjects that they attained at least a C+, currently not the case with foreign based universities.

• Delivery abnormalities
A newer dimension to the conflict on quality of higher education concerns the mode and duration of delivery of courses. Concerns have been raised over the relatively too short period taken by in-service students compared to the full-time students. Although these are offered as crash programmes, whereas full time regular students are spending a minimum of 30 weeks of study each year, their counterparts in in-service programmes spend a maximum of nine weeks in some universities. For some universities, in the race for full-cost tuition paying students, universities target teachers and offer them academic bargains in terms of flexible school-based degree courses. There are new programmes being introduced in the universities to respond with market demands. One such a programme is the accelerated one year post graduate Executive Masters in Business Administration (MBA - Executive) meant for the busy executives. In most cases it lacks the research component otherwise integrated in normal masters programmes and is considered a terminal degree hence not a sufficient pre-requisite for doctoral studies. Unfortunately, many universities are accepting these degree certificates even for doctoral studies, negating the purpose of the normal MBA. Such experiences are undermining the credit transfer system on basis of contact hours and credits earned, and creating academic gaps tending to lower the quality of higher education. These are issues structured collaboration and a regional accreditation body could address as part of reforms in quality assurance, accreditation, ranking and
harmonisation of degree programmes to address inefficiency, irrelevance and output of the region’s higher education systems.

- Fear of the future

The staff employed in the government owned tertiary institutions have had academic progression mobility limited by two facts; the institutional vision and goals were crafted for lower cadre services and consequently for the corresponding service providers, and the large number of such staff in the country considering that the government was almost the sole owner of tertiary institutions well into this century. The collaborations between universities and the tertiary institutions in Kenya has taken an ugly development in that ultimately the collaboration ends up as a merger or complete take-over. That precedence has led to resistance from the tertiary institutions due to the following reasons:

- Existing programmes eventually die a natural death, and are not strengthened,
- Teaching staff who don’t conform to the incoming programmes end up being retrenched,
- Staff unable to upgrade their skills and expertise although very experienced get disillusioned, are retired or even fired. Most in this group include those approaching retirement, those that have risen (promoted) through rank and file to senior positions beyond their academic merit,
- Bogus institutions.

The current status of limited access to higher education has led to some institutions unfairly exploiting the situation by providing sub-standard higher education. There are cases of local colleges collaborating with foreign universities to offer foreign degrees and diplomas, despite the fact that the university collaborating is neither accredited locally or in their country of origin. With the tendency by the local population to have more faith in foreign-earned certificates, they therefore get lured to join such institutions only to realise the unimaginable after valuable time and resources have been spent. There is a need therefore to create the necessary institutional framework and capacities to combat this challenge at the policy level.

**Conclusion and recommendations**

Although there are serious challenges facing expansion of higher education in the region, governments should put extra efforts to overcome these challenges to further increase access which is crucial for the regional economic development.

There is a need for structure cooperation and collaboration between universities and other higher education institutions for meaningful expansion to be achieved without loss of quality of education.

The crafted policy for upgrading polytechnics and middle-level colleges to constituent colleges should be implemented to ensure continuity of programmes, academic diversity and institutional identity are maintained.
There is a need to strengthen existing collaborations, networks and encourage new partnerships between institutions and international, regional and national organisations and professional bodies for they can play a crucial role in education and quality assurance, besides funding for capacity building.

With the growth of ICT in the region, governments and institutions require to re-focus on accreditation and quality assurance mechanisms to additionally address the global emerging innovative mode of open, distance and technology-mediated learning.

There is a need to strengthen the existing internal quality assurance bodies within institutions and countries besides setting up regional bodies that could further strengthen quality assurance, accreditation and recognition of qualification schemes within the region. This would promote student and staff mobility within the region, integrate cross border education, encourage joint degree programmes and establish qualifications comparability criteria.

In conclusion, Kenyan universities and those in the region need to develop and strengthen their institutional capacities to enable them remain committed to high quality of education provision, even as they compete for revenue in the higher education market. Through collaboration and networking other than competition, institutions can partially overcome capacity problems by offering courses in which they have enough competent staff and scholastic resources, rather than offering similar programmes as other universities beyond their core areas of strength. By differentiation of focus and specialisation of programmes based on their strengths, institutions can develop into centres of excellence.

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Educational experiences of diverse learners in higher education teacher training institutions: Scenario in Northern Philippines

Leonila R. Sito and Aurora Santiago-Cuyan

Abstract
This study surveyed 569 students, 275 teachers and 55 administrators in public Teacher Training Institutions (TTIs) in Northern Philippines to ascertain the educational experiences of students with diverse background specifically along gender, academic performance, religion, socio-economic status and geographical location of the TEIs; the felt consequences of these experiences, implementation of institutional and instructional practices, and problems related to the diversity.

Generally, students rarely encountered unfavorable teaching-learning experiences associated with their diversity and such have positive effects on their personal, social and academic life. Some significant differences are found relative to their background.

The TEIs greatly implement good practices to accommodate diversity but perceptions of the respondents differ. Problems related to the teaching and learning were reported.

Keywords: Multicultural, diversity, educational experiences, felt consequences

Introduction
With the impact of technology, the structures of society, lifestyles and living conditions of people worldwide have changed. Travel and communication have been made convenient to interact with other people in any part of globe. This has brought about diversity of people in almost every section and structure in society: globalization in business, workplace, schools, etc. Before the 1950s, culture was viewed as patterns of behavior and customs relative to a locality, whereas today, emphasis is put on shared knowledge, belief systems, symbols and meanings so that rarely would we encounter the word culture without the prefix multi. Therefore it can be said that every person is multicultural. Each one has multiple cultural identities - nationality, ethnicity, religion, gender and many more. In relation to this, diversity of students in the US schools, and everywhere else is increasing. By 2020, demographers predicted that minorities will comprise almost half of school-aged children.
Contrasting positions have been raised on the consequences of pluralism and diversity in schools. Positively, diversity will lead to increased achievement and productivity, creative problem solving, improved cognitive and moral reasoning as well as social relationships, and general sophistication. On the contrary, diversity will result in lowered achievement, close-mindedness and rejection of new information, increased egocentrism, stereotyping, bullying, prejudice and other harmful consequences (Johnson and Johnson, 2002).

The goals of the United Nations for interdependence, tolerance and learning to live together are realized by several social structures, programs and policies and the educational sector is most confronted with eliminating the harmful effects all forms of discrimination. To incorporate cultural knowledge in teaching has always been a challenge for teachers and administrators. Some teachers openly react antagonistically to the idea of multicultural education because they believe that their primary role is to deliver subject – content to the students without realizing that the main criterion for multicultural education is that the content of the subject matter is a feasible point in knowing more about the students. Knowledge about students should allow teachers and administrators to make content-teaching more meaningful to students by relating it to their own experiences and building on their prior knowledge. Relative to this, Davis (1999), citing the position of Solomon (1991) pointed out that there are no specific rules for responding to ethnic, gender, and cultural diversity. For most teachers, multicultural education is complicated and dynamic hence taught with difficulty and discomfort. Multicultural education signifies the recognition, understanding, appreciation for all cultural groups and the desire to put people within the context of the global community. For multicultural education to become a reality in the formal school situation, the total environment must reflect a commitment to multicultural education. Sleeter (2001) refers to this as a commitment where differences in academic achievement would disappear between males and females, dominant and minor group members, and upper-middle-class and poor students. Multicultural education would enable the faculty, administrators, and staff to see themselves as learners who are changed by understanding, affirming and reflecting cultural diversity.

The Philippines is highly heterogeneous in terms of cultural and ethnic groups. This situation makes her a potent environment to study cultural, ethnic and linguistic differences that create special learning needs for many students. Relative to this, Salandanan and Tumapang (2000) pointed out that multicultural education is a serious concern of Teacher Education in the Philippines. Both stressed the importance of multicultural education with emphasis on oneself and others through the exploration of the cultural identity alongside with cultural diversity, the elimination of prejudices and fostering cultural understanding. The findings of this study would inform the Commission on Higher Education on the status of multicultural education practices in Higher Education Teacher Training Institutions in Northern Philippines.
Objectives of the study
The general objective of the study is to assess the status of educational experiences of freshmen students with diverse background and the practices in public higher education TTIs and the practices in these institutions in relation to their characteristics. More specifically it ascertained
1. the experiences of students in school in relation to their diverse demographic background, such as:
   • gender;
   • perceived academic abilities;
   • religion; and
   • socio-economic status.
2. the comparative perceptions on the educational experiences of students with diverse background;
3. the felt consequences of diversity along personal, social and academic dimensions;
4. the institutional and instructional practices in higher education related to the education of diverse students; and
5. problems encountered in the education of students with diverse background.

Methodology
Quantitative and qualitative data were randomly gathered from 569 freshmen, 274 college teachers and 55 administrators in teacher-training colleges in 13 state higher education institutions of the Northern Philippines.

Two sets of questionnaires were used. The questionnaire for the students included five parts that inquired into their demographic characteristics, educational experiences in relation to their background, the felt consequences of the experiences, the institutional and instructional practices related to their diversity and the problems related to their learning experiences. The questionnaire for the teachers and administrators focused on the institutional and instructional policies and practices of the institution and problems related to multicultural education. It contained the same questions as that of the student respondents. The questionnaires were answered in a four-point scale where 1 is the minimum score.

A semi-structured interview guide was used to validate responses. Data were analyzed using the SPSS. The post hoc test on Least Significant Differences was applied whenever the F values proved significant. Data were interpreted at the 0.05 level of confidence.

Findings and discussion

The educational experiences of students with diverse background
There are five dimensions related to the educational experiences of student-
respondents: ethnicity, gender, academic abilities, religion and socio-economic status. The **ethnicity** refers to the students’ ethno-linguistic affiliation. There were two groups in this study- the Cordillera which is one of the known the *minority* groups in the Philippines and the Non-Cordillera which includes the known *majority* group in the country (Tagalog, Ilocano, Pangasinense). **Academic abilities** refer to the objective assessment and classification of each student of his overall scholastic performance (low, average and above average). **Religion** is Roman Catholic and non-Catholic, whereas **socio-economic status** is based on the collective family monthly income (low, middle or high).

It was reported that generally, the students rarely experienced untoward treatment in their educational experiences in all the five dimensions (Ethnicity= 2.02, Gender = 2.11, Academic Abilities = 2.04, Religion = 1.90, Socio-economic status =1.99, Overall mean = 2.01). These imply that students of different backgrounds experienced equal treatment which is indicative of the respect that abounds in the Teacher Training Institutions (TTIs). This situation creates a positive effect on the self-esteem and personal development of the future teachers.

While this is the general scenario, it would be worthwhile to look into some specific items where the respondents felt there were instances of unwanted treatment. Table 1 shows the findings.

**Table 1. Specific items where students *often* experienced unwanted treatment**

<table>
<thead>
<tr>
<th>Specific Items</th>
<th>Issues on</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There are teachers who use their culture as the standard.</td>
<td>Ethnicity</td>
<td>2.65</td>
</tr>
<tr>
<td>2. Male and female students are perceived to have different scholastic abilities.</td>
<td>Gender</td>
<td>2.71</td>
</tr>
<tr>
<td>3. Students of the same gender would share jokes against the other gender when with their peers.</td>
<td>Gender</td>
<td>3.94</td>
</tr>
<tr>
<td>4. Teachers call more on students of above average ability.</td>
<td>Academic Ability</td>
<td>2.94</td>
</tr>
<tr>
<td>5. Students of the other religion make me feel uncomfortable.</td>
<td>Religion</td>
<td>3.42</td>
</tr>
</tbody>
</table>

1.0 - 1.49 – not at all experienced; 3.50 - 4.00 – frequently experienced
The first item implies that somehow teachers inadvertently encourage ethnocentric attitude among students. There were other items with means above 2.00 which tells that there are few instances where insults are cast at a particular group, such as making fun of other’s tribe, and there is some sense of superiority among students (ethnicity). Students receive different treatment from their peers and teachers in terms of gender as shown by items 2 and 3. Interviews with students proved that since they were in the grade school, they used to hear that boys are better in Biological and Natural Sciences and Math while girls were supposed to perform better than boys in Languages, History and Social Sciences.

While students with better academic abilities were often called in class, students with less ability wanted to be given more attention in trying to find answers. They mentioned in the interviews that they hoped their teachers were more patient in guiding them though probing or recasting questions so they would be led to the answers. According to teachers on the other hand, they would be catching up with time to finish topics but realized that they should be more patient with the less abled students.

Lastly, some students are made to feel inferior in terms of religious practices. Among those from Regions I and II where Catholicism is the predominant religion, a non-Catholic feels intimidated when most of this classmates and peers are Catholics. The case is reversed in the Cordillera Region where most of the students are Protestants. It is observed that for the past 15 years, the young people have been very active in their religious groups and that they usually bond together during their free-time in school, talk about their church activities so that a classmate who belongs to the other religion may feel outcast.

Despite that there are no specific items related to socio-economic status that were often experienced, there are instances when students perceive that their teachers give less attention to those from the low status, students of high status would not like to do schoolwork with those below them and that students of the same group tend to bond together. These indicate that school administrators, teachers and students have to be more conscious of the principle advocated by the UNESCO on the third pillar of learning, which is learning to live together.

*Comparative educational experiences*

When the respondents were grouped according to their diversity, more revealing findings came to the fore. Table 2 bears the findings.
Table 2. Educational experiences according to students’ demographic characteristics and geographical location of HEI

<table>
<thead>
<tr>
<th>Students’ demographic characteristics</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Academic performance</th>
<th>Religion</th>
<th>SES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.05</td>
<td>2.04(^{b})</td>
<td>2.05</td>
<td>1.96</td>
<td>1.90</td>
</tr>
<tr>
<td>Female</td>
<td>2.02</td>
<td>2.14(^{a})</td>
<td>2.04</td>
<td>2.00</td>
<td>2.06</td>
</tr>
<tr>
<td>t-value</td>
<td>0.72(^{ns})</td>
<td>3.71(^{*})</td>
<td>0.03(^{ns})</td>
<td>0.02(^{ns})</td>
<td>0.45</td>
</tr>
</tbody>
</table>

| **Abilities**                        |           |        |                       |          |     |
| Poor                                 | 2.09\(^{a}\) | 2.21\(^{a}\) | 2.10\(^{b}\)         | 1.97\(^{a}\) | 1.99\(^{a}\) |
| Average                              | 1.99\(^{b}\) | 2.09\(^{a}\) | 2.01\(^{b}\)         | 1.87\(^{a}\) | 1.96\(^{a}\) |
| Above average                        | 2.13\(^{a}\) | 2.16\(^{a}\) | 2.21\(^{a}\)         | 1.98\(^{a}\) | 2.12\(^{a}\) |
| F-value                              | 3.09\(^{*}\) | 1.65\(^{ns}\) | 4.37\(^{*}\)         | 2.43\(^{ns}\) | 1.89\(^{ns}\) |

| **Religion**                         |           |        |                       |          |     |
| Roman Catholic                       | 2.14      | 2.14   | 2.16                  | 1.93\(^{a}\) | 1.97 |
| Non Catholic                         | 2.02      | 2.05   | 2.00                  | 1.79\(^{b}\) | 2.00 |
| t-value                              | 2.75\(^{ns}\) | 2.86\(^{ns}\) | 275\(^{ns}\)        | 7.08\(^{*}\) | 0.20\(^{ns}\) |

| **Socio-economic status**            |           |        |                       |          |     |
| Low                                  | 2.02\(^{a}\) | 2.09\(^{b}\) | 2.03\(^{a}\)         | 1.89\(^{a}\) | 1.97\(^{b}\) |
| Middle                               | 2.14\(^{a}\) | 2.24\(^{a}\) | 2.12\(^{a}\)         | 2.01\(^{a}\) | 2.13\(^{a}\) |
| High                                 | 2.02\(^{a}\) | 2.14\(^{b}\) | 2.07\(^{a}\)         | 1.82\(^{a}\) | 1.92\(^{a}\) |
| F-value                              | 2.66\(^{ns}\) | 3.18\(^{*}\) | 1.02\(^{ns}\)        | 2.73\(^{ns}\) | 2.86\(^{*}\) |
Educational experiences of diverse learners in higher education teacher training institutions:
Scenario in Northern Philippines

<table>
<thead>
<tr>
<th>Students’ demographic characteristics</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Academic performance</th>
<th>Religion</th>
<th>SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locality/Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>2.02a</td>
<td>2.18a</td>
<td>2.02a</td>
<td>1.92a</td>
<td>2.02a</td>
</tr>
<tr>
<td>II</td>
<td>1.90b</td>
<td>2.06a</td>
<td>1.95b</td>
<td>1.81b</td>
<td>1.91a</td>
</tr>
<tr>
<td>CAR</td>
<td>2.09a</td>
<td>2.09a</td>
<td>2.09a</td>
<td>1.94a</td>
<td>2.02a</td>
</tr>
<tr>
<td>F-value</td>
<td>7.61**</td>
<td>2.43ns</td>
<td>3.94**</td>
<td>3.56**</td>
<td>1.69 ns</td>
</tr>
</tbody>
</table>

1.0 - 1.49 – not at all experienced; 3.50 - 4.00 – frequently experienced

**Gender.** The male and female students more or less get equal treatment when it comes to ethnic differences, abilities, religion and socio-economic status. However, with regard to treatments related to gender itself, the females experienced negative treatment from teachers and friends. They believed that their teachers think that they are less capable in math and sciences and have different scholastic abilities than the males. This supports the old myth of gender and abilities. The finding of this study implies that both males and females need encouragement, validation, and support for expressing their opinion from parents, classmates and specially teachers who deal with them everyday. A major challenge in this regard is for teachers, administrators and parents to create an atmosphere in which male and female learners seriously listen to the opinions of each other. Cooperative learning, often in small groups, provides the context in which learners will be listened to and be understood.

**Abilities.** Findings indicate that with regard to ethnic differences and academic performance, students with average ability received a more comfortable treatment than those who are less capable and the above average groups; moreover those of better abilities receive more the negative treatments. It is inferred that intellectually better students are more sensitive to unfair treatments compared to students of average abilities. This implies that the students of different performance abilities can interact and work together harmoniously if the teacher establishes a caring learning atmosphere where there are warm interpersonal relationships. Glasser (1990) pointed out that multicultural schools should encourage dialogue with students regarding curricular and instructional decisions, listen to students’ concerns, give all students an opportunity to experience success, and ensure that learning is fun.
**Religion.** In general, the Roman Catholics and non-Catholics are treated equally. It is only along issues related to religion where the two groups differed. The Roman Catholics experienced more the negative treatment, such as being bothered or intimidated by non-Catholics, feeling uninterested in the religious activities of others and perceiving that teachers and classmates do not give equal recognition to other religions.

**Socio-economic status.** Significant differences in the educational experiences related to gender and socio-economic status were reported when students were compared according to their family’s economic status. Those from the middle class perceived more the unfavorable experiences while those from the low and high status have similar perception of better experiences. Students from the high stratum might be less concerned with unequal treatments because they get positive treatment and attention from teachers and classmates while those from the low group might have been used to such negative treatments that they have become less concerned.

**Geographical location of the TEIs.** The Philippines is composed of different regions and each has a predominant culture. Three regions were covered in this study: the Region I (Ilocos Region), Region II (Cagayan Valley), and the Cordillera Administrative Region (CAR).

Those from the CAR and Region I believed that teachers and classmates laughed at errors in mispronouncing words due to language/regional defects, and make funny stories about different ethnic tribes. Teachers also make use of their ethnic practices as good example in class discussions and that student with the same ethnic group with the teacher feels superior in class.

They also claim that the female are not treated well, teased by the males and feel that the two gender groups get their biased treatment from teachers. Moreover, they perceived that teachers show disgust/frustrations toward slow learners; classmates and friends laugh and tease students who cannot follow the lessons, and students of above average are often asked to recite.

Lastly, they claim that there are students who feel that their religion is the right one and feel superior in class, or that they feel bored listening to classmates of other religious group. In general, the findings indicate that the teaching-learning experiences of students call for a re-orientation of the curriculum and a need to adopt a multicultural education due to a pluralistic society.

**Felt consequences in relation to diversity**

Three areas of felt consequences of diversity are included in the study: personal, social, and academic aspects. In general, the students agreed that they felt positive effects in the three aspects. Along social consequences, the respondents agree that they can easily interact with students of different backgrounds, can work, socialize and have good relations with others of different background, can communicate comfortably with other learners even with foreign students. In terms of their academic performance, the respondents agree that they can solve problems objectively, are open-minded, able to view others’ ideas, can tutor their classmates,
and involve themselves openly in school activities. When it concerns personal consequences, they say that they feel good about their background, feel equal and comfortable with others as they are able to work and tolerate those who are different from them. They have confidence in themselves.

The findings are indicative of a high level of trust among the key players in the educational field.

Trust is essential in any relationship especially in the teaching-learning environment. Trust is the foundation on which all other principles rest, the glue that holds teaching and learning together, the beginning point for re-education. The quality of teacher-student relationship dramatically affects whether students’ needs and development are met in school. What students experience in their institution, they will be able to use as a model when they become teachers. Jones and Jones (2004) pointed out that individuals are likely to model the behavior of people whom they view as possessing competence and control - characteristics possessed by teachers. The overall findings imply that it is desirable for teachers and administrators to act systematically in developing positive relationships in schools.

Institutional and instructional practices related to diversity

In a student’s lifetime, the most stressful is being a college freshman. The student is away from home; far from his familiar neighborhood and is in an almost entirely new environment. Besides these changes, the tertiary institution is perceived to be cold and indifferent to his needs and characteristics. But these feelings can be avoided if the school promotes inter-group, inter-ethnic, and interracial understanding that reduces if not eliminates stereotyping and ethnocentrism.

Four factors were presented to the respondents that are related to institutional and instructional practices. The admission practices are the school guidelines or policies implemented in admitting students in college such as admitting them regardless of their abilities, socio-economic status, ethnic affiliation, religion and physical disabilities. The instructional practices are the approaches and strategies of the teachers in teaching and dealing with students of diverse background, such as developing critical thinking and problem solving skills, helping them to form questions, create hypotheses as a basis for class discussion, enhancing their imagination and inductive thinking processes, and providing the students with an opportunity to understand others through enhanced interpersonal communication. Classroom atmosphere are the ways and means of the teacher in dealing with students, such as establishing a pleasant environment of teaching and learning where everybody feels comfortable and are motivated to learn, treating each one with respect and recognition, allowing the expression of different views, and assigning tasks equally to students.
Lastly, **teacher's behaviors** are the ways the teachers interact with students of diverse background. That is, teachers are warm and friendly to all students, willing to accept personal responsibilities and extended role such as home visitation and remedial classes for slow learners, helping them understand conflicts between social ideals and realities as well as encouraging discussions on societal problems and cultural experiences in class thereby avoiding discrimination and prejudice among the students.

<table>
<thead>
<tr>
<th>Table 3. Comparative perception on the educational experiences as related to diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practices</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Admission</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Instructional practices</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Classroom atmosphere</td>
</tr>
<tr>
<td>Teachers' behavior</td>
</tr>
<tr>
<td>Overall mean</td>
</tr>
</tbody>
</table>

1.0 - 1.49 - not at all practiced; 3.50 - 4.0 - Very greatly practiced
Mean scores with the same letters do not differ significantly.

The respondents assert that all the four identified institutional and instructional practices are carried out. A comparative analysis of the data point to differing perceived level of implementation: that is the students do not agree with the perceived extent of implementation of the issues at hand with their teachers and school administrators. The three groups of respondents significantly have different views regarding teachers' behavior. The findings pose a challenge to the school administrators and teachers. It indicates that they have to exert more effort in the implementation of multicultural practices to foster intellectual, social and personal needs of the students with diverse background.

**Problems encountered in the teaching-learning of students with diverse background**

There are four problems included in this study that are commonly encountered by teachers and administrators in teaching students with diverse background. These include approaches and strategies, resources, student behavior and teacher behavior. Problems on **resources** as well as those related to the **teaching approaches and strategies** were reported to be moderately serious. The teachers and administrators
perceived that there are no available resources such as books, CDs, tapes and related learning resources of local authors on the subject matter. The administrators claim that materials related to multicultural education are expensive, while teachers assert that there is very little support from school administration for them to train on the approaches, teaching strategies and learn the practices in dealing with learners of this nature. Teachers admit that they lack the skills in managing learners of diverse background hence treating students en masse. From interviews, they say that even the curriculum in the tertiary level does not give much emphasis on the UNESCO’s program on Education For All. Student behavior, such as not having good study habits, students of particular cultural group feeling superior over others’ culture, and students not treating each other well were perceived to be slightly serious problems. Similarly, problems of teachers’ behavior are considered to be slightly serious. These are related to not strictly implementing school and class rules and regulations to all students, not making a follow up on students, some cases of favoritism and instances when students are not given equal treatment. Nieto (2000) stressed that creating equitable education must begin with teacher’s knowledge of skills for effectively working with diverse population, and transforming attitudes towards cultural diversity. In view of the findings of the study, Quisumbing (1996) stressed that knowledge and understanding of the Filipino value system would help the education sector to adapt curriculum content, methodology, techniques and learning strategies to the Filipino learner to become the change agent and the future leader of a just society.

**Recommendations**

- For the major stakeholders in education, such as the Commission on Higher Education, HEIs and Department of Education, to actively pursue the goals, objectives and programs of multicultural education like revisiting curriculum, training of teachers in all levels, conduct of researches, forums and networking for the identification and exchange of good practices that address the holistic development of all learners.

- For HEIs, particularly the TTIIs in partnership with the Department of Education, to adopt school programs that support Multicultural Education, such as enabling teachers to focus more on knowing the background of their students and making their teaching relevant to their learners’ needs and background, fostering a caring and trusting learning environment, and adjusting the teaching approaches and strategies so that students with all kinds background will benefit from their learning experiences.

- For HEI administrators to procure resources needed for maximum learning, support the school structures and activities that enhance pride in one’s cultural identity and promote inter-cultural understanding and appreciation.

- For the students to model good behaviors of cultural acceptance, tolerance, respect and interdependence.
Emerging transformation in higher education – International UNISTAFF Forum

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Higher education quality accreditation system of Central America: An institutional stakeholder network for improvement and accountability

Francisco Alarcón

Abstract
Quality accreditation system of higher education in Central America is briefly described. Main progresses and outcomes of the system are analyzed. Central American Quality Accreditation is basically an institutional multinational and multi-stakeholder network. This has been a key factor of system legitimacy in the Central American setting; however this condition implies several difficulties and constraints that are discussed in the paper. This system is aimed to quality improvement and also to accountability. These two aims are not always easy to be combined within the same body. Difficulties regarding this potential contradiction are discussed from the Central American experience.

Keywords: Higher education, accreditation, quality assurance, Central America, accountability

Introduction
Most accreditation agencies around the world have three possible origins: a) Established by the State through a national law, b) Established by the academic community through a collective decision, and c) Established by professional bodies for accrediting quality of study programs in their specific profession.

In the majority of Central American countries universities enjoy a very large degree of autonomy. Regarding public policies in higher education and quality control, in most cases the role of the State is rather weak or non existent. It is common in the region that States have delegated this role to some public universities or to special multi-stakeholder bodies.

In the region during the last decade, society has exerted pressure on the higher education institutions to become accountable for quality and for money spent. In a context where universities enjoy a large degree of autonomy, they responded by building systems for external quality assessment (accreditation).
Without being detrimental to any other approaches, in Central America the accreditation system chosen has the main following features:

- It is a multinational regional system.
- It is collectively owned by higher education institutions themselves, although in active alliance with main stakeholders, including governments.
- It aims foremost at quality improvement, quality assurance and quality enhancement, while trying to also fulfill the public function of enabling accountability.
- It is in the first instance program-oriented. However, institutional evaluation and accreditation is also part of the system, mainly within the private universities.

We believe that higher education quality only can be assured by those responsible for quality: academic and administrative staff and students of the universities. This means that universities must believe in the system and not see it as a threat. The system should also be focused on those matters in which it will have the most direct impact: the teaching and learning environment (curriculum and pedagogical methods) and the research programs. Rather than be a quality control system serving governments, it was built to become an instrument that serves universities for quality improvement and quality assurance.

However, the accreditation system in Central America also needed to play an important public function: accountability and information for the outside world. We have to recognize that it has not been easy to conciliate both functions of the accreditation system.

As Ton Vroeijenstijn (1995) says, being responsible for an external quality assurance system is like navigating between Scylla and Charybdis. Aiming only at improvement, the system will shipwrecked against Scylla because the outside stakeholders will ask for accountability and they will be tempted to establish their own accreditation system. On the other hand, overemphasizing accountability, the system will disappear in the Charybdis, because improvement will be hindered or even made impossible. As Vroijenstijn (1995) said, it is necessary to look for an effective relation between improvement and accountability. And this was indeed a hard thing to achieve, but it was not an impossible task.

In the Central American context, with rare exemptions, initiative for establishing accreditation agencies could not come from governments. The risk of this hypothetic initiative not being accepted by university community could be pretty high. On the other hand, if an initiative for establishing an accreditation agency comes from higher education institutions only, the credibility of these accreditations could be under question from some sectors of society. Therefore, the most successful approach in the region, in terms of legitimacy, has been that university initiatives for establishing accreditation agencies have involved the active participation of different stakeholders, including state bodies.

We decided to establish a plural system, i.e., a multi-stakeholder system. The Central
American accreditation system had a mixed origin: It was established through a joint venture between the public universities, the States (Ministries of Education), professional bodies, private universities and other stakeholders (academies of science, national organisms of science and technology, and business sector representatives). We believe that we are on the road of achieving the equilibrium between Scylla and Charybdis in the Central American higher education accreditation system.

The Central American Higher Education Quality Accreditation System

The Central American Quality Accreditation System is a two layers multi-national and multi-sectorial system. It includes the participation of stakeholders and universities from 8 countries: Guatemala, Belize, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and The Dominican Republic. It also includes the direct participation of public universities, private universities, Ministries of Education and professional bodies (university graduates) from the whole region.

At different levels of the system it also includes the participation of the National Organisms for Science and Technology, the Academies of Science and in a much less extent the participation of representatives of the business sector. Therefore it is a real institutional multi-stakeholder network for accrediting higher education quality.

It is a two layer system since in one layer it includes a Central American Accreditation Council (CCA) in charge of setting good practice principles for accreditation and standards for the accreditation organisms which operate in the region. This is a Council in charge of carrying out the meta-evaluation of the accreditation agencies and its procedures, and awarding regional recognition or accreditation of the accreditation agencies. In the other layer the system includes the accreditation bodies themselves, in charge of accrediting the universities and or their study programs.

In the accreditation of the study program or university level, there are two main kinds of accreditation organisms or agencies:

On the one hand, at the regional (Central American) level, usually specialized accreditation agencies, such as ACAAI (accrediting engineering and architecture programs, 2006), ACESAR (accrediting agriculture, food and natural resources university programs, 2005), ACAP (accrediting postgraduate study programs, PhD, MSc, MA, and professional specialty programs, 2006), AUPRICA (accrediting only private universities at institutional level only, 1990). Moreover, there is SICEVAES (evaluation for improvement only, for public universities, 1998) and also SICAR (evaluating for assigning or recognizing regional category to postgraduate programs for public universities, 1998); both under the authority of the Central American University Superior Council (CSUCA).

There are 14 organisms as a whole. The quality evaluation and accreditation agencies existing today in Central America are:

**Organisms of national scope:**
- Dominican Association for self-study and accreditation “Asociación Dominicana para el Autoestudio y la Acreditación (ADAAC)”, 1987.

**Organisms of regional (Central American) scope:**
- Central American Accreditation Council for Higher Education “Consejo Centroamericano de Acreditación de la Educación Superior (CCA)”, 2003 (second layer, accredits accrediting bodies in the region, it is clearly the cornerstone of the whole system).
• Central American Accreditation Agency for Architecture and Engineering “Agencia Centroamericana de Acreditación de Arquitectura y de Ingeniería (ACAAI)”, 2006.
• Central American Accreditation Agency for Postgraduate Studies “Agencia Centroamericana de Acreditación de Postgrados (ACAP)”, 2006.

Figure 1
This is a very young Regional Quality Assurance System. The main organism, the CCA was formally established at the end of 2003, and the majority of the accreditation bodies have been established after that. Therefore, the number of institutions and study programs that have been accredited so far is still small.

Table 1

<table>
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<tr>
<th>Country</th>
<th>Organism</th>
<th>Evaluation Higher Education Institutions</th>
<th>Accreditation Higher Education Institutions</th>
<th>Evaluated Study Programs</th>
<th>Accredited Study Programs</th>
<th>Accredited Agencies</th>
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<td>90</td>
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Note: Moreover there are 6 more study programs in a private university in Guatemala (URL), which have been accredited by Mexican Agencies (ACCECISO, COMAEA y CACECA).
Discussion of main results and features of the system

The 14 evaluation and accreditation agencies that operate now in Central America have means and mechanisms for communication, coordination and collaboration among themselves. This is thanks to the key role played by the Central American Accreditation Council CCA.

Licensing and quality control is compulsory for higher education institutions in Central America and this is done by agencies different than those mentioned in this paper. However, quality accreditation has been voluntary for higher education institutions in the region. With the exception of the recently approved new accreditation law in Panama that make compulsory quality accreditation for higher education programs and institutions.

The majority of evaluation and accreditation agencies in the region are very young. Therefore, the number of study programs and institutions that have been accredited so far is very small in comparison of the total number operating today in Central America.

So far, the evaluation and accreditation agencies that operate in the region, as a whole, have accredited a total of 90 university study programs (through SINAES, SICAR, CFIA/CEAB, SUPRICORI) and 31 universities (through CdA, ADAAC and AUPRICA). As a total only 170 study programs have recently carried out complete evaluation processes, either aimed at quality improvement only (through SICEVAES), or aimed to accreditation (through SINAES, SICAR, CFIA/CEAB, SUPRICORI).

As it can be seen in Table 1, summing up the concluded processes and those that are about to be concluded, during the last decade 234 systematic evaluation processes have been carried out in the region. This out of a total estimated of more than 4,500 university study programs offered by 202 universities legally established in the region.

This means that about 3% of the study programs offered in the region have been evaluated, i.e. the regional evaluation and accreditation system is just starting its job.

Therefore, so far, quality accreditation has done a very limited contribution to quality improvement and regional academic harmonization and mobility. However, considering that the system is already in place and has started to work, the potential is very high.

It is encouraging to notice that 58 universities (16 public and 42 private) have already got involved in evaluation and accreditation processes in the region. This is 25% of the total. And the main institutions are already among them.

Even though quality evaluation and accreditation are still at their beginning in the region, a quick review to more than 2,150 recommendations in the external peer evaluation reports, conducted by CSUCA (through SICEVAES and SICAR), already show some clear trends. And from them, a preliminary quality improvement agenda could be drawn for the region.
In the case of SICEVAES (first degree programs level), the majority of the recommendations are focused on the curriculum (study plans) (31%), teaching staff (17%), students (14%), resources (13%) and academic management (11%). Regarding institutional evaluation, the majority of recommendations are focused on institutional management (21%), teaching management (21%), resources (20%) and institutional projects (18%).

In the case of SICAR (postgraduate programs level), most of the recommendations were centered in: academic and administrative management (29%), curriculum (study plans) (18%), regional collaboration and exchange (16%), academic staff (10%) and research (9%).

Therefore, after reading many evaluation reports and considering Central American higher education system as a whole, we conclude that actions should be taken in the following issues.

- It is necessary to make important efforts for improving the design of the curricular plans and to improve the procedures for revising and changing the offer of university study programs in public universities in the region. The need to be sensitive to the rapid changes in the external setting, and the need for more flexibility and innovation in public universities has to be seriously taken into account. It could be useful to introduce tracer studies as a generalized institutional practice among Central American public universities.
- It is also necessary to concentrate resources and energy in improving the academic level of the teaching staff (take them to MSc and PhD level), and to significantly improve their pedagogical methods.
- Systematic efforts have to be made for significantly improving institutional management of universities and the academic management of study programs.
- Important investments have to be made for improving the means and support resources for higher learning at universities (e.g. laboratories and libraries).
- Finally, to improve and develop research capacities in Central American universities has a large potential for improving the quality of higher education currently offered in the region.

On the other hand, there are some concerns among university authorities in Central America, regarding the sustainability and efficiency of the general process of evaluation and accreditation of higher education in the region. So far it seems to be too slow and too expensive.

It is necessary to maintain a more systematic and deep dialogue between universities and accreditation bodies, to find strategies and mechanisms to accelerate the general process and to reduce the costs of accreditation in the region.

So far some ideas have been discussed and are just starting to be tried out: 1. “Cluster evaluation”, it is to say, larger mixed external peer review teams to evaluate a group of related study programs, instead of a specialized peer review team for only one study.
program. 2. Collaboration agreements between (mainly regional and national) accreditation agencies, for jointly carrying out evaluation and accreditation of study programs; avoiding in this way the need for a study program to repeat the process for getting the regional specialized accreditation and later getting the national accreditation (or vice versa). The idea is, when it might be possible, to go through only one process for getting two seals.

For a multi-national (8 independent countries) and multi-stakeholder (5 or 6 main stake holders from each country) higher accreditation system, the difficulties and challenges are very high. However, the potential for fostering quality improvement, accountability and regional academic mobility is also very high. We believe that the Central American higher education quality accreditation experience is unique and very interesting in many ways. Let us hope that Central American higher education accreditation system achieves the equilibrium between Scylla and Charybdis and will manage to successfully navigate towards safe port.

References

Increasing the effectiveness of UNISTAFF project work implementation

Ahmad Syafiq

Abstract
The objective of this paper is to share information on experiences in implementing project work of UNISTAFF course in the home country. In this case, implementing Tracer Study in Faculty of Public Health University of Indonesia and its expansion to the university level. The first important step is the selection of a project to be developed: a project related to previous work of participant is preferable compared to a new project. Next step is information dissemination including presentation of study results that should be conducted immediately to raise awareness about the importance of the project work. The most important key to the success is proper networking. Contacting the right persons is vital in this process as well as maintaining good personal relationship. Convincing university management about the need to conduct UI Tracer Study is necessary to ensure the smoothness of implementation. The near future challenge is to institutionalise tracer study within university structure.

Keywords: UNISTAFF, project work, networking, tracer study

Introduction
This paper aims at providing experiences on implementing project work, i.e. Tracer Study in Faculty of Public Health and its expansion to Tracer Study University of Indonesia. It is expected that the shared experiences could be used as lessons learned for UNISTAFF or other similar training program participants in developing and implementing their own project work in their countries of origin.

Participants of UNISTAFF are allowed to choose project work within the scope of the three modules (organization development, quality in teaching and learning, and knowledge and research management) and should be finalised within 2 weeks in total. The development of the project work is facilitated by facilitators and supported by libraries in ISOS and University of Kassel. Should the project be finalised, an individual presentation is held to gather inputs for improvement. It is expected that project work would be implemented in the home universities. However, facts suggest that this is not always the case: much project work developed during UNISTAFF course can not be implemented, which thus reduces the effectiveness of project work development and hinders achievement of goal of the UNISTAFF program as a whole.

Tracer study as project work in UNISTAFF 2006
Participating in UNISTAFF 2006, the author developed project work on tracer study at faculty level (Faculty of Public Health, University of Indonesia). The reason behind selecting a tracer study as project work was related to previous experience when the
author involved in implementation of Tracer Study of Faculty of Public Health, University of Indonesia (FPH-UI) in 2003. There was a need to complement and to continue that first tracer study to different cohorts of graduates and to obtain a more complete picture about the graduates and particularly the transition from education to employment experienced by graduates.

The objectives of FPH-UI Tracer Study 2003 were to obtain a description of alumni employment; to obtain input on education system and facility in FPH-UI; and to obtain input on communication between alumni and FPH-UI. The study design was a cross sectional survey using self-administered questionnaires. A multimode tracking approach was applied to obtain maximum response rate and adequate sample size. Target respondent included all regular S1 graduates 1993-2002 cohort (in total 422 graduates) and the study was conducted during December 2002 – June 2003 period. The response rate was 62.1% and was considered high for a census type of tracer study which sometimes only has response rate of 40% or lower (Schomburg and Teichler, 2007).

Other lessons learned from Tracer Study FPH-UI 2003 are that the conventional postal approach was ineffective and inefficient compared to other approaches such as telephone and face-to-face interview. Since most of the respondents were working, the researchers and surveyor team should be willing to work in accordance with the time availability of the respondent, and often it means extended working hours. Solid and effective internal research team is the key to success, and could not rely on “snow-balling” technique usually used in this kind of survey or the service of alumni organization. It is interesting that awareness of the importance of the tracer study among departments, program study and faculty management was high, particularly after series of presentation showing the potential benefit of the tracer study. In fact, study programs asked to be provided by tracer study data as to be used in marketing activity, and not limited to evaluation purposes only.

Based on previous experience above, the proposed UNISTAFF Project Work 2006 was developed to continue the Tracer Study FPH-UI 2003. Further exposure to references to the tracer study and direct learning and consultation to experts of tracer study such as Professors Siawuch Amini, Ulrich Teichler, and Harald Schomburg assisted the process of proposal development.

The name of the project work was Tracer Study Faculty of Public Health University of Indonesia 2006. This study was prepared as a step toward a regular tracer study conducted by FPH-UI and would cover alumni graduated 1998-2005 period. The study was designed so as to allow the possibility to analyse trends. Faculty top management was fully supporting the study which was viewed as useful for faculty, departments, and study programs.
Follow-up process

Immediate after the UNISTAFF 2006 course, in August 2006 a presentation was held in FPH-UI to disseminate information about UNISTAFF and project work. The presentation was attended by FPH-UI academic staff including faculty management. Participants valued the presentation as it brings new information and relevant issues in faculty as higher education institution management. The proposed project work was responded to positively and would be supported for its implementation.

Beside information dissemination, another key to the success of implementation of project work was proper networking. Contacting the right persons is vital in this process. In this case, managers of student and alumni affairs as well as the Vice Dean of Finance were both contacted and provided explanations of the project work.

The project work of UNISTAFF 2006 was then implemented, albeit with some modifications. The proposed study was modified mainly due to budget limitation which forced the team to change the study design to qualitative rather than quantitative survey. The study was conducted in September-December 2006 period. The increasing awareness of the importance of the tracer study made the Director of the Master Program include the master program graduates into the study, and not only the bachelor program graduates. In the implementation stage, the study deliberately selected informants from bachelor and master program graduates cohort 2000-2004 with inclusion criteria minimal work duration of one year. The study also included users as informants.

Lessons learned from the study were that tracing master program graduates was not that useful in investigating working transition. More appropriate objectives and method including instrumentation needed to be prepared more specific and given more preparation time. Besides, most master program students already have a permanent job. It was also found that in a qualitative study, the experienced interviewer and researchers were thought to be compulsory since the design necessitates research skill beyond the standard requirement of quantitative survey with standardized close-ended questionnaire. Lastly, presentation of study results is very important to further increase awareness about the importance of the study.

At the university level, the idea of implementing the tracer study of UI started to grow. Again, networking is the key to success. Maintaining good personal relationship to alumni from the same alma mater in postgraduate courses (University of Queensland, Australia, UNISTAFF Germany) proved to be fruitful. A good relationship to other university level management was also important in convincing them about the need to conduct the UI Tracer Study.

Formal sounding out of university level top management, in this case Director of Alumni Relations, had provided insights on what was to be done. It was informed that UI had never been conducting tracer study at university level. All previous tracer studies had been organised by faculty at the faculty level. Coincidentally, Career Development Center UI (CDC-UI) is headed by UNISTAFF 2005 alumna, Sandra Fikawati, MPH and she fully supported the idea. To add to the value of the study,
UNISTAFF alumni in Indonesia (INDOSTAFF) was contacted and provided support in allowing it to share information about tracer studies conducted in other universities in Indonesia. Career Center Community, a forum of Career Centers in Indonesian universities also provided information on tracer studies conducted by its member. The diagram below shows the development of Tracer Study from previous early experience to university level tracer study.

![Tracer Study Development Diagram]

Figure 1. Tracer study development in UI

Presentation and publication of study results is important to disseminate findings to a wider audience and to expand networking and collaboration. Results of Tracer Study FPHUI were published in Indonesia Journal of Public Health (Jurnal Kesmas), and presented in international seminars (The 5th Meeting of Network for Graduate Surveys, University of Kassel, Campus Wilhelmshoehrer Allee, Germany, 4-5 June 2008 and Open Forum of University Staff Development Program, Institute for Social Studies, University of Kassel, Campus Witzenhausen, Germany, 11 June 2008), and also presented in National Workshop on The Role of University in Improving the Workforce Quality in Indonesia, 22 January 2009. Two posters on FPHUI tracer study (titles: “Tracer Study as a Tool in Up-Dating Public Health Curriculum: Tracer Study Of Faculty Public Health UI 2003, 2006 and 2008”, and “Competencies to Work in Public Health Area, Perception of Graduates and Employers”) were accepted to be presented at the World Congress of Public Health in Istanbul, Turkey at 27 April-2 May 2009 organised by World Federation of Public Health Association. UI Tracer Study results were also used as main component of Indonesia country paper in The Association of Southeast Asian Institutions of Higher Learning (ASAIHL) Conference on Enhancing Graduate Employment in Colombo, Sri Lanka at 20-23 May 2009.
Increasing the effectiveness of UNISTAFF project work implementation

SWOT analysis
Mapping of potential and existing situation regarding tracer study in Indonesia was drawn through SWOT analysis. This is important to plan the next step and strategy to strengthen the tracer study in Indonesian universities. The table below presents the results.

Table 1. SWOT analysis in tracer studies in Indonesia

| Strength | • Awareness among universities to conduct tracer study is increasing as proved by their commitment through funding and/or establishing unit to organize tracer study.  
• Tracer study in Indonesian universities started to be implemented as part as universities policy. |
| Weaknesses | • Tracer studies conducted in universities in Indonesia still at the early stage and not all are well planned and clear in objectives.  
• Data base of graduates is not well-maintained and not well-updated.  
• Tracer study is mostly done by faculty or study program due to national accreditation system which accredited faculty or study program instead of university. |
| Opportunity | • The establishment of a career center in many universities could be used to organize a tracer study in universities in Indonesia.  
• The continuation of a tracer study as part of accreditation system in national, regional, and international level should be used to enforce and strengthen the tracer study in Indonesian universities.  
• Increasing number of respondents who could be contacted and who responded through e-mail.  
• Sharing experiences and information among universities could be facilitated by conducting seminars and training on graduate surveys in Indonesia.  
• Demand for the establishment of a national tracer study network is strong and needs to be implemented. |
| Threats | • Lack of awareness of university management about potential, limitation, and diversity of the tracer study.  
• The hard and fast competition in the globalization era can only be won by the ability to adapt to the constantly changing demands of the workplace. |
Future challenges
In the near future, the challenges include the institutionalization of a UI Tracer Study. This could be implemented through insertion of a Tracer Study into the existing structures in UI or establishing new institution. Making a Tracer Study part of the Career Development Center of UI (CDC-UI) is the most feasible option since CDC-UI was the organiser of the first UI Tracer Study and functionally has tasks to build and to maintain connection between alumni and the world of work. The center will also provide consultation and assistance to other universities in Indonesia in planning, organising and conducting tracer study. The center is under the Directorate of Alumni Relations. Collaboration with other related institutions in UI such as Directorate of Academic Development is to be improved. One aim of the Tracer Study team is to hold a conference titled The National Conference on Tracer Study: Conducting Tracer Study and Labour Market Signal and aimed at raising awareness about Tracer Study in Indonesia. This would be part of series of conferences which is planned to be held annually and will be the routine agenda of UI Tracer Study team. The first conference will be immediately followed by a serial of intensive training on Tracer study content and Methodology. The trainings will be held under collaboration of UI Tracer Study team, CDC-UI, INDOSTAFF Jakarta Chapter, and INCHER-University of Kassel, Germany.

Conclusion
• Key factors in the success of project work implementation are: proper selection of project work, early dissemination, networking and collaboration with appropriate management in the university, and presentation and publication of study results.
• Networking with other UNISTAFF participants, especially within the same university is a must to ensure the implementation of project work, and this should be strengthened by maintaining good relationship with relevant university management.
• Sustainability of project work implementation is the next challenge; one way to sustain is by institutionalization of project work into the university structure whether by inserting it into the existing structure or establishing new institution. In the case of the tracer study in UI, it is considered as most feasible to have it inserted into UI Career Development Center and try to expand the possibility of collaboration with other unit/institution both within and outside UI.
Increasing the effectiveness of UNISTAFF project work implementation

References


Emerging transformation in Bogor Agricultural University – Indonesia: From learning organization toward quality organizational learning

Yonny Koesmaryono and Titik Sumarti

In order to be well prepared in its autonomous management, Bogor Agricultural University (IPB) has started its organizational learning process. The transitional period of IPB was done in 3 stages structuring: organization, management, and academic level. To establish its autonomy, IPB in making the changing process to develop organizations and management based on an integrated quality management of all activities carried out a number of strategies which require conditions, some of which include tolerance (progressing thinking and openness), participation and team work so that all parties are able to understand, to be sensitive and to overcome any resistance and challenges that IPB faces. The IPB organizational learning process still continues, and it is expected to improve the nation’s competitiveness, empower the autonomy management and decentralization, and establish good organization health.

Keywords: Higher education, autonomy, transformation, organizational learning

Preface

Higher education institutions such as Bogor Agricultural University (IPB) are expected to play an important role to produce qualified graduates, who come from all over Indonesia, and to distribute evenly their graduates, who have great accessibility and credibility, to a wide range of work and community.

Higher education is an agent of change, which plays a role as a “moral force” and thus becomes a basis for the emergence of human resources that have high instinct and sensitivity in responding to every change of systems that might happen. Besides producing qualified human resources, higher education must also be able to develop science, technology and arts that are appropriately usable to improve the quality of people’s lives through the three-missions of higher education: education, research and community services.

Agricultural higher education must also face global challenges. This certainly encourages the university to improve its capacity so that it will be able to carry out education processes that can produce competent human resources, applied technology, and useful community services. In 1999, IPB carried out an evaluation on all aspects of education that was written in three books as a preparation for IPB to become a State-Owned Legal Entity of Higher Education (Badan Hukum Milik Negara/BHMN), namely: 1) Self-evaluation, 2) Plan for Transition, and 3) Implementation Plan. IPB has obtained a lot of evidence about the many constraints
that IPB will face to make it an academic excellence.

Autonomy and accountability of higher education are an IPB institutional demand that it has long dreamed of. The issuing of the Government Regulation No 154, 2000 concerning IPB as a BHMN is the beginning of a new era of autonomous management of higher education in IPB as a learning organization.

**Change of status of IPB to become a state-owned legal entity of higher education**

The change of status of IPB to become a BHMN occurred on the issuing of the Government Regulation No 154, 2000. In the initial period, there was an initial implementation of IPB autonomy that was carried out during the period of 2000-2003, with the following activities: 1) formation of Autonomy Implementation Preparation Office (AIPO); 2) formation of Academic Senate of IPB of BHMN during the transition period of 2001-2003; 3) formation of Board of Trustee (BT); 4) making of IPB household budget; 5) election of IPB Rector for the period of 2002-2007; and 6) election of Audit Agency.

AIPO IPB was founded to carry out the following duties: 1) to help IPB leaders in the process of autonomy implementation; 2) to make a portfolio concept and steps of change taken gradually; 3) to help IPB leaders to prepare and facilitate implementation of change and to anticipate its consequences; 4) to develop a new culture about the new paradigm in IPB; and 5) to become a central of information of change to become an autonomous IPB.

The Academic Senate (AS) is the highest IPB normative agency and the first management formed during the transitional period to become BHMN. As soon as the AS was established, it formed a Committee to formulate the IPB household budget, Board of Trustee (BT), Audit Agency (AT) and Executives (Rectors). The BT together with AS and the institute leaders becomes a governance organ that will lead the university to become an effective, efficient, and qualified university. The elements of BT are: a) one person representing the minister, b) Rector representing the institute, c) four persons representing the academic senate, d) one person representing students, and the person holds a position in the student organization, e) four persons representing community, and they consist of one local government officer, one non-IPB researcher, one businessman, and one agriculturalist. The item concerning BT membership was amended through the process of lengthy debate, and it was finally agreed by the Minister that 21 persons will become members of BT. IPB BT was formed through a gradual process and was carried out by the AS, using networks, and by various stakeholders in and outside IPB.

After the AS team members completed their duties to formulate the IPB household budget, the BT formed a special working group of IPB household budget in 2003. Once settled the working group, the draft was socialized to all stakeholders, inside or outside IPB, with the purpose of collecting aspirations that do not exist in the household budget draft. The obtained responses were considered for corrections and the following socialization stage for additional materials, and finally the IPB
household budget was legalized. In the application of the new paradigm of higher education, the formulation of the IPB household budget has been the major activity in preparing the legal aspects of IPB to become a legal entity, taking the opportunity in developing IPB to be better, overcoming the weaknesses and anticipating the threats.

The transition of IPB to become BHMN: A process of organizational learning

As a learning organization, IPB has continuously developed its capacity to create a better future through its changing status. In order to be well prepared in its autonomous management, IPB has started its organizational learning process since the initiation of IPB autonomy implementation through the following activities: 1) preparation of materials and information collection required for the formation of governance organs; 2) formulation of working groups and socialization of IPB autonomy and its activities; 3) formulation of stages and procedures of actions in anticipating problems occurring during the process; 4) selection of the new IPB rector after it became a BHMN, and the rector started to implement the new paradigm of higher education.

Resistance and constraints faced by IPB at that time included the formation process of the BT, the formulation of household budget, and the selection of rector, which was carried out for the first time since its new status of BHMN. During the process of organizational learning in its initiation period to implement its autonomy, IPB produced a number of governance organs and legal aspects required to meet the requirements of its capacity to be a BHMN.

However, there were still many pros and cons in accepting the changes in the implementation period of IPB autonomy called as a transitional period starting from 2004 to 2007. There were three stages involved in this process, namely, 1) organizational re-structuring; 2) managerial re-structuring; and 3) academic re-structuring (programs and curriculum).

Organizational structuring

The organization is the place for IPB to carry out its vision and missions. The requirement to develop the organization was triggered by its intention to develop its more qualified education. Therefore, quality has been the principle for the change of an organization at IPB (change for quality). The organizational structure was aiming at creating good governance, which can improve transparency, accountability, effectiveness and efficiency in implementing its three-missions. Furthermore, IPB also has developed the principles of performance-based management, professional, competency-based, and integrated information system toward good-governance.

In the generic organizational structure legalized by the Board of Trustee in 2003, IPB in producing its academic excellence has created the centralization of administrative activities in the central office whereas the academic activities have decentralized into the departments and research centers as its responsibility (SADAR). To run this
system, there was a change in the organizational structure of IPB. The Rector in running the organization was supported by his four Vice Rectors. The first Vice Rector was responsible for the coordination of academics, the second Vice Rector was responsible for the coordination of administration and finance, the third Vice Rector was responsible for the coordination of students, alumni, and public relations, and the fourth Vice Rector was responsible for the coordination of planning, development, and institutional cooperations. All administrative work had been centralized to the Central Office; the Faculty is currently responsible for quality assurance from the academic activities; the Research Centre and the Community Service Center were joined into the Research and Community Empowerment Center (RCEC) so that it was able to function more effectively and efficiently. These new organizations of Central Office became the Directorates and Offices supporting all centralized administrative activities, and in this transitional period, there were eight Directorates and seven Offices.

Management structuring
The centralization of educational facilities is directed toward the improvement of efficiency in facility utilization through resource sharing. IPB has also built the ICT infrastructure Fiber Optic-based as the central internet to support the institutional management, academic development, and acceleration of governance information access by having a direct connection between the general administration building and all working unit buildings. Education administration is managed by the directorate of administration and education quality assurance, and this includes the implementation of lectures and integrated academic schedules, the implementation of examinations, the completion of Study Plan Form, administration of unit cost of every subject, and administration of tuition fee payment.

To become a leading university, the organization of IPB has to be changed from the faculty-based into the department-based. IPB has prioritized the service management to students and other clients, the teaching staff, technicians, and other supporting staff who run this service. Through this approach, the department becomes the focus of the organizational development with the principles of ‘student centered activities’ and ‘department based management’. Meanwhile, the major function of a faculty dean is as “quality assurance” especially for the undergraduates.

In relation to structuring of the IPB departments, IPB has elaborated some scenarios and through the meeting between the autonomy implementation team and the whole departments, IPB established the duties of the team with the following scenarios: 1) eliminating all departments and creating the new ones based on: the groups of science fields, the expertise of IPB staff, science and technology development, the needs of the community/stakeholders, and the anticipation for the future; 2) forming faculties based on the groups of departments which have similarities in the science fields.

One of the important stages in the structuring process of the departments is the formulation of the requirements and criteria of the departments, which was established on 1 April 2004. Basically, the criteria used indicate that each department must have a distinct competency and management feasibility. After a long, tiring
discussion, and based on the Decree Letter of IPB Rector number 01/K13/PP/2005 dated 10 January 2005, as many as 36 new departments including their mandates were approved to be set up.

**Academic structuring (programs and curriculum)**

To avoid overlapping and over-specialization and to improve relevance, each department is only allowed to execute one major program for undergraduate and more than one major for postgraduate (Figure 1). The IPB curriculum system is a major-minor system. Major is the expertise field which is offered to students to be their major expertise, whereas the minor expertise field is the one which is offered to students to support their major expertise.

![Diagram of Formulation Process of Major Designs at IPB including the Departments which serve the majors](image)

**Figure 1.** Diagram of Formulation Process of Major Designs at IPB including the Departments which serve the majors
There are 34 majors at S1 (Bachelor) IPB. They are distinctive from one to another, but have a coherence inter strata. To assist the preparation of the academic programs in the new departments, a coordinator recommended by all staff at each department was appointed, and this person has the following responsibilities: 1) preparing a major-minor curriculum including its Global Business Preparatory Program (GBPP); 2) preparing the department’s infrastructures; 3) implementing the coordination with related parties; 4) preparing and coordinating the selection of the head of the department; 5) reporting the results of the implementation of the assignments.

IPB has faced the challenges in solving complex problems in developing agricultural society in a wider context. Therefore, a relevant curriculum should be designed based on the studies of the linkage between educational programs (aim, curriculum, teaching-learning process) and the activities of the society (job opportunity, job description, work and behavior/attitude). In order to meet the demand on job market, IPB considered that the major-minor curriculum system is suitable in implementing the Competency-based Curriculum issued by the Ministry of Education. This curriculum, which is based on competency, will be executed by a department, which is given a freedom in designing all subjects to broaden students’ horizon, improving the efficiency in the implementation, and improving quality and relevance of the educational programs.

Creativity and capacity in creating a new system in the paradigm of BHMN through the change of the organizational structure of faculty toward a directorate and office organizations, the application of SADAR management as well as the development of competency-based curriculum have brought about the basic changes and have influenced all life aspects of IPB as a learning organization. To reach this goal IPB as BHMN, IPB requires an organizational learning process, and this process includes tolerance, trust and self-organization, and the improvement of the mutual advantages in the cooperation and communication inter working units and stakeholders. The Autonomy Implementation Team of IPB and all the governance bodies have taken some steps in regards to organizational learning, and these include decentralization of assignments and decision-making, leader’s authority delegation, and teamwork. However, if the process is not supported by tolerance and trust given by all working units and academicians, IPB will still face resistance and challenges in establishing itself as a BHMN.

The challenges faced by IPB in establishing itself as a BHMN
To establish its autonomy, IPB in realizing its vision and missions should create a strategic plan in order to reach the effectiveness, efficiency, sustainability, and accountability of its programs. The strategies carried out by IPB in making the changing process to develop organizations and management based on an integrated quality management of all activities require conditions, some of which include tolerance (progressing thinking and openness), participation and team work so that all parties are able to understand, to be sensitive and to overcome any resistance and
challenges that IPB faces. The occurrence of resistance may be used as source of information in understanding the dynamic interests of all working units, lecturers and supporting staff - the interests of carrying out their duties, improving their career as well as of earning more income - so that any conflict can be resolved.

The following are the challenges that IPB faces:

- **The slimming from faculty organizational structures to directorate and office organizations**
  
  To change the function of a faculty into a quality assurance and to form a directorate and office organization in supporting the centralization of administration requires good cooperation and coordination between these working units. Therefore, there should be a clear explanation on the coordinating mechanisms and the cooperation capacity between them, so that their interests may be maintained. However, the slimming structuring of faculty does not make these two staff units serve the interests of all supporting working units of the centralization of administration.

- **Human resources management**
  
  The changes in the management of the department and the application of major-minor curriculum have changed the requirements of the number and the qualifications of teaching staff. As soon as a new department was formed, the structuring of human resources in every department was carried out through the mechanism of their curriculum vitae confirmation in regards to their own expertise. As a result of this, there was high inter-department mobility of staff. However, there is a resistance from them since they feel insecure about their future career, or they already felt comfortable with their previous working unit.

- **Physical facility management**
  
  Physical facilities especially for the academic service should obtain more attention. The application of major-minor curriculum and the increase of the number of students for the last five years require more lecture rooms, more sufficient infrastructure and facilities for the teaching and learning process to take place smoothly.

- **Management of education administration and academic quality assurance**
  
  One of the requirements in the implementation of the major-minor curriculum is the need for the integrated scheduling and for the information technology-based Academic and Administration System. The concept of educational quality assurance of IPB was approved at the workshop on educational quality assurance system in 2004, and it was then perfected at the meeting attended by the Deans, Directors, Heads of Offices, Vice Deans, and Heads of Departments.

- **The one-door policy in the financial management**
  
  In the SADAR system, the finance is managed through one door i.e. through the Rector's accounts. This policy still creates pros and cons because some working units are concerned with the centralization of finance management. In this way, they are worried that they cannot obtain the fund to finance the academic services, which requires fund any time they need. On the other hand, the implementation of finance
management through the Annual Budget Working Plan has not been completely carried out based on the relevant working program but based on the funding blocks, and it has not been formulated based on the accurate data base and the funding control is not effective yet. There should be some improvement in the human resources capacity holding the petty cash, and continuous coordination inter-departments and faculties as the quality assurance.

- Curriculum and program management

The major requirement in the implementation of the major-minor curriculum is that each department should be “distinctive”. The challenges in the implementation are not only from the ego of science owned by a particular department which still offers overlapping subjects but also from the internal teaching staff members, who are worried that their subjects will disappear and the change of function of teaching staff in teaching the subjects, and the decrease or increase of their teaching load. It has been recorded that the subjects taught to students were reduced by 52%. The socialization process is required to internalize the department as a science-home base and this department has a distinctive mandate, and the development of major-minor curriculum takes a long time. Therefore, a continuous discussion and evaluation in the working unit and gradual workshops at the level of IPB should be carried out for their learning process in solving this problem.

Consolidation of IPB-BHMN organization: Period of 2008 – current

In the year 2008, IPB entered a new era with its new selected Rector for the period of 2008-2012 who developed the concept of servant leadership. This period is referred to as the consolidation phase because the learning process of the organization has come to the development of mutual vision that involved all levels of leadership from department, faculty, director and office head, the vice rector through the implementation of a leadership with the perspective to serve.

The institutional capacity building can be seen from the change in the structure of IPB organization, which states the change in number of directorates to twelve and number of offices to three. The top management (Rector) is still supported by four Vice-Rectors but with different tasks; i.e. Vice Rector for academic and student affairs, Vice Rector for resource and development, Vice Rector for research and collaboration, and Vice Rector for business and communication. The commitment to develop quality education, organization regularly is carried out through arrangement in directorates and the separate establishment of quality management and internal audit offices to safeguard the whole academic quality of IPB. The offices for quality management, internal audit, legal issues and organization, and executive secretary directly report to the rector.

The direction and strategy of IPB development in period of 2008-2012

The development of IPB up to the year 2025 is focused on three main aspects: 1) to continue the success during the transition period through the building of foundations of research-based university and entrepreneurial university, 2) to perform institutional
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building and good university governance, 3) to improve social responsibility, and IPB must contribute in the establishment of social prosperity. All these are expected to materialize through the products of graduates, research products, and commercial venture products that IPB develops based on its core competency. The capability of IPB in contributing to the improvement of community prosperity, especially the farmers, will return in the improved public trust to IPB.

The development of research, through research grants and collaborations, will improve the quality of teaching-learning process, encourage the student and lecturer participation in various research packages that accelerate the period of education, scientific publications, patents, and commercial research products. These are the aspects that will improve the public recognition and trust, which will open up partnership both with private sector and the government, and become the power of collaborative and consortium researches. Furthermore, the improvement in commercial research products will strengthen commercial ventures in general, and improve the institution revenue that eventually implies to the uplifted lecturer’s and staff’s prosperity. The development direction of good university governance of IPB is through the perfection of administration system that builds up trust and confidence around the stakeholders and shareholders and supports the development of commercial ventures. This administration system must be exercised into practices of good management that requires good organization body, good policy, good procedures, and quality human resource with sound integrity.

The strategy of IPB development in 2008-2012 period comprises of 5 pillars: 1) the expansion of access and improvement of educational quality and studentship; 2) the quality improvement of research and community service; 3) the prosperity improvement of the lecturers, staff, and students; 4) the improvement of resource capacity; and 5) the strengthening of IPB management system. These pillar strategies have strong interrelationship with the long-term strategic plan of higher education development in Indonesia: 1) Higher education long-term strategies (HELTS) 2003-2010; 2) Higher Education-National Education strategic pillar (Figure 2). The first to the fourth of the strategic pillars of IPB development in 2008-2012 period show focus on internal business, while the fifth pillar focuses on the foundation of the program. The reflection of this is a strong performance based management. The approach used is balanced scorecard (BSC) with four perspectives: operational excellence, academic excellence, prosperity excellence, and customer excellence.
Human resource management

The human resource management in this period continues the achievement by previous directorates that is still based on the SADAR system and focused on the performance-based management. The criteria for lecturer performance assessment are discussed and formed. The challenge encountered is how the performance assessment system can also support the merit valuation system useful to rank promotion. The fact is that there are still some lecturers that are reluctant to fill out the assessment forms even though they know that this implies to their own incentive scheme.

Academic management

The homework that is still left by the transition period is related to the integrated academic service and class scheduling within the frame of major-minor approach which becomes the main challenge encountered by education administration directorate. The solution for various problems in the learning process is developed through long discussions and socialization at work unit levels, IPB level, and top management level.
Closing remarks
The lack of overarching law and higher regulation to strengthen the existence of legal aspect of PP 61/99 and PP 154/2000 is still the ultimate challenge for BHMN in order to properly implement the self-autonomy approach in higher education management. Therefore, it is very crucial to establish the law for education legal body (BHP-Badan Hukum Pendidikan) in order to strengthen and become the ground for BHMN. Furthermore, necessary preparations for the implementation of HELTS 2003-2010 must be established through the continuous improvement of IPB quality as the learning organization. The IPB organization learning process that is based on the integrated quality management through the four approaches (operational, academic, prosperity and customer excellence) is expected to improve the nation's competitiveness, enable autonomy and decentralization to be achieved, and establish good organizational health.

References
Students’ participation in higher education quality assurance

Call for project partners as a trial for application in the Egyptian Higher Education System

Hany Youssef Hassan

Abstract

Recently, students have increasingly become involved in the enhancement of the teaching process and their own learning experiences. Whether it is through providing feedback on the courses they had taken, contributing to the development of learning and teaching in their core topic areas, and via participating in their educational institute decision making processes, or representing student views in any number of formal and informal ways. Students’ voices are today being audible loudly, clearly and, ever more often, their views are being taken seriously all over the world and hopefully in the developing countries.

The aim of this manuscript is to underline the importance of partnership between higher education institutions, their staff and students in order to achieve the goals set for the quality of higher education and to flash a light in relation to the possibility of sharing student bodies via a cooperative project as an initial applying within the Egyptian Quality Assurance System.

Keywords: Students, participation, higher education, quality assurance, teaching and learning

Introduction

In recent years, the role of students in the quality assurance of higher education has become recognized across Europe and to some extent to the Far East and Africa, as being both necessary and desirable. Students have increasingly become involved in the improvement and enhancement of their own learning experiences. Whether it be through providing feedback on the courses they have taken, contributing to the development of learning and teaching in their subject area, participating in university decision-making processes, or representing student views in any number of ways through a student union or other representative body - students’ voices are today being heard loudly and clearly and, ever more often, their views are being taken seriously. Students are involved within the processes of their ‘own’ institutions, as part of the quality assurance of institutions and programmes by outside bodies, and in the review of the quality assurance of those bodies themselves. Participation takes many forms, both formal and informal. The rich diversity of student involvement with quality assurance provides us with an abundant resource from which we can research and share good practice, and so help all involved to learn and to develop, (Hanna Alaniska; Esteve Arboix Codina; Janet Bohrer; et al. 2006) because the quality in higher education now calls for changing from the teaching process to the learning
ones. The students are one of the main partners in this process.

The role of students in quality assurance and learning process

Although students are not experts in academic matters, they are experts in affairs that affect them directly, i.e. university facilities, the learning process, etc. (Christian Thune 2005).

Hanna Alaniska; Esteve Arboix Codina; Janet Bohrer; et al. (2006) described the roles of the student in external panels at institutional level. The students take on several simultaneous roles in the external panels that evaluate institutions. First of all, the student representative is, of course, a student, and as such the only one who has the ability to see the situation from the perspective of a student and of a learner. Secondly, the students elected to be a part of an evaluation panel in Norway usually have a background as student representatives, either at the institutional or the national level. Their insight and knowledge of the higher education system is thus significant, and they have the ability to see and understand consequences for the students’ situation, which the other panel members may not take into account. A third role of the students consists in being the largest stakeholder in higher education, investing time and money in education. As such, they have a special interest in factors that are relevant in making education a good investment. Students should be seen as partners in the academic community, because they often have a balanced view of the aim of the academic institution; on the cultural, political and historical aspects of the academic community; on the institutions’ role in society and on the future of the academic tradition. This insight combined with factors such as the influence of their age, their peer group, and the time they live in, means that students may bring a valuable perspective into the panel’s work. Finally, it should be stressed that students need to be acknowledged as full committee members. Some might argue that students may not have enough academic experience or organizational insight to be accepted as full members in expert committees. In some cases, the students may lack a full understanding of some organizational aspects of an institution, but one might think that this is not a serious hindrance compared to professors who do not understand the importance of modern learning methods. In the end, students, quality assurance experts and academic staff have competences which are complementary for an evaluation. The student may have a different approach to the process and use different jargon. The student background will also contribute to the adoption of a different point of view, which in several cases has proven to be a valuable contribution to the evaluation process, including matters not directly linked with the students’ learning situation. Most importantly, the participants of an evaluation panel may identify different challenges due to the different perspectives they represent, and thus the evaluation might result in a more thorough process, due to the better opportunity to “get under the surface”.

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Challenges regarding student involvement in quality assurance processes

Some of the educational quality assurance agencies representing the student involvement reported that they faced challenges in recruiting students with proper competences. Some reported that they had a hard time finding qualified students; others reported that there was little interest among students to participate. This led to a discussion on how and where students could be recruited: directly through advertisements, through nomination from institutions or through student unions.

Success or lack of success in finding students with proper competences did not depend only on the process of recruitment. Some agencies reported on the lack of relevant competences in students, despite a satisfactory recruiting process. This might be the case in those countries where students are not represented at the faculty and institutional boards. Consequently, they will not have the opportunity to get training in tacit competences, which are most relevant for participation in evaluations at this level. The involvement of students at faculty and institutional levels is part of the Finnish system and in some countries as Norway, too. Some quality assurance agencies have also had great experiences in training programmes for students. The legitimacy of student experts in the eyes of the professors under evaluation also seems to present a challenge in some cultures. This is especially challenging for the quality assurance agencies – are they capable of training the students properly and so of helping them act in a way that increases the students’ legitimacy? At the workshop, the students’ personal integrity was also mentioned as a challenge. Some countries have very politically-oriented student unions, and in those cases the students’ ability to set personal integrity over political agenda can be questioned. It might be fair to address this as a challenge and not only as a challenge for the student representative, but also for the quality assurance agencies in general.

The last but by no means least challenge mentioned at the workshop, which is especially relevant regarding evaluation of the quality assurance agencies, is the international perspective. Language, cultural issues and knowledge of the educational system in foreign countries present true challenges to the involvement of students. This of course sets an additional requirement for students’ competences, as it does for the panel as a whole, (Hanna Alaniska; Esteve Arboix Codina; Janet Bohrer; et al. 2006).

What are the levels of student participation in quality assurance?

Student as an information provider

Giving feedback is the most common way students participate in quality assurance. There is a wide diversity of how, when and what kind of feedback students give. It is typical that feedback is given after each course or at least once in a term. Both quantitative and qualitative procedures are used. One of the polytechics recommends
that their teachers also collect feedback in the middle of the courses. The method they use is to ask the students to write down their feelings, problems and ideas on how to improve the course on a blank piece of paper. This may sound a very simple approach, but it seems to be quite an effective way to collect feedback for both teachers and students.

**Student as an actor**

Students are able to do more than function merely as information providers. In many universities in Finland students design their own feedback questionnaires or do so in close cooperation with the academic staff. Feedback is also often collected and analyzed by students. They organize staff and student development workshops, where innovative and problem-solving oriented discussions are encouraged in a comfortable atmosphere. They organized a workshop for students and staff, where the decisions concerning improvement were made. Student associations at the University organize, together with staff, a workshop where they discuss and solve problems relating to teaching. The student association uses the collected feedback to decide the themes that need to be discussed. In small groups they try to find solutions to problems in teaching and studying. Very often representatives of working life are invited to speak about the current trends and needs of employers.

**Student as an expert**

If we believe that the focus of quality assurance should be about the quality of learning, not teaching, the role played by students is inevitably important. In Finland, the students are generally regarded as experts in learning. They know how they have reached their learning outcomes and how the teaching has assisted them in this process. Thus teaching should be evaluated through students’ learning experiences and based on how it actually assists the learning process. Harnessing this student expertise in a concrete form includes using methods like inviting students into working groups and meetings, asking widely for their opinions, and for written statements. Treating students as experts is now a cultural expectation, which demands a positive attitude both from the staff and from the students. It has taken years to develop an atmosphere where student feedback is not seen as nagging but more as constructive feedback from an expert. Asking students to participate in development teams shows that staff values student expertise. It has been noticed that, as a consequence of some of the practices outlined above, students and staff have been able to work in closer partnership and so to develop a shared commitment to recognizing the value of student expertise. Teaching development teams for every subject, the main task of the teams is to improve the quality of teaching. Half of the team members are students; usually this means 4-5 students. So the expertise of students is heavily utilized. There are also a few teams where the chairperson is a student.

**Student as a partner**

Learning is achieved through close cooperation between lecturers and students. The
Students’ participation in higher education quality assurance

development of the concept of partnership, in relation to student involvement in quality assurance, can therefore be seen as a natural consequence. Examples are of the ongoing reinforcement of the sense of partnership, academic and annual celebrations, events and excursions. The notion of partnership between students and staff members represents the possibility of an authentic and constructive dialogue which offers the opportunity for more reflective feedback. It is the responsibility of staff to treat students as partners and to create an easy-going and positive atmosphere in the institutions. This, hopefully, leads to more open and authentic quality assurance, (Hanna Alanska; Esteve Arboix Codina; Janet Bohrer; et al. 2006). During the Tempus Conference in Cairo 2008 entitled "Bringing out the best in education, enhancing quality in higher education" emphasized that the students’ experience is fundamental to the quality debate. While feedback questionnaires are increasingly becoming the norm they are by no means universal and there is some obscurity about exactly how they are being used and the extent to which there is consistency throughout institutions. Moreover, students’ feedback questionnaires should not be seen as the only way in which students can be engaged in the quality process. The argument was frequently put that students are not culturally prepared or mature enough for a more active and responsible role in their own education and evaluation of their experience and hence that their education needs to remain 'teacher centered'. This is evidently a challenge but just as employers will need to be more actively engaged in a variety of ways so it is necessary that, in a student- centered learning environment, students should be encouraged to develop a critical awareness and understanding of the teaching and learning process for their personal development and an analytical approach for evaluating their experience. This cannot be limited simply to feedback questionnaires but must involve other ways of engaging them and with them in a way which will enhance their personal development while contributing to the enhancement of the quality of their learning experience. While many initiations are developing formal structures for quality assurance and associated documentation and also have introduced student feedback procedures, there is less evidence that nationally or institutionally there is widespread publication and transparency in relation to the quality assurance process. Increased transparency will not only help to build public confidence, it will also act as a powerful incentive to all staff and students within an institution to adopt a responsible and proactive approach to enhancing quality. Colin Tück (2008) mentioned that “higher education institutions (HEIs) and students are competent, active and constructive partners in the establishment and shaping of a European Higher Education Area (EHEA)” and to add value of stakeholder involvement in quality assurance. He also recorded that students have on-hands experience on study conditions and can appraise the impact of measures' items. Moreover, Kauko, Hämäläinen; Kimmo, Hämäläinen; Anette, et al. (2002) stated that after the initial goal setting and the selection of the benchmarking partner, the selection of people for the benchmarking teams should be made representatives of students and teachers. Each team has four to six members. They suggested that the students should participate in the workshop and therefore give their opinions about the matters discussed. The role of students is very important. It is desirable that the
comparisons develop into a shared learning process between the students and teachers as well as between the partner departments. The students' part of the workshop was held only between students to produce honest and open ideas; if the staff were listening, the students might hold back something worth noting. The students have been an essential part of the workshops, eager to join the discussions, and have given valuable insights into the departments function models.

Ewa Krzaklewska (2006) affirmed that learning outcomes oriented programmes cannot be created, organized and perfected without the input of students. Of course students are not the only actors in the play (e.g. employers are also an important group), but they are sometimes the unique source of information on learning processes that indeed take place. She also called that students’ involvement is needed at all levels: programme, institutional, national, European (ESU), in all different forms – from passive to active role in groups and panels, in formal and non-formal way, and most importantly, on equal footing with other opinion-givers and ideas producers. Fiona Crozier, Bruno Curvale, Rachel Dearlove et al. (2006) declared that the notion of peer review is understood differently by different agencies, each of whom has its own idea of what the term means. In certain cases, the peers can only be drawn from a pool of university professors, in others from the entire pool of personnel relevant to the evaluation in question. The participation of students in evaluation procedures raises more questions about the legitimacy of those who participate in the judgment-making and advisory processes.

Gus Pennington and Mike O’Neil (1994) confirmed that students (particularly the increasing number of mature entrants) have valuable experience and knowledge which needs to be built upon. They added that the most significant features of this principle, in their view, are as follows: acknowledging the existing experience and knowledge base of students as a valuable learning resource by inviting their participation as co- and peer-tutors; and establishing learning contexts where learners feel that full recognition is given to the setting of objectives that match their own purposes, needs, and level of prior achievements and accomplishments.

From all the previous we made assessment questionnaires among both undergraduate and postgraduate students in Sadat City Branch of Menoufia University, Egypt.
## Student's knowledge and aptitude to be involved in the quality assurance process

<table>
<thead>
<tr>
<th>The degree of knowledge and readiness of students</th>
<th>I don’t know and not agree</th>
<th>I know and fully agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know the programme intended learning Outcomes (PILOs)?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to share in putting PILOs?</td>
<td></td>
<td>+</td>
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<tr>
<td>Do you know the academic standards?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
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<tr>
<td>Do you like to share in putting academic standards?</td>
<td>- 1 2 3 4 5</td>
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<tr>
<td>Do you know what these benchmarks are called?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to share in putting benchmarks?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you know the course specification?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you share or like to share in the evaluating of the academic programme and courses?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to share in designing the feedback questionnaires?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to share in collecting and analysing the students' feedback?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to participate in development teams?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to share in curriculum evaluation?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to be one of the quality assurance units in your faculty?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to be a peer reviewer?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you know about the quality assurance process?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you know about the Egyptian quality assurance agency?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
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<tr>
<td>Do you know the activities of the Egyptian quality assurance agency?</td>
<td>- 1 2 3 4 5</td>
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<tr>
<td>Do you like to share in the quality assurance agency activities?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
<tr>
<td>Do you like to be a member of the teaching development team for every subject?</td>
<td>- 1 2 3 4 5</td>
<td>+</td>
</tr>
</tbody>
</table>
The result and analysis of the questionnaire revealed that the knowledge and terms of quality assurance tongue and idiom are low by the Egyptian students but their fancy for the cooperation and involvement in the quality assurance process are high. The quality of higher education is of concern to not only quality assurance agencies and higher education institutions but to all stakeholders including students, among whom there is a growing interest to participate in quality assurance. However, without a good understanding of these issues, they cannot participate meaningfully, and their role in shaping quality in institutions may be limited. These are matters of particular importance in a developing country such as Egypt where the role of students in quality assurance has not been clearly defined. It is against this backdrop that the Involvement Student in Higher Education Quality Assurance Project (ISHEQAP) has been needed.

**Significance and practices**

The students are for the majority critical stakeholders of higher education systems and also that of quality assurance mechanisms. The attention and contribution of students at all levels in both internal and external quality assurance have to play a vital role. Higher education institutions need to ensure that students have a voice at all stages in the formulating of learning and teaching practices and that views of students are to be considered as the primary evidence on which the quality of teaching and learning is evaluated. Even as the central role of students in the higher education system is agreed in principle by the decision makers, the experience of actual involvement of students varies to a large extent from one culture to another. Commendable work in this regard has been done by many European countries, such as Finland, Norway, England, Poland and Germany etc. The Cairo Tempus Forum of May 2008 documentation has also drawn attention of the higher education community towards the urgent need of addressing the issue of student involvement in quality assurance. The declaration points out: “In the development of quality assurance processes, European stakeholders have recognized the need to involve students actively and fully in all aspects, including external as well as internal evaluation, as full members of the relevant bodies. Student feedback in the form of questionnaires is becoming pervasive and is helping to contribute to curriculum development. National student surveys such as those conducted in many European countries can also provide valuable information for students applying to universities and for other stakeholders about the student perception of the quality of their education. Student evaluation constitutes an important performance indicator, which is contributing to the new league tables and ranking of higher education institutions and subjects in a number of countries”.

**Key objectives**

The proposal of Involvement Student in Higher Education Quality Assurance Project (ISHEQAP) has a twofold aim. The short term aim is to train students so that they can participate in the various external assessment committees. The idea is to create a
steady stream of students capable of becoming external assessors and not a closed body of “assessment professionals”. The second aim is a long term one and more ambitious: it seeks to promote the active participation of students in university quality assurance policies and processes and thereby helping to establish a participative culture in Egyptian universities.

These aims will be fulfilled via the following key objectives:

- Increase students' understanding of and participation in quality matters and to assist them to acquire:
  - entrance information about accredited learning programmes and registered higher education institutions
  - to disseminate and understand the language of 'quality' and 'quality assurance' so that they can assess the accuracy of data they receive from institutions during recruitment
  - appraise the quality of provision and the value of the learning experience in individual modules, courses, programmes and institutions
  - actively participate as co-constructors in shaping the quality of education inside higher education institutions
  - provide feedback that enables institutions to improve the quality of teaching and learning, research and community engagement
  - improve the relevance, responsiveness, effectiveness and efficiency of higher education in general
  - amplify awareness of the importance of student participation in quality assurance processes among all stakeholders
  - identify and promote Egyptian strategies to involve students and student organizations in quality assurance, both internal as well as external.

**Methodology and design**

1. **Content selection and sequence:** The primary prerequisite of the training was to provide the students with knowledge about the university system and with information on the aims and work associated with quality assessment. It was also thought that students would need self-confidence and assertiveness in oral communication, with the stress put on communication skills (drafting of reports, public speaking, the ability to come to conclusions, etc.). Students also need to be trained in procedural aspects, such as the understanding of assessment protocols, so that upon the completion of the course they are capable of reviewing and improving the procedures.

2. **Teaching methodology:** As the students require training in the techniques of participation in assessment committees, the methodology needs to be tailored towards the practical and participatory. The majority of the activities therefore require the students to actively participate in group activities, which are based on the study of specific cases prepared. This design enables continuous feedback to
be obtained on the different activities. The simulation of real situations (committee meetings, oral presentation of reports, etc.) is highly useful for helping the students to acquire greater confidence.

3. A study visit and collaborate efforts with experienced bodies like professional peer reviewers.

4. Conclusions would be analysed and documented in book as well e-format.

5. The up-and-coming quality assurance systems would be provided with necessary inputs so that they may have strong student involvement in the quality assurance process right from the inception.

6. Backing procedures would be taken up with government agencies for better focus on student involvement in quality assurance.

Project outcomes
1. Disseminate the quality assurance culture among the students and staff members.
2. The students connected to the partner category as well as stakeholder in the quality assurance process.
3. The students gain more transferable skills as communication skills, decision making, time management, report writing and working in a group.
4. Students learn and apply a degree of democracy when dealing with the staff either internally or externally during the quality assurance process.

Acknowledgement
I would like to express warm thanks to Institute of Socio-Cultural Studies (ISOS) of Kassel University, special appreciation and gratitude to the German Academic Exchange Service (DAAD), the responses of the UNISTAFF Network Conference for their generous invitation to participate in this conference and presenting this manuscript. Grateful thanks to all ISOS staff members for their previous efforts during the programme of the university staff development since 1998 and their continuous cooperation and support.
References


NETWORKING: CREATING SYNERGIES IN PROCESSES OF TRANSFORMATION
Human empowerment through academic networks. The case of GUCAL XXI in Central America

Alicia E. Vargas-Porras

There is a confluence of interests expressed by several international and regional organizations to privilege networks as a way of improving the development of higher education. Networks and universities are dissimilar types of organizations and therefore, their nature is discussed in this paper as a framework for understanding the possibilities of empowering academic people through networking.

People’s improvement is presented through the case of the academic network University Group for Quality (GUCAL XXI) as an important experience that has linked alumni of various DAAD programs in six countries in Central America, and helped enhance people’s potential in more than 40 universities in the region. The voices of different weavers of the network: coaches, people developing projects, national GUCAL coordinators, and newcomers are presented in terms of the benefits they obtain through networking, their contribution to the network and some of their recommendations towards a healthy network.

Keywords: Academic networks, higher education, empowerment, regional development

Networks as a way to face new academic challenges

There is an increasing awareness about the importance of creating and developing networks, which is of particular relevance in the academic world. As it was stated by UNESCO in the study “Towards Knowledge Societies” (2005) the expansion and diversification of knowledge as well as the global interaction of academic activities are transforming higher education and its organization, where new crosscutting disciplinary communities, organized in the form of networks, are proliferating. UNESCO’s study states that the emergence of university networks does not prefigure the eclipse of universities and academic institutions, since there is always a need for fixed geographical locations for the networks and their activities. “However, the expansion and diversification of jobs, of knowledge and of the disciplines underlying them, mean that hierarchical structures must be supplemented by decentralized structures organized along network links” (2005:93).

In a world where knowledge, science and technology play a key role for societal development, the institutions of higher education are considered important assets to face the collective challenges to enhance the generation of wealth, strengthening of cultural identities, social cohesion, actions against poverty and hunger, prevention of climate change, coping with the energy crisis as well as the promotion of a culture of peace, among other important issues. In tune with those expectations, during the last
Regional Conference of IESALC/UNESCO\(^1\) carried out in Cartagena, Colombia in June 2008, a declaration was proclaimed recognizing the importance of networks in strengthening the common history of regional integration and as a way of sharing scientific and cultural potential in the solution of strategic problems which go beyond frontiers and which demand united efforts among universities and States. “Academic networks at the national and regional level are strategic partners in dialogue with governments. At the same time, they are key actors for articulating significant local and regional identities for actively collaborating in overcoming the strong asymmetries that are present in the region and the world…” (IESALC/UNESCO 2008:7)\(^2\).

Academic networks are proven to be relevant means for the positive evolution of universities. They represent an excellent opportunity for the creation, diffusion and development of knowledge enhanced by the technological advantages of interactive electronic communication in the age of information which opens windows for common people to interact with the world, at very low costs and high speed. There is however concern for the digital gap between developed and less developed countries but, in that respect, universities play a crucial role, because they cluster the “educated elite” of developing countries and therefore face the responsibility to spread out knowledge to help improve life conditions in their country, their region and the world.

The nature of networks and universities

Universities are very complex organizations because they deal with intangible goods related to knowledge and symbolic interactions that are part of the educational processes, as well as power relations derived from aspects such as social recognition and economic status among professions, and the interactions between teachers, students, and administrative staff derived from a specific institutional culture. For these reasons, recent theorists on higher education agree that universities are political organizations because of the power relations established among the different university actors. (Baldrige 1999:133-151)

Understanding the university as a “political organization” is important for people’s empowerment because this idea clarifies the need for considering the types of conditions that intervene in the relations established among people such as the degree of agreement or disagreement among interests at the individual, group and institutional levels. Other aspects are related to conflicts and values, feasibility of making changes considering internal and external conditions, the role of pressure groups, the intentions (and fears) of people at the individual and group levels, hierarchical relationships and aspects that enable or obstruct decision making, as well as the established rules and regulations and the way they are utilized by different groups.

Academic networks are open systems\(^3\) and as such, they may disrupt the stable and

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\(^1\) IESALC: UNESCO International Institute for Higher Education in Latin America and the Caribbean.

\(^2\) Free translation by A. Vargas.

\(^3\) The basic theoretical framework on open systems is based on Chiavenato (1992:570-607).
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traditional university life. As open systems, networks have a dynamic interaction with the environment which can be considered as a threat to the static organization of the university, which tends to perpetuate its structure, inertia, “parcels of knowledge”, methods, traditions, and goals. As open systems, networks demand flexibility in order to adjust, respond and react quickly to the changes in the environment and needs, which may cause some disruption in the traditional academic life supported by a rigid organization. To guarantee continuity in the service, an open system is expected to produce results that are needed and accepted by its participants and to do so they must openly exchange information as a feedback to the activity that is being carried out. This openness can sometimes be questioned by internal university groups who could consider the incursion of other actors in the institutional activities as a threat to academic life. Networks establish new forms of dynamic interactions and communications among actors who affect power relations and the rigid structures within universities.

A confluence of interests

Networks offer valuable synergetic effects and therefore they need to be considered as part of the new trend of building up and reshaping academic empowerment and for this reason they must be enhanced. Each participant in a network expects some gains and contributions from the association with others but at the same times adds to the generation of mutual benefits. By doing so, a multiplicative effect develops, where the combination of resources, potentialities and interactions of people produce an effect that is higher than the addition of individual contributions. As a result, a synergetic effect takes place and the outcomes can be highly satisfying for participants and institutions. Empowering people through networks improves professional performance as well as working outcomes, which, in the end, benefits the organization as a whole.

For about ten years, people from Central American universities have taken part in several capacity building programs supported by German agencies of academic cooperation such as DAAD and GTZ. The main concern of those programs has been to improve quality and change in higher education. With the support of German universities (mainly the University of Kassel and the University of Leipzig), three programs have developed in the region: The Latin America University Staff Development Program (UNISTAFF), the International Program towards Quality Management and Change in Higher Education (UniCambio XXI), and the Training Course on Innovative Self Evaluation Methods (CAMINA).

From these three training programs, there has been an enriching pool of knowledge, values and experiences shared by people who work at universities with the certainty that improvement and changes are possible. By the end of 2007, UniCambio XXI and CAMINA came to an end, and there was a confluence of interest among people from DAAD as well as the German and Central American Universities to continue building up on experiences derived from the previously mentioned programs, by establishing a Latin American academic network.

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The birth of GUCAL XXI

The academic network GUCAL XXI (Latin American University Group towards Quality) was created in November 2005, during a meeting in Costa Rica carried out by a small group of alumni from previously mentioned programs and with the support of German partners interested in joining efforts to strengthen the universities exchanges and experiences. This steering group came from six Central American countries (Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica and Panama) and from Peru. At this initial meeting, some general bylaws were agreed upon and a directive board (president, vice president, treasurer and secretary) were appointed. During the years 2006 and 2007, national network chapters were developed in Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica and Panama and, in 2008, the initiative for a new chapter in Mexico took place.

GUCAL XXI was established as a network with neither lucrative purposes nor political orientation. It is integrated by the voluntary affiliation mainly of alumni who had participated in the three training programs supported by DAAD, GTZ and the German Universities of Kassel and Leipzig, as well as other people who are interested in the area of quality management and change in higher education.

The mission of GUCAL XXI is to offer a space for the exchange, collaboration and professional and personal development of its members, in order to implement concrete actions towards the improvement of quality in higher education, both in the public and private sectors.

The potentialities of the network, as an important agent for change in the region, were recognized by the Central American University Superior Council (CSUCA). During the Regional Meeting in Leon, Nicaragua on April 2007, all the Rectors from member universities (more than 40 Central American institutions of higher education) agreed to: “Recognize and support the creation and development of the network GUCAL XXI and the activities that it may organize for the benefit and support of the processes of evaluation, management and accreditation of quality that are of interest to the CSUCA university members”. The relationship between the network and CSUCA has been always of mutual support and empathy.

Knitting the net with different threads

Flexibility and a coordinated independence among the network’s national chapters have been important aspects in the organization of GUCAL XXI. At the beginning, the network was created through a Constituency Act and a defined set of by-laws. It also had a directive body made up of persons from different countries who were meant to orient and take decisions at the regional level. However, with the creation of network chapters in each country, these groups became the most important nucleus

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4 In 1948 a Central American confederation of universities was created. It later on became the Central American University Superior Council (CSUCA), comprising all public universities of the region. For more than 30 decades, as a powerful link between universities, governmental institutions and all kinds of organizations related to higher education inside and outside the Central American region, it has had a strong influence in the improvement of higher education.
for developing activities at the national level and for coordinating efforts at the regional level. Therefore, a new “structure” was developed.

As of now, each national chapter has its own set of guidelines, which are of course in tune with the goals of the regional network. At the same time each chapter is organized the way they prefer (people may work through committees with different but “harmonic” purposes, or they may have a more traditional coordinating board), but there is always a person responsible for harmonizing and coordinating the efforts in each country. There is also a regional coordinating board which rotates every two years between the countries participating in the network. The general coordinator, the secretary and the treasurer are all from the same rotating country. Also, the original by-laws have yielded to more general guidelines that orient the members in the activities in a more flexible way.

Each national chapter can organize activities with other chapters but there are also activities for the region which are harmonized by the regional coordinating body.

The following figure shows the conformation of GUCAL XXI and its relation with national GUCAL chapters.

After the establishment of GUCAL XXI some actions were performed by a few national GUCAL networks. However, there was the need to establish an integrated effort that would bond the networks in the region, give a common meaning and purpose to the members of the different groups and continue with the effort of building up unity and quality in Central America. With the help and valuable support of the people of the Institute for Socio-Cultural Studies at Kassel University, a project was structured and presented to the DAAD for funding within the framework of the support given by the German cooperation, which aims to strengthen alumni networks, developing many activities with amazing results.
Putting theory into practice through “DECARA”

The Project for the Development of Capacity Building of Academic Networks (DECARA for its title in Spanish “Proyecto para el Desarrollo de Capacidad de Redes Académicas”) was approved for funding by DAAD in May 2007, within the framework of support that the German cooperation has for its alumni networks, as it is the case with GUCAL XXI. The project aims to strengthen the national GUCAL networks located in Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica and Panama and to help build up regional unity and mutual understanding among Central American universities. It seeks to improve knowledge in the area of quality management and change in higher education and to empower people who work at universities and who are participating in the project.

Empowerment is based on three important characteristics derived from the previous training programs that GUCAL members had gone through: UNISTAFF, CAMINA and UniCambio XXI. These characteristics are:

- A horizontal relationship among colleagues.
- The belief that a person can help improve quality at his or her place of work, starting at the individual and group level, through the design and implementation of a specific project that would fulfill a particular institutional need.
- The “coaching” methodology lived especially through the UniCambio XXI experience, as a way to “walk” together with the people who design and implement a specific project.

DECARA’s first activity was a three day Regional Meeting held in Costa Rica in July 2007, with the involvement of GUCAL members from the six participant Central American countries. One of the participants was the coordinator of the national network’s chapter and the rest were people who would be in charge of accompanying the new projects to be developed in a given country, under DECARA. Gathering people for a Regional Meeting enabled to trigger future actions since it helped to clarify the purpose of DECARA, it allowed for a discussion about the best ways of implementing it and it also permitted an initial training activity in the coaching methodology in order for GUCAL people to be able to approach the development of future projects carried out in their own countries. Also important was the support of three advisers from Kassel University who gave an important theoretical framework to the activity through different conferences open to a general public and who supported this initial step forward of DECARA.

Once the First Regional Meeting finished, the people went back to their own countries and started actions for spreading out the aims of GUCAL and the possibilities offered by DECARA. With that purpose, national university authorities
(Deans, Rectors or Vice Rectors of Academic Affairs) were visited and invited to present one or more projects that would enhance quality and change at their own institution and to assign the people who would carry out those projects. The cooperation was requested also in terms of time allocation for people doing projects and the allowance of resources needed for planning and implementing a given project. As far as GUCAL was concerned, there was the compromise of assigning people to accompany the projects using the coaching methodology.

As a result of this negotiation, a total of 66 projects were started at 33 different Central American universities, with the participation of 104 people and the involvement of 25 GUCAL coaches. Besides, there was the support of five regional coaches who had been previously trained through the program UniCambio XXI (Vargas, 2008).

Once the projects were defined by the participating universities, planning started at a workshop organized by the national GUCAL chapter. At that event, there were also two or more external specialists who came from countries within or outside the region in order to present lectures open to public (and of value to the aims of the workshop) on topics related to project management, quality in higher education and networking. Afterwards, there were different follow up actions, carried out by GUCAL members in order to coach the development of the projects and, in the middle of 2008 another set of workshops was carried out by each national GUCAL chapter to present preliminary results.

The Second Regional Meeting took place in Copan, Honduras, in November 2008 with the purpose of evaluating the development of the projects under DECARA, planning future activities for the last year of DECARA and establishing some actions for the future of GUCAL as a regional network. Some sessions on coaching were offered by two professors from Kassel University and by another specialist from a coaching institute; this training proved to be very valuable for strengthening the capacities of GUCAL members and of people developing the projects.

The Second Regional Meeting was an outstanding experience, bringing together a very cohesive group of people who showed empathy, enthusiasm, interest in growing together and a desire for the improvement of their institutions in a spirit of helpfulness and solidarity. It gathered different types of actors who are actually weaving the net:

- **The coaches**, who are dealing with the difficult task of walking together with the people in charge of doing the projects.
- **The “projectists”** (in Spanish “proyectistas”), who are people developing projects in their own institution.
- **The national coordinators**, in charge of harmonizing the actions to be taken by GUCAL members in each Central American country.
- **The supporters**, who came from Kassel University and other organizations to improve knowledge about networking, quality management and coaching.
- **The newcomers**, people from Mexico and Peru, who came to the Regional
Meeting with the intention of establishing new GUCAL chapters in their own countries and, by doing so, expand the net.

- **The helpers**, who supported the general activities of the Regional Meeting.

Through two instruments (a workshop and a questionnaire) given to participants at the Regional Meeting, it was possible to gather new information regarding the way all those different weavers see and feel about the network.

**Voices from the weavers**

The coaches, the “projectists”, the coordinators and the newcomers all expressed a very favorable opinion about the net. They confirmed that their linkage with the network had helped them grow at the personal level and had also had an impact as a group and at their institution. They expressed specific gains, some concerns and a common desire to continue enriching the network and its activities, as it is stated as follows.

**Benefits obtained through networking**

At the personal level, the network’s participants indicated that, through the different activities organized by the national and regional networks, they have been able to gain new knowledge, be trained (especially in the case of the coaches), widen their professional profile and to face new challenges and opportunities. In the case of the “projectists”, a special mention was made more precisely of their personal growth regarding knowledge and learning special techniques for developing their own projects. Also, the possibility to share their practice, skills and knowledge with other people at their university was considered very important.

In a collective way, the different actors gave special importance to the benefits of sharing knowledge and experience. Specially mentioned were the value of knowing about the concerns, accomplishments and constraints that other “projectists” had faced and the strength of working in a collaborative way with coaches.

At the institutional level, the activities with the network have enabled participants to strengthen ties among universities and other networks as well as to narrow the gap between institutions at the regional level. Improvement in the academic and professional fields by exchanging knowledge was also mentioned as a benefit derived from the activities with the network.
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The interest to continue their linkage with GUCAL XXI was mentioned by all participants. Among the reasons given for that assertive reaction was the consideration of the network as:

- An important niche for the projection of universities and for the enrichment of people.
- A group of people of great academic potential who are working towards a common culture that would enhance Central American universities.
- A way to open up spaces for collaboration, team working, and personal and professional growth.
- A mean of innovation for universities and to help in the transformation of societies.
- A great potential for institutional growth and for exchanging experiences among universities.

A special mention was made of GUCAL XXI as a regional network. In that respect, the network was considered a valuable space for the Central American unity because of its multicultural nature and its flexibility which allows to work beyond the political frontiers. An important aspect that was consistently mentioned was the contribution of GUCAL to bring together public and private universities through mutual improvement and team working.

Contributions from the weavers

The different actors not only mentioned the benefits of being linked to the network. They also expressed the value of their own contribution for enhancing the network. Individual experience and specific knowledge in particular fields were commonly mentioned as valuable assets that participants may offer to the network. People also mentioned their individual support for collective actions in terms of their willingness to donate time and work in order to contribute to the personal growth of each other and to enrich the goals of the network. The aspects previously mentioned show evidence of the synergic and dynamic effect that the network has.

Towards a healthy network

In the experience of starting GUCAL XXI and working within it, there have been constraints that should be taken into consideration for improvement, some of which were pointed out by the different groups of participants previously mentioned. Networks are open systems whose flexibility and loose organization does not necessarily go in tune with the rigid structures of the university and, for that reason, as wisely mentioned constantly by the participants, informing and involving decision makers must be a main concern for the network. Small reports, occasional meetings with authorities and consistent activities for feeding back and stirring up awareness regarding the contributions of the network were mentioned as important for the healthy growth of GUCAL.

Another related aspect for a healthy network is communication. GUCAL must use all possible mechanisms to spread out discussions and take decisions on how to reach
common goals, but also on how to share expectations, possibilities, face problems and seek solutions. In that respect, the participants mentioned that information should be widely spread to participants, institutions and countries. Special attention was called to the use of non traditional communication tools such as a platform, virtual sessions and an agile and actualized web page.

Although GUCAL XXI has its own webpage (www.redgucal.org) where documents, reports, memoirs and other information are placed, there was a call for its improvement. The importance of the network’s electronic bulletin was recognized among participants as a valuable way of informing members and stakeholders about the activities performed by the national networks, as well as future events and other relevant information.

Other than that, there are human aspects essential for a healthy growth of a network which has to do with team building and caring for internal and external relationship. As stated by Egger “The relationships among members are the arteries constituting the network, and they should be cared for attentively” (2006:81). Relationships among members of GUCAL are horizontal and there is a sense of belonging in the network’s members which is probably due to a common culture that was promoted by taking part in similar training activities and by sharing mutual interests. Members indicated they feel united by common commitment, confidence, optimism and friendship which are enhanced and nurtured by the opportunities they have of working together. This situation, no doubt, generates a synergic effect among GUCAL as a group and must be always improved.

One final aspect for a healthy network is the central issue of monitoring and mutual support. Accountability, screening and reporting the results that have been achieved in the network are part of the transparency that it must have. The activities carried out throughout DECARA are documented and, for that reason, a memory of each Regional Meeting and each National Workshop has been prepared and placed in the website. Special concern is given to financial reports for each activity, which have specific guidelines for its preparation.

**Summing up on empowerment**

GUCAL XXI is an academic network that has helped improve potentialities at the individual, institutional, national and regional levels.

At the individual level, the network has trained people who are learning by doing and applying new knowledge through their own projects. Also, people are benefiting from coaching, an active methodology that has enhanced the abilities of GUCAL members and “projectists”. Interaction, teamwork and learning from each other are values that have been reinforced through the activities carried out through the network.

At the institutional level, there are projects being carried out through DECARA that are impacting institutions of higher education. Around 60 projects are being developed in more than 30 Central American universities, each one fulfilling specific needs as requested by each institution, with regard to its own search for quality management and improvement. Also, the people being trained are now better
prepared to cope with their work at the university, which then benefits the organization.

At the national level, in a two year period of DECARA (2007-2008) there have been 12 workshops, two in each country, that have integrated people both from the network and others who share interests regarding university improvement. Also, a set of 6 more workshops is planned for 2009. Universities have found a valuable space to work together through the activities of their national GUCAL network and they have benefited from specialists who have come from inside and outside the Central American region, to discuss about improvement of quality, leadership, management and change in higher education. GUCAL is visible now in each Central American country, and is positioning itself as a serious academic network.

At the regional level, the two Regional Meetings carried out in 2007 and 2008 under DECARA have helped enhance mutual understanding and support among countries and have strengthen an understanding of common responsibilities in the region, because working together through a regional project demands a set of coordinating actions where individual responses are important for the integral development of the network. In other words, if one GUCAL Network does not present a report or does not carry out a workshop, the aims of DECARA as a regional project will not be fulfilled and its development will be hindered.

GUCAL XXI is gaining regional support and recognition as an important group that works towards improving higher education in Central America. In that respect, coaches from the network are also accompanying regional efforts under PUEDES, the Program on Linkages between Universities and the Private Sector for Sustainable Development, carried out by CSUCA with the support of GTZ.

The academic network GUCAL XXI is now looking forward to increasing activities in Mexico and also to developing actions with other similar academic networks because the door for expansion and for meeting new challenges is open. Networking is proving to be an effective way for empowering people who, by their individual and collective actions, can make a difference in the improvement of their institution, country and region. In regards to DECARA, a second period is being proposed or, at least, an establishment of new similar projects is being considered because an experience that has been so successful deserves to be continued and enhanced.
References


UNISTAFF: Milestone for establishing and expanding the networks

Wahyu Supartono

Abstract

“The World is Flat” was a realization that all people around the world could be connected, collaborated and synergized. They were facilitated by the webs to collaborate for the purposes of innovation, production, education, research and everything. Networking is the most important thing in the future. UNISTAFF was one example of various brilliant ideas for preparing university people in Asia, Africa and South America to face and to play an important role in the flattened world. Content and method of delivery strengthened and gave deep insight for building better foundations and for preparing them to serve as an agent of change. Some networks have been established by the alumni. All network members receive more benefits, when they are active and have sense of belonging to the networks. Trust in others is a key point in the network and in the future they will become a huge family in the world, which was planned and born in Witzenhausen.

Keywords: UNISTAFF, milestone, flattened world, network, trust

Introduction

As Thomas Friedman wrote “The World is Flat” in 2005, it was already realized that all people around the world could be connected, collaborated and synergized. They were facilitated by the development of webs, which supported individuals, groups, companies and even universities to collaborate for purposes of innovation, production, education, research and so forth. The most important thing in the future is networking.

In this century at the globalization phase, challenges to survive and to grow are becoming stronger and sometimes should be faced not only by individuals but also within groups. The people around the world without boundaries of distance and time are working together to fulfill their needs for life. Realizing that they cannot fulfill their needs by their own resources, power and intelligence and spirit of togetherness are significantly increasing.

Actually the globalization was already dreamed of and realized in ancient periods, but at that times the people tried to defeat, to govern and to colonialize other countries which were rich in natural resources or labors. At moment trade, business and production system are the way to accelerate the world in flattened form. After the invention of modern technologies, especially in information technology and transportation, the exchange of information, human resources and knowledge are growing rapidly. So the challenge for preparing human resources in all regions in the world is very crucial and a role of higher education for educating people and for developing science and technology cannot be neglected. Based on the condition in the
flattened world, a similar form of networking should be conducted among the higher education institutions.

University Staff Development Program (UNISTAFF) which was initiated and conducted by the Institute for Socio-cultural Studies, University of Kassel since 1994, was one example of various brilliant ideas for preparing university people in Asia, Africa and South America to face and to play an important role in the flattened world in productive ways. The 10-week course in Witzenhausen city gave all participants an idea of how university management should be conducted due to the needs of the global environment, how people communicate with each other to gain mutual benefits, and how the people cope with the problems and sometimes to see problems or resistances as “capital” for developing the institution, etc.

For more than 10 years UNISTAFF has been conducted and its alumni all over world play important roles within their own universities in the field of university management, teaching-learning process, research management and social activities. They are still connected with the UNISTAFF spirit which is built and planted during and after the course. They are looking after it in their own way based on regions and countries, but they have the same vision and mission to educate human resources with brain and heart for facing the global changes in a proper way.

This paper aims to explain my personal experiences of how UNISTAFF course has changed my mind and brought me into the global networking.

UNISTAFF and building network

UNISTAFF was designed in three main course materials: University Leadership, Teaching and Learning Process and Research Management, to strengthen and give deeper insight to participants to build a better foundation in their university, before they started to serve as “an agent of change” in terms of how to bring their universities to the networking world.

Contents and methods of delivery during the course opened my mind, on how important the management in the university was and how to handle clever people to take roles. It took more than 5 weeks for me to realize how high the values in the course were, especially how the participants communicate and discuss with other participants from other continents within a limited time and to achieve certain results which had to be presented in the class. The teamwork among group members was excellent and without notice they gave trust each other based on their competency to finish assignments. Trust is the highest value for network building.

Furthermore the UNISTAFF alumni have a special kind of insight such as vision and mission sharing in developing human resources at higher education institutions, a systemic approach usage at implementing UNISTAFF value, and usage on practical and competencies. This is a specially valuable capital for the alumni to build a network.

In addition, they are not only satisfied with their UNISTAFF experiences, but also they are willing to expand their own competence and scientific interest based networks. They conduct workshops and other scientific meeting dealing with their
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interest such as agriculture, chemistry, medical sciences, education and physiology. Democritus, quoted in Fremerey (2008), wrote “A fool can learn from his own experiences; the wise learn from the experience of others”. This sentence inspired the alumni to expand their horizons by building the networks from which they could learn from each other. The characteristics of formal networks are as follows (Fremerey, 2008):

- interrelated groups of independent institutions
- sharing common vision, objectives and rules, carrying out a set of common activities
- not only based on needs of members, but also fostering change in the entire system
- giving and receiving in an atmosphere of openness and trust.

My experience was that after the UNISTAFF course, I had an opportunity to join South East Asian German Alumni Networking (SEAG) in 2002, which was concerned with green technology and higher education system. This field of green technology, specializing in agriculture, was in accord with my interest on post harvest technology and quality of agricultural products. Through the both networks I could share not only research results from my discipline but also the themes on the university management, lectures based on student centered learning and research management. We could share experiences and establish new sub-networks for conducting researches or academic staff exchanges.

SEAG was supported by the people who had interests in agriculture (e.g. agriculture, animal husbandry, food science and technology, forestry, etc). This network was organized by Marburg University, Goettingen University and Kassel University, and the members came from South East Asian countries (Indonesia, Thailand, Philippines, Vietnam, Laos, etc.). The scientific forums were conducted annually in a selected country, but in Indonesia the SEAG members had also a national scientific meeting based on special topics and promoted or suggested by the members. Sometime a group of members in a certain university needed and invited an expert from other university who was SEAG member too. The members might propose the researches and apply for national or international funding sources. If qualified, they did the research, which was then discussed in the proposed scientific meeting.

This network had a co-coordinator in each country, who had a responsibility to report to the coordinator in Germany. In Indonesia the co-coordinator was supported by all members especially when a special event will be planned and conducted. The network has already produced some proceedings based on the scientific events and it has a mailing-list, which serves as communication tool among the members. It has a conducive and familiar atmosphere, openness and trust, which are important. This network helped us to expand our capability and ability in creating and conducting the projects.

The SEAG network still exists and its members communicate through the mailing-list. The condition for existing the network is just as Liker and Hoseus (2008:291) wrote,
that Toyota Culture is developed also by communication in three ways: a) formal
communication both vertical and horizontal, b) human resources activities that are
designed to keep the communication channels open and effective, and c) informal
activities that are designed to facilitate and improve communication.

UNISTAFF alumni in Indonesia built INDOSTAFF network, within which all alumni
serve as members and have a similar position in promoting UNISTAFF values in
Indonesia. Some of the alumni have already succeeded in serving as the agent of
change at least in their own universities. Furthermore they have constructed the
networks in their country and region and tried to spread the good UNISTAFF virus
among other universities. The virus contamination works like a multi-level-marketing
system. Every alumnus functions as a marketer of UNISTAFF vision and mission.
They act as their own examples, based on their experiences in their individual project
work or their functions in the university.

INDOSTAFF has a structure as follows: one country coordinator and seven nodes
represent the region or university which has more than 5 alumni. INDOSTAFF has
already conducted the same course of UNISTAFF even though it only takes one
week. The alumni served as facilitators specified on their competency. An annual
national meeting is planned every year and the communication and distribution of
information are conducted by the INDOSTAFF-mailing-list. The main aim is to plant
and to grow the UNISTAFF values in Indonesian universities. In this network, all
members are free to express their ideas and projects in their own environment and in
some cases they link with each other to construct projects, trainings and to serve as
experts or consultants for the university.

In 2006 there was a special summer school concerning postharvest technology, quality
of foods/agricultural products, conducted in Hannover, Goettingen and Stuttgart-
Hohenheim. This idea was to give more attention to world food problems such as
food safety and food security especially in the postharvest handling. This was also an
embryo of special network dealing with food enhancement or agricultural products
quality, since some rules in the food industry in global market are announced and
implemented in the future. At the beginning of 2008 the network called German
Alumni Food Network (GAFooN) was established and coordinated by Goettingen
University together with two country coordinators, Thailand and Indonesia.

The members of GAFooN come from Asia, Africa and South America. Some
activities have been already conducted such as workshops on post harvest technology
in Chiang Mai, Thailand and Goettingen ‘Alumni Meeting on Food Science and
Technology’. Cooperation with industries has been established for at least by inviting
them to give scientific presentations and the network members visited the industries.
In Germany and Thailand, GAFooN had links connected with some industries for
conducting the projects dealing with enhancement of food quality. In Indonesia some
certain food security and food safety research involves students.
Lesson learnt from the network

Based on the experiences resulted from the network activities, there appear to be some constraints faced during maintaining the activities:

- **Source of funding:** In some cases the network needs funding for daily activities for first and second years. When the network becomes more active, source of funding will be found automatically. The network should be more creative to offer programs which are suitable with the network vision and mission, and the donor as well. It can “sell” the programs to the society or special group of interest at regional, national or even international level.

- **Difficulty in election of a coordinator:** As we know the network is based on the same vision, competencies and established usually in informal or familiar atmosphere, the election of coordinator is difficult because the job and responsibility of coordinator are voluntary. This process depends on the network members, if they are active and have a high sense of belonging, it will ease to execute and all members will respect the coordinator.

- **Sense of belonging to the network:** This sense should emerge from the heart and mind of all members. This sense is a sort of moral authority, which can speed up trust among the members (Covey, 2004:165-166) and will construct a better foundation for the network. Within the network, the process of giving and receiving is raised simultaneously and continuously.

The more people join the network, the more benefits can be gained through it:

- **Learning about each other’s tremendous experiences in a bi-directional way:** This will support an increase in the personal and even institutional competencies and professionalism.

- **Understanding each other within different cultures and habits to achieve a similar vision and mission:** This process will make the network members more open-mind and adaptable to accept the differences, resistances or new “wave” within their environment.

- **Having more friends around the world makes the world smaller:** It is in accord with “having thousand friends is not enough, but having one enemy is too much”. This condition will support the members to expand their networks in the future, since they are not feeling like strangers around the world and are able to start new communication easily.

All members of the networks will receive more benefits when they are more active and give trust to others and in the future they will become a huge family in the flattened world, which was planned and born in the cherry city, Witzenhausen.
This is supported by Fremerey’s opinion (2008) concerning the functions of formal networks as follows:

- providing a powerful mechanism for sharing information and knowledge
- promoting communication and coordination to achieve profound and sustainable changes
- acting as an effective catalyst for building up trustful relationships and commitment
- serving as mutual learning and capacity-building mechanisms
- creating synergetic processes and results
- activating the interface between knowledge and action.

**Conclusion**

Based on the above experiences some points concerning the roles of UNISTAFF and the networks can be pulled out as follows:

- UNISTAFF, one of various brilliant ideas in the world, successfully educates its alumni to actively participate in preparing human resources to face and adapt the flattened world.
- UNISTAFF can stimulate networks provision and the alumni can choose and expand further the established networks by building new networks based on their competencies and professionalism.
- Although some constraints and benefits have appeared during establishment and maintenance of the network, the sense of belonging to the network and trust among the members are still capable of fostering the network activities.

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Gender, technology, and higher education revisited: Research and networking for change

Emilia Nercissians

Abstract

It is sought to investigate how the research agenda developed during the UNISTAFF course of 2004 has fared in theory and especially in practice. The concept of gender is important because it has been exemplary for the broader and more general concepts of power, hegemony, and marginalization. The importance of technology, on the other hand, stems from its leading role in social transformations in contemporary world. Information technology, in particular, has led to the advent of the digital economy and knowledge based society where the production of intangible goods has become the main driver. Universities are also at a crossroads. The philosophies, methods, and institutions of higher education are undergoing major changes. The relationship between the three spheres is very complex and has manifold feedback loops. The goal of the research agenda was not only to study the current state of situation mutual impacts, but also to seek ways and means towards achieving more empowerment, participation, and inclusiveness. The results obtained in Iran as well as in other countries show the possibility to perform transformational leadership. It further shows that networking can be most effective for comparative analysis and fusion of experiences.

Introduction

The concepts of participation, empowerment, and inclusion have come to occupy a focal place in contemporary social thought. The relationships between these objectives are complex and dynamic. It is, for example, not enough to promote inclusion and participation as a policy end, with no empowerment for influencing that policy. Pretences of participation may contribute to further disempowerment. Collective deliberation can be very different from seeking consensus via interest tradeoffs. Real cultural participation allowing for communicative action can lead to the fullest development of sense of belonging, critical faculty, and civil society, while mere attempts to eliminate differences and reach social homogeneity may lead to alienation and conformity. It is sought in this paper to investigate the theoretical and especially practical impacts of the research agenda developed during the UNISTAFF course of 2004 on gender, technology, and higher education (NERCISSIANS, 2004d). The concept of gender had been chosen because it exemplifies otherness and difference in all its practical, cognitive, and affective aspects in a stratified society. It is important because it correlates to the broader and more general concepts of power, hegemony, and marginalization. Technology and higher education, on the other hand, are leading factors bringing about social change in the contemporary world. So as to achieve their vision and goals for development, these facilitators of change processes need to work with the community collectively and reflexively. Higher education in our
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...contemporary knowledge intensive society constitutes the highest formal stage in the processes of socialization and enculturation, where reproduction of power relations takes place, and opportunities for instigating change are created. In addition to the manifest curricular content, the hidden aspect of that curriculum is also of the utmost importance. Internalization of the actual relationships, experiences of participatory and interactive pursuit of educational goals, feelings of belonging and control, appreciation of other points of view, exerts more powerful impact than rational acceptance of norms and values promoting inclusiveness and celebrating diversity. In order for the universities to become agents of social change and spreading new higher values, those values must first prevail in all institutional aspects of that university, so that they are picked up at subconscious and affective levels as well as at the cognitive levels of awareness and volition. Technology, according to McLuhan, is an extension of the human somatic faculties. Technological change eventually leads to alteration of perception patterns. Nothing in the contemporary world has been as disruptive as technological advances. The convergence of biotechnology, nanotechnology with information technology leads the way to consider all materials, proteins, and other building blocks of our life-world as software. With the omnipresence of computer and communication networks through which business can be conducted, we have stepped into the world of the digital economy. The advent of the virtual world made possible by utilization of the power of simulation and representation has changed our conceptualization of meaning, negating its very existence, stability, or at least totality. It is sought to explore the notion of a participative and empowering communication culture as a basis for healthy knowledge societies. The digital media of computer networks, because of their design and the technology upon which they function, are fundamentally different from the current mass media of television, radio, newspapers and magazines. No longer does technology in itself favor further confinement of the production and control of information to the few and the expansion of its consumption to larger masses. Every user in the Internet can be the provider as well as the receiver of information at the same time.

Conceptualizing inclusion in terms of forms of participation, it is important to study not only whether people have access to and are using new technologies, but also how they are using them. There is now a fairly large body of knowledge and empirical evidence both concerning the emancipatory potential of new technologies especially in terms of inclusion, participation, and empowerment; and the threats associated with their advent in the opposite direction of reproducing the existing stratifications and making them more acute, as well as generating new digital divides. Thus there can be no instrumentalist prediction on the possible impact of new technologies. A substantive analysis will reveal the importance of the communication on how new technologies are used for the determination of the direction of their impact. The relationship between the three spheres: gender, technology, and higher education, is very complex and has manifold feedback loops. The goal of the research agenda was not only to study the current state of situation and mutual impacts, but also to seek ways and means of achieving the stated social goals and avoiding the dangers of further alienation, and depletion of communicative action possibilities (LUCAS &
The complex and multifaceted relationships between gender, technology, and higher education, especially in the context of Iran in general, and the University of Tehran in particular, has been the subject of several different reports (LUCAS & NERCISSIANS, 2004, 2006a-c, 2008; NERCISSIANS, 2004a-d, 2005a-c, 2006a-c; NERCISSIANS & FREMEREY, 2008; NERCISSIANS & LUCAS, 2005a-b, 2006a-e, 2007). Today's information, communication, and technology revolution has created educational possibilities never seen before. Higher education must create new ways to meet the challenges faced by today's colleges and universities and the requirements of a student body that does not constitute the elite strata in society, but is composed of the different social groups. Virtual communities furnish new avenues for participation and community building. There is an obvious need for a detailed analysis of the ethnography of the participation of people from excluded groups in those online communities. It should be noted, however, that technologies have in the past never lived up to their potential as educational tools because institutions of higher education try to fit new technologies into the same model. Higher education has also become increasingly less concerned about learning specific skills and knowledge. The diversity that is constantly increasing in universities and colleges of today is a rich yet underutilized resource from which there is much to learn about different ways of being in the world. Students gradually recognize the value of putting themselves, rather than their professors, at the center of their own education. Access, agency, authority, and authenticity are central issues for the new subject of telepistemology: the study of knowledge acquired at a distance. Not only is the student body more diverse but today's students are also learning in more different ways than in the past. The advent of cybertechnology radically empowers the individual; it also creates new tools that make possible the construction of new communities of shared interest. Research for addressing the asymmetric and hierarchical positioning of females must be based on a critical deconstruction of the socially and politically dominant discourses of gender, technology, and education. It has been conjectured that the ideal of rationality and technological thinking is bound up with cultural definitions of masculinity such that femininity is treated as antithetical to such rationality. Girls are, therefore, posited as outsiders in the technological domain. Despite decades of government and industry backed campaigns, the numbers of female students entering technologically oriented studies are far from satisfactory. Iran is a country that can boast of very rich cultural traditions including institutions for higher education from ancient times. For decades now the country has been striving to achieve rapid development to close the gap with the industrially developed countries. However, almost complete dependence upon the extractive petroleum sector and decades of adherence to import substitution strategies have hindered the attainment of that goal and have, instead, left the economy with a non-competitive, inertia laden structure that is unable to adapt itself to the requirements of global scale competition. The
imbalanced economic structure exerts little pressure on Iranian enterprises to leverage new knowledge and technology. Lack of incentives for technological innovation is directly translated into lack of funding for research activities. The population profile in Iran is also very young. The bleak outlook for future development leads them to seeking means for upward vertical mobility via attainment of higher education. The insatiable demand for tertiary education has resulted in a very competitive entrance examination and many Iranians leave the country to study abroad. Few of them return to the country after graduation. Also, many of the graduates of the Iranian universities leave the country to find better jobs. The brain drain, the causes of which according to the studies cannot be solely ascribed to differentials in economic opportunities and lack of suitable opportunities for the graduates of technical disciplines to apply their knowledge towards achieving the developmental goals of the country, has reached very high levels. In recent years, impressive advances in gender relations have taken place in the spheres of higher education and public employment. The number of female students being accepted in the very competitive entrance examinations for the Iranian universities has passed the parity rate so much that there is now a male education crisis in the country and a clear need of reverse affirmative action. The trend is due to the internal dynamism and structural factors rather than conscious policies. How the Universities of Iran can promote the use of information technology, especially by their female students. The university has to find solutions because: It has to adapt to the global scale shifts associated with transition to a new era of information and knowledge based societies; it must adapt to rapid technology changes and learn to use those technologies to transform itself so as to meet the challenges of new demands and new educational philosophies; and it must adapt to a more participatory and gender symmetric environment. Electronic learning, and use of information technology and knowledge management techniques, on the other hand, is important for maintaining the academic excellence and assuring the provision of quality education to its students. They are also important because the graduates must respond to the changing needs and expectations of the business community. It is especially important for the university to resolve the problem of technology utilization by both genders because it has to act as an agent for change in the broader polity. Investigations carried out at the University of Tehran showed that the rate of use of Personal computer were % 21.5 for male students and % 10 for female students. Female students were also more likely to send and receive emails, chat, and use Internet for purchasing and recreation; while male students were more likely to use the Internet mostly to get news or to search for matters of interest. The opening up of Iranian universities to the previously disadvantaged strata has mostly been a lucky consequence of the trends created by the social dynamism and renovation processes. But the inclusion of women and other social groups, so far widely excluded from higher education, has very importance consequences in terms of new functions required from educational institutions. It is no longer considered enough to facilitate acquisition of skills and knowledge by the students. Education must also help them to live together. A two way learning process constitutes the main vision in this research. Female students must overcome all difficulties and learn, alongside the male students, to use technology effectively. The university too must learn from its female students.
to develop new ways of dealing with technology. The latter process can be designated as disengendering of the technology utilization process. A smaller scale investigation, using the same methodology, was subsequently carried out for identifying the rate, purpose, and different usage techniques of the Internet by male and female students in the American University of Armenia (GEVORGYAN, 2008). The purpose was to identify those differences so as to try to enhance users’ Internet experiences. The investigation revealed that the majority of the students of both genders enjoyed using computers and considered cyberspace as an effective means for passive as well as active participation in news groups and accessing enormous amount of electronic materials. Female students were more careful about new things; they wanted to know more before trying. They were not too inclined towards innovation and wanted to do things as they had done before. Male students, on the other hand, considered themselves as more proficient in computers than females. Students in Engineering and Business colleges were more proficient in computers than those of English and Political Science. Students generally used the Internet as means for improving their social status, and their career opportunities, and becoming engaged in social networks. The different results found in the two surveys can be ascribed not only to country differences, but also to the different times the studies were conducted. The improved access to information technologies and reduction of gender differences in students' attitudes toward technology reflects to a large extent the worldwide trend in rapid expansion of the Internet and bridging of the gender technology divide. It should, however, be pointed out that the American University of Armenia cannot be considered as a typical national university, and is widely conceived as a center for dissemination of modern and American business culture and organizational behavior in a country that used to be part of the Soviet Union. Furthermore, Armenia is widely believed among those countries experiencing abrupt transformation, acute unemployment, and widespread male emigration in search of a better income and employment opportunities, where females become more active job seekers and are less prone to social problems.

Conclusion
The barriers between the university and the outside world are collapsing as people make direct contact in a forum which masks their gender, age, and other social differences and presents them as virtual equals. The system of higher education can be seen as a complex system, with intricate interdependencies and diverse factors affecting the interaction of its parts, in ways that are often difficult to predict, and educational theory is starting to use the language of complexity theory as a tool both for understanding how the education system works and for managing change within the system. The paradigm of complex adaptive system has been elaborated to capture the emergent self-organizing properties of networks and informally organized systems. To understand why the simple concept of networking in academia as well as in other organizations can be so powerful, there is a need for a paradigm shift away from traditional learning theories. A learning activity is, in essence, an interaction taking place among learners and other members of what can be designated as a learning
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community. It can be argued that the networking approaches of UNISTAFF are best suited for the contemporary needs of academia in a rapidly changing world. From a system point of view the network can be viewed as an evolving autopoietic system. As scientific capacity continues to grow around the world, and links are made among countries, the flow of knowledge among them also grows. Recent developments in distributed artificial intelligence and the convergence of new technologies from telecommunications, distributed computing, multimedia, and databases now make possible a network of diverse but interconnected educational and learning entities (FREMEREY, 2002; NERCISSIANS, 2007). An anthropological study of new technologies has recently been carried out along the dimensions of status and solidarity (NERCISSIANS, 2008a-b). The process of convergence leading to sociotechnical systems and ambient intelligence is analyzed from the viewpoint of reproduction of social structure and introduction of new divides. Of special interest is the inscription of representations of masculinities and femininities in technological artifacts. Regeneration of masculinity and femininity in smart environments takes place both through ascription of gendered roles to technology users and direct engendering of smart devices themselves. The research agenda itself can hardly be considered as gender neutral. Housework, as one of the most repetitive and time-consuming tasks in the home that seems an ideal candidate for technologically based assistance in intelligent homes and smart environments, has found very rare consideration in that agenda. Context awareness has been argued to be an important factor in endowing smart environments with communicative and cultural competences necessary for the quick adoption of ambient intelligent technologies especially where solidarity oriented ideologies predominate (LUCAS & NERCISSIANS, 2008; NERCISSIANS, 2000, 2003, 2004a-c). A substantive approach on the future of technology in society must be shaped not just by what the technologies can offer, but must also take into account factors influencing popular attitudes and propensities towards utilization of available technologies. Digital divide is not just a question of access to services but also of skills, competences, appropriate content, access to the necessary resources and different modes of using new technologies. Ambient Intelligence refers to a vision of the future knowledge based society where intelligent interfaces enable people and devices to interact with each other and with the environment. It promises to revolutionize the role of Information and Communication Technologies in society and to transform the way we live, work, and relax through provision of timely services. The prevalence of cognitivist attitudes towards intelligence, however, poses a major problem hindering the progress of technologies related to intelligent systems and devices. With the advent of computational intelligence and the associated philosophies of connectionism and situated action, attention has shifted towards more biomotivated, embodied and collectivist views of intelligence. Too much cognitive intelligence and too little communicative and cultural competence, it has been argued, will make the device utilization hard and unpleasant. It is very important in the case of sociotechnical systems to determine who will control their actions and who will benefit from the provision of their services. Networking for change is important not only for responding to the rapid shifts in our surroundings and taking advantage of the
opportunities created by the technology via exchanging our theoretical findings and practical experiences, but also shaping the future path of technological progress and modes of its utilization. On the one hand disadvantaged social strata and groups must learn the new culture associated with new technologies and be trained and empowered to avail themselves of facilities and use smart tools and devices, on the other hand those scripts, norms and values, and modes of technology utilization must themselves become non dominant centric to reflect the new needs and predispositions of a society composed of diverse communities and subcultures in which heterogeneity, far from being a candidate for elimination, is celebrated as an asset supporting vitality and adaptability.

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Engaging an entire academic community towards shared governance: A balancing act among multiple stakeholders and multiple perspectives

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Abstract

Shared governance is arguably the most sustainable approach to university leadership, but it often requires some structure in the decision-making policies and procedures. A modified balanced scorecard approach to strategic decision-making can be used as a tool to provide such a structure. As a test case for shared governance in a university setting, an entire faculty assembly plus student representatives, support personnel, and university administrators were engaged to make use of the balanced scorecard in collectively designing the student development framework for De La Salle Canlubang in the Philippines.

Keywords: Balanced scorecard, shared governance, strategic decisions, multi-perspective decision-making

1. Shared governance in universities

Although governance in the context of universities may refer to very high levels of authority and decision-making such as those exercised by the Board of Regents or Trustees and the highest administration posts such as those of the Rector, President, Chancellor and Vice-Chancellor, governance can also refer to the organizational processes at the lower levels, such as those involving professors, department chairpersons, deans, and other officials of the university. We are concerned with governance of the second type.

The premise is that governance, when shared with junior academic leaders and faculty members of a university, has tremendous positive effects on the over-all organizational culture of a university that would help lead the institution towards quality and relevance and the fulfillment of its Vision-Mission.

A very precise definition of shared governance (or a precise answer to “how much governance is shared?”) would not be possible at this point – and, in a way, by the very essence of shared governance, even its precise definition and scope must be collectively agreed upon by an academic institution that vows to practice it. In any case, there is a so-called shared governance in a university if there is active participation by faculty members and junior academic leaders in all strategic and major operational decisions made in the university.
Shared governance is the most sustainable approach to university leadership. Strategic decisions in the university, especially those concerning academic matters, should be made with major involvement of a faculty senate or even by less formal academic structures such as faculty committees and task forces. It must be emphasized that the involvement of the faculty members and junior academic leaders should not be “ceremonial” in nature, but should allow for a genuine exchange of ideas and actual decision-making.

Barbara Sporn (1999), in a case study of how the University of California at Berkeley (UCB) weathered the severe financial cuts in state appropriations of the early 1990’s, wrote that “a broad and integrated planning initiative has involved many key areas and officials on campus, and through shared governance adaptation could be achieved in a way that overcame the dramatic financial crisis and set the scene for sustainable excellence in the future of UCB”.

Indeed, shared-governance in the university setting is the most sustainable approach to university leadership. Firstly, it allows for an intense exchange of ideas prior to decision-making that would not be otherwise possible if decision-making were mostly carried out solely by top administration. Shared governance also provides an environment for creativity and innovation, therefore providing for avenues for organizational learning and self-improvement. Indeed, how can members of an organization be encouraged to be creative and innovative if their participation in decision-making is not even sought and valued? And because shared governance means that faculty members and junior academic leaders are involved in strategic planning and decision-making, there is a much greater sense of ownership of and commitment to the major programs and projects that the university would embark on. This is especially critical when tough and unpopular decisions must be made.

In addition, shared governance has some benefits that may not be directly related to the quality of decisions being made but have positive organizational repercussions. Firstly, shared governance implicitly allows for a continuous “on the job training” for future university administrators, thus avoiding situations where academic leaders (who are only trained in their respective scientific disciplines) are assigned to administrative posts without the necessary prior management exposure. Secondly, by encouraging participation from the junior academic leaders, institutional memory is distributed among so many more individuals in the university – which eventually serves to improve future decisions. Thirdly, self-governance would insulate the institution from being overly dependent on charismatic, high performing administrators who may be very hard to find. All these benefits brought about by shared-governance would, in the end, contribute to the over-all improvement of the quality and relevance of the university.
2. A modified balanced scorecard: A tool for shared governance in universities

One is tempted to think that it is enough to just use the long term Vision-Mission of the university as sole criterion for making any major decision. This may seem to be the most natural thing to do and indeed appears to be plausible and logical. However, there are programs or projects, even granting that they serve to fulfill the Vision and the Mission of the school, that are not feasible from a financial perspective, or require resources that are not available, or perhaps would disturb in a major way the academic operations of the university.

One is also led to think that all it takes is to appoint members of the community who come from different sectors of the university – from finance, from research centers, from the teaching ranks, from the registrar’s office – which would then ensure that decisions are inherently multi-perspective. This is indeed a good ingredient for any decision-making process to produce healthy and sustainable programs and projects, but the multi-perspective composition of the committee alone does not guarantee a multi-perspective decision. Various issues and concerns and indeed even certain hard constraints may get ignored or may go unnoticed if there is no structured framework or tool that would encourage every decision-maker to be conscious of the many facets of the project, program or policy that is being initiated.

As such, there is a need to develop a decision-making framework and tool that “forces”, by design, a multi-perspective approach to every major decision. With such a tool, administrators may come and go, and decision-making bodies may have varied compositions over time, but the multi-perspective nature of the decision-making framework remains. The goal therefore is to eventually design, together with faculty members and junior academic leaders, a balanced, multi-perspective framework and tool for decision-making. Such a tool ought to lead university decision-makers to adopt policies, programs and projects that not only serve the Vision and Mission of the university, but also take into consideration the well-being of the major stakeholders of the institution (i.e. students, teachers, researchers, support staff), the resources needed to implement the decision, and the internal and external factors affecting academic operations.

Viewed as an input-process-output model, any decision-making framework would first assume (and require) that the decision or project would eventually lead to an outcome that improves the overall quality and relevance of the university and would be perfectly aligned with the Vision-Mission of the university. In other words, the overriding final question boils down to whether the decision is good from the perspective of quality and relevance, and through this, the perspective of the Vision and Mission of the university.
As mentioned earlier, however, this pre-condition is not enough. Especially in the case of private universities where a tight balancing act must be carried out in terms of optimal use of resources on the one hand and the improvement of relevance and quality on the other, various other perspectives must be considered so that in achieving the individual objectives of these different but complementing perspectives, the over-all Vision and Mission of the university is fulfilled.

The first set of perspectives that cannot be ignored in every strategic decision consists of all the stakeholders’ perspectives. In all strategic decisions of a university, the perspectives of two stakeholders are paramount: 1) students; and 2) faculty members. There are other stakeholders, including parents of current and would-be students, current and potential donors, alumni, employers of graduates, and members of the administration and staff. Pushing the input-process-output analysis one step further, we can subsequently identify several other facets of the decision and would be able to understand how these have an impact, either positively or negatively, on the input, the process, or the output of a strategic decision that is to be implemented. We can discern that at least 3 other perspectives must be considered.

The first of these other perspectives are the resources – including financial, human, time, and physical resources. These resources impinge primarily on the input – positively when there are adequate or excess resources that the current decision or project may utilize; or negatively when there are inadequate resources. The resources are also affected positively or negatively as output, e.g. increased revenues, worn out sports equipment, depleted laboratory supplies.

The second non-stakeholder perspective is the academic operations (e.g. administrative, instructional, research, regulatory processes), which creates either positive conditions or negative constraints for the process (in this case, the process is the execution or implementation of the decision or project). These conditions and constraints are collectively referred to as “influencing factors”. This academic operations perspective, although typically related mostly to the process, is also affected as output or outcomes (via the stakeholders), such as improved service to students and streamlined research publication process.

The final non-stakeholder perspective is “quality improvement” (also referred to as organizational learning). This is the perspective of the various processes and means by which the institution is able to learn and maintain its competitive advantage. In the case of universities, this is the perspective that focuses mainly on preserving or upgrading relevance and quality, such as for example, faculty development, increase in research productivity, and application and extension of research to solve societal problems. It is sometimes useful to think of this perspective as “opportunities for quality and relevance”.

There is a popular technique, mainly used for performance management and strategy mapping, that has multiple perspectives right at the core of its methodology. This is the Balanced Scorecard method developed by Robert S. Kaplan and David P. Norton (2001), which first appeared in the Harvard Business Review in 1992, and has
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subsequently been revised and clarified. The method has been considered in 1997 by the Harvard Business Review as one of the most significant business developments of the past 75 years. The method is widely used among the Fortune 500 companies and has also found applications in the service and the NGO sectors.

In a nutshell, the balanced scorecard method considers 4 major perspectives and for each of these perspectives, four major components are identified, namely 1) goals/objectives, 2) targets, 3) metrics, and 4) the activities/projects supporting the perspective. Collectively, once all the individual objectives are met by implementing the identified activities and projects for each of the four perspectives, a balanced strategy is achieved that fully supports the pursuit of the Vision and Mission of the company.

The Balanced Scorecard method, being a Business Strategy tool, is tightly coupled with the Vision-Mission of the company or institution. To achieve the Vision-Mission and other strategic goals of the institution, the company must meet specific objectives with respect to four major perspectives, namely 1) stakeholder or customer; 2) finance; 3) operations or internal processes; and 4) organizational learning and growth. These four perspectives, having been explicitly linked to the over-all Vision-Mission of the institution, provide for a balanced framework in driving the execution and implementation of the various programs and projects that have been decided upon as part of the business strategy effort.

The Balanced Scorecard method is also a performance management tool (which is why it makes use of scorecards) that places a lot of importance on the specific and measurable goals and the specific targets for each of these goals. The method calls for goals, targets and metrics to be identified for each of the four perspectives above. Once the goals and targets are in place, the monitoring and evaluation of each of the projects would be facilitated and the individual contributions of the various company projects towards the fulfilment of the Vision-Mission (via the four perspectives) would then be very clear.

Kaplan and Norton explain the emphasis on “balance” as: “the Balanced Scorecard should translate a business unit’s mission and strategy into tangible objectives and measures. The measures represent a balance between external measures for shareholders and customers, and internal measures of critical processes, innovation, and learning and growth. The measures are balanced between outcome measures – the results of past efforts – and the measures that drive future performance. And the scorecard is balanced between objective, easily quantified outcome measures and subjective, somewhat judgmental, performance”.

Adapting the Balanced Scorecard method to support decision-making in academic institutions involves two forms of adaptation. The first adaptation is in terms of the choice of perspectives, since academic institutions may not have the same kinds of major perspectives as regular business entities which typically talk of customers and the “bottom-line”. In fact, whenever the balanced score method is adapted to a sector, for example the NGO or the service sectors, the perspectives are the first to change.

The second form of adaptation is in terms of the use of the balanced scorecard itself.

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The method, as proposed by Kaplan and Norton, is mainly a tool that supports business strategy and the methodical execution (i.e. performance management) of the strategic plans that result from the strategy mapping. In this application of the method, we are seeking to adapt the Balanced Scorecard method to support individual decision-making by a group of stakeholders as part of shared governance, with an assumption that some kind of strategy mapping had previously been done.

The adapted Balanced Scorecard method for decision-making would rely heavily on the multi-perspective approach of the Balanced Scorecard method, and would likewise structure the decision-making process in such a way that success indicators and targets are clearly identified and that these are identified for each of the major perspectives that have been laid out.

3. Shared governance in the specific context of De La Salle Canlubang

The De La Salle Canlubang campus first opened in June 2003. The 50-hectare campus is located 45 kilometers south of Manila - in the middle of what is dubbed as the “high-technology corridor” of the Philippines (cf. www.canlubang.dlsu.edu.ph). De La Salle Canlubang is a member of a major international network of Catholic schools known formally as the Institute of the Brothers of the Christian Schools (cf. http://www.lasalle.org). This network has its headquarters in Rome, while the schools of the network are located in all the continents of the world, in about 80 countries, with over 900,000 students, and working with about 73,000 lay colleagues.

The Philippine District is among the largest of all La Salle districts in the world. There are currently 17 De La Salle schools in the Philippines that constitute De La Salle Philippines. The oldest La Salle school in the Philippines is De La Salle University, in Manila, which was established in 1911.

As in all La Salle schools in the Philippines, funding for the operations budget comes solely from fees collected from the students. There is no state subsidy whatsoever - not for salaries, not for laboratory equipment, not for buildings, not for research. Because of the tight financial situation, operations must be conducted in a very business-like manner.

To a large extent, each school is autonomous in its internal operations. Each has its own Board of Trustees and is separately incorporated. However, the long term mission of each school is determined by the Lasallian Mission Council of De La Salle Philippines. In addition, certain other facets of each school's operation are also centralized for purposes of synergy and “strength in number”. Just the same, the leadership style and governance structure within each La Salle campus vary significantly from one school to another.

With regard to shared governance, De La Salle Canlubang has had in-roads into shared governance right from the very beginning of its operations. Before opening of classes in June 2003, it had been decided at the level of the Board of Trustees that the University was to adopt certain practices of smaller universities in the provinces, including the wearing of school uniforms even at the tertiary level. But since there was an expressed negative reaction from the college students regarding the wearing of school uniforms, a formal survey was conducted. Following the very clear preference
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of the incoming students, it was then decided, and approved by the Board, that the college students would not be wearing school uniforms after all. Instead, a dress code was adopted and is still in force.

The development and adoption of the student handbook was another case of shared governance. Based on the existing student handbook of De La Salle University in Manila, the student handbook was revised and adapted to the needs of De La Salle Canlubang by a group of junior faculty members and members of the student council. As for the Faculty Manual, the core of the manual was based on the existing manual of De La Salle University. However, major revisions were made and radically new ways of assigning faculty teaching loads were designed. All these changes were discussed and negotiated with all the faculty members, and several other changes and refinements were made over four years before the faculty manual was finalized and sent to the University President for endorsement to the Board.

Another important occasion of shared governance is the annual review of tuition and fees and proposals for tuition fee increases for the following school year. Although the Philippine government does not require consultations with students when the rate of increase in tuition fees does not exceed a pre-set bar, De La Salle Canlubang decided to follow the tradition of De La Salle University to conduct multi-sectoral consultations every year prior to making decisions about tuition fee increases. Students, their parents, faculty members and members of the support staff are consulted. Decisions have always been based on a consensus, with no decision being adopted unless all sectors agree.

Yet another instance of shared governance is the bottom-up process that was adopted in coming up with the Vision-Mission statement. The process took more than a year and involved representatives from the entire academic community. Finally, all major process concerning faculty members such as faculty hiring, promotion/reclassification, and permanency (granting of tenure) are done by faculty boards composed of the Dean, department Chair (School Director), a faculty member in the same department, and a faculty member from outside the department.

4. Developing a student development framework: a convergence of perspectives

In June 2007, De La Salle Canlubang sought to contextualize the Lasallian values and tradition that date back to the 17th century in France. It set out to draft a student development framework that was apt and responsive to the prevalent culture and current needs of the students of the school, given that the school has a quite unique mission (i.e. to provide human and Christian education with a slant towards science and technology) and that the school is very new and may have a unique organizational and academic culture.

As to how to go about drafting a “home-grown” student development framework, the emerging culture of shared governance in the school, with a lot of bottom-up processes, dictated that there would be ample contribution from stakeholders. It would have been fairly easy to draft a student development handbook, based on existing manuals and handbooks of other universities. But a top-down approach
might completely miss out the perspective of students and junior academic leaders. Also, certain facets of student development might be left out, not to mention missing out on a sense of ownership, institutional memory, and all the other benefits of shared governance enumerated earlier.

And so a small group of faculty members initially gathered relevant materials. The framework was then the subject of a two-day live-in workshop, held last August 27-28, 2007 at the La Salle Villa in Tagaytay City, attended by all 31 full-time college faculty members, top university administrators, members of the support staff, and some student representatives.

The community employed the adapted “balanced scorecard” approach discussed above that forced the convergence of different perspectives, namely the perspective of stakeholders, finance and other resources, academic operations of the school, and opportunities for improvement of quality & relevance.

After many refinements, the resulting student development framework was agreed upon (cf. Figure 1), composed of 5 avenues of student transformation symbolized by a stick figure of a young student, namely: academics (head), culture and formation (heart), social involvement (left hand), student research (right hand), and student support services (legs).

Given that the entire full-time faculty workforce, support staff, administrators and students were called to actively participate in the drafting of the Student Development Framework, many of the items were hotly discussed, as they involved issues and concerns that generated tensions resulting from different perspectives. These were eventually resolved, and the exercise proved useful in engaging a community that saw the long term project from multiple perspectives and were therefore invited to collectively agree on a fairly balanced view of the issues and the various options available.

Figure 1. The five avenues for student transformation in the Student Development Framework of De La Salle Canlubang
Academics, through the formal curriculum, refers to the analytical, problem solving, knowledge integration, and communication skills of the students. The main focus of academics is the cognitive aspect of student development, although it is obvious that even inside the classroom and the laboratories, various soft-skills such as interpersonal skills, leadership skills, listening skills, and many others are honed.

Social involvement refers to a semi-structured process that all DLSC students are made to undergo. Right at the freshman year, they go through one term of the national service training program (NSTP). This is a structured program where the teachings of St. La Salle are taught alongside actual exposure to social realities, e.g. poverty and destruction of the environment. The subsequent term of the NSTP allows students to work in a group towards actual implementation of miniature projects that are either socially relevant towards the plight of the poor or relevant in terms of harnessing knowledge and technology in addressing environmental issues.

The other component of social involvement as an avenue of student transformation rests primarily on volunteerism and by design has been less structured. Various projects, led by the Lasallian Mission Office (LMO), would encourage students to continue to be involved in socially relevant projects even when they are no longer required to be so. These projects ought to be undertaken by the students through the various student organizations, although the LMO may also initiate institution-based projects such as the LINGAP program.

The third avenue of student development is culture and formation which targets the “heart” of students. Culture and formation would address various issues that confront youth today and would work primarily on their value system – encouraging them to veer away from a self-centered, ego-centric form of existence and instead focus on a God-centered way of life that puts premium on solidarity and service to others. It was agreed that the activities on culture and formation need not be an isolated set of activities, but instead would be designed to be woven into academics, into the NSTP program, and the student leadership training program. However, it was decided that there ought to be activities that are primarily designed for culture and education (the only English word available for this), and that these should include the annual retreats or recollections, symposia, seminars or workshops on vital moral, spiritual, and even social issues.

The fourth avenue for student transformation is the involvement of students in research. This avenue is the other “hand” that leads a student to think of solutions to problems of society. The hope is for students to develop an instinct of using knowledge and technology in solving real problems. Indeed, there is a huge stock of existing knowledge and technology that can be harnessed in order to provide even partial solutions to problems with the environment, food supply, poverty, education, malnutrition, and other social realities.

The final avenue for student transformation are all the student support services, centered at the Office of Student Affairs, that have to do with student wellness, safety, culture and arts, leisure, guidance and counseling, student discipline, sports, all the way to career planning and placement. These student support services would make sure
that the students are well and safe, and that their social, cultural, physical, and emotional needs are all met.

It was made very clear at the onset that a major program such as the student development program of a university would need to be designed, implemented, assessed, and refined with the four perspectives discussed earlier. These four perspectives, when addressed in a balanced manner would assure that the program will not only be effective and sustainable, but would also be truly relevant in terms of the vision and mission of the school.

First and foremost, the student development program must aim for a good “reach” among its stakeholders. The program would not be effective if only a handful of students truly benefit from the program. Likewise, the entire academic community must be drawn in, not only in the formal academic or research programs and projects, but also the various activities under social involvement, culture and formation, and student services.

The transformation of students, by its very nature of touching their “hearts”, must rely on a very high level of volunteerism. Volunteerism in social involvement projects would be a good gauge of the extent and efficacy of the culture and formation program, as an avenue for student transformation. In addition, volunteerism must be high among non-students, especially the teachers and the support staff. The stakeholders, especially students, must be able to participate in all the student development activities, without fear for their safety. As such, all care and effort must be exerted so that the projects can be implemented without ever compromising the students’ safety and wellness.

Finally, the stakeholders must be able to choose from a healthy mix of activities and programs, designed for various learning and working styles. As students, they have different personalities and different levels of readiness for the various programs designed for them. As such, a good balance of activities, mixed with fun and leisure, would go a long way in terms of student involvement, and even in terms of the sustainability of the programs.

From the perspective of resources, it was understood that even socially relevant projects can cost a lot of money, and can quickly drain the resources of the school if not managed properly. As such, careful planning must be made, and control of resources must always be maintained. To a large extent, it was agreed that it was useful to concentrate social involvement projects on the various communities surrounding the campus and that research projects should be designed in such a way that existing physical and laboratory resources are tapped.

More importantly, it was recognized that there are numerous resources, especially human resources, that go untapped. Members of the academic community are such a wealth of talent and interests, and it will be useful to be able to harness all these. In addition, the planning and execution of the programs and projects must obviously take into account the perspective of the academic operations of the school. As such, activities must be scheduled in such a way that they complement the activities and experiences inside the classroom – instead of distracting the students from their
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academic activities. The non-academic programs of student development must obviously enhance the learning in the classroom and must never compete for the students' interest and time. After all, the activities are supposed to all collectively work towards the holistic development of students.

Finally, for each and every activity, for each and every syllabus, for each and every student development program, it must be very clear as to how each contributes to the over-all mission of the school. Everything else that is not relevant need not be pursued – as they would just take time and focus away from what the students truly need.

5. Conclusion

As Professor E. Gradey Bogue (1998) puts it: “Is the assurance of quality primarily a matter of well-designed systems and technical processes, or does it depend as much on the compassion and courage, the moral and ethical posture, of those who give voice and meaning to our colleges?”. Indeed, even with a multi-perspective decision-making framework or tool, no matter how well-designed, there is no real guarantee that decisions would be “balanced” and strategically sound. In the end, it will still depend highly on the people who are making the decisions.

By encouraging checks and balances in the entire decision-making process, such a decision-making framework or tool would simply increase the chances that indeed the decisions coming out of the decision-making process would be balanced, well-thought, multi-perspective, and strategic in approach.

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Strengthening transformation process towards an autonomous university through networks

Setyo Pertiwi, Singgih Hawibowo and Damona K. Poespawardaja

Abstract

The new paradigm of higher education management in Indonesia introduced through Higher Education Long Term Strategy (HELTS) 1996-2005 emphasizes the restructuring of higher education management in five aspects which are quality, autonomy, accountability, accreditation and evaluation. This paradigm has been strengthened in HELTS 2003-2010, in which the main objectives are improving the quality of higher education, which envisions a healthy higher education system characterized by improved quality, wider access and equity, and greater autonomy. This means that the focus of improvement does not only deal with education quality, but also with governance, efficiency, and equity. As part of the implementation of the new paradigm, in 2000, through the Government Regulation signed by the President of the Republic of Indonesia, 4 outstanding public universities have been granted with a new status as the state owned legal entity, locally known as Badan Hukum Milik Negara (BHMN); they were University of Indonesia, Universitas Gadjah Mada, Bogor Agricultural University, and Bandung Institute of Technology. Then, in 2003, 2004 and 2006, 3 other universities were granted the same status. With the new legal status, those universities should run their institutional restructuring in terms of university governance and internal management; and should be fully autonomous within 5 years, except that the transformation process of the employees’ status, from public servants to university’s employees, will run for ten years. At the beginning, however, the transformation process was not running smoothly as expected, due to some constraints which are the prevailing regulations that were not compatible with the government regulation on establishing the autonomous university as well as the internal management problems. Despite considerable changes in university structure, facility management, information management, and management of academic programs, changes in financial management as well as human resource management actually still lagged behind, and in most cases hindered other aspects of the changes. Realizing that the transformation process was not only dealing with various internal problems, but also with the external problems, even with superstructure problems, at the end of year 2001 the four universities have taken an initiative to collaborate in solving the problems through what was called BHMN Network. The initiative started with a round table discussion among university executives, and then it gradually grew wider, involving most of the universities’ structures, i.e. Board of Trustees, Board of Audit, Academic Senate, and Board of Professors. The topics and the substances being covered were all of university governance and management as well. Several working groups were formed to take concrete action after the talks.

This paper will discuss the network initiatives, including background and objectives, the activities, the outcomes and the lessons learnt from the whole processes. Special emphasis will be placed on the results on functional management aspects and their relationship with the quality of higher education.

Keywords: Autonomy, transformation, network, quality
Introduction

The new paradigm of higher education management in Indonesia introduced through Higher Education Long Term Strategy (HELTS) 1996-2005 emphasizes the restructuring of higher education management in five (five) aspects which are quality, autonomy, accountability, accreditation and evaluation (Soehendro, 1995). This paradigm has been strengthened in HELTS 2003-2010 which has main objective of improving the quality of higher education, envisioned with healthy higher education system characterized by improved quality, wider access and equity, as well as greater autonomy (DGHE, 2003). This means that the focus of improvement does not only deal with education quality, but also with governance, efficiency, and equity.

Driven by the drastic economic changes induced by economic crisis as well as international intervention, and also by the awareness to make the nation a member of global civilization as well, Indonesia is in a transition period toward a more democratic society. This process needs moral force as its counterpart. In this point, university is expected to play a significant role as a driving moral force in supporting the nation.

A credible moral force should be shown by university, in terms of the accountability of the public fund being used, demonstrated by a high efficiency of its operation, quality and relevance of its output, and by a compliance of its internal management with an acceptable standard of quality as well.

In response to the demand, the Government Regulation No. 61, dealing with the establishment of public university as a legal entity, was issued in 1999. By having a legal entity, the university is assumed to have more freedom to determine their own strategic values and to manage the institution along the lines. Following the regulation, the Ministry of National Education invited four best public universities in Indonesia, i.e. University of Indonesia (UI), Universitas Gadjah Mada (UGM), Bogor Agricultural University (IPB), and Bandung Institute of Technology (ITB), to prepare the proposal of university as a Legal Entity.

Responding to the government’s invitation, the four universities have set up a task force in each university whose main task is to prepare the proposals and submit it to the Directorate General of Higher Education (DGHE). The proposals comprise four steps which are diagnostic study (self evaluation), strategic plan formulation, transition plan preparation, and University Act preparation draft. The proposal’s focus of interest is spread over seven areas, i.e. university governance, academic programs, human resource management, financial management, asset and facility management (including information system), revenue generating activities, and quality assurance system and management. Each task force used several approaches. Nevertheless, participatory approach that involves civitas academica and related stakeholders in the whole process of preparation was the most effective one.

It has been such a long process that finally in the last week of December 2000 the four universities have been granted the state owned legal entity status, locally known as Badan Hukum Milik Negara (BHMN) through Government Regulation with Number 152 for UI, 153 for IPB, 154 for UGM and 155 for ITB consecutively, signed by the President of the Republic of Indonesia. This was a starting point for
transformation in the respective higher education institutions toward full autonomy status. With the new legal status, those universities should run their institutional restructuring in terms of university governance and internal management; and should be fully autonomous within five years, except that the transformation process of the employees’ status, from public servants to university’s employees, will run for ten years.

Transformation agendas and encountered problems

The transformation agenda in each university was carried out based on self evaluation analysis as well as strategic plan and transition plan. The agenda might vary among universities, but certain common issues below in self evaluation results have emerged. Various constraints on university governance were found to be the core problems of ineffective and inefficient management practices, such as: 1) inappropriate formal documents and non-comprehensive operational working system, which include job description and standard operating procedures, which can link all working units into one functional working structure; 2) an organizational large body with incompatible human resources, which is responsible for ineffective qualification results and too long span of controls; 3) a bureaucratic culture, especially the administrative working unit, and poor spirit to pursue excellence in services and continuous process improvement; and 4) lack of sense of business in practice.

In general, academic programs in each university were also facing similar challenges, including: 1) the relevance of education program due to prevailing regulations related to program commencement as well as curricula reconstruction; 2) the shifting of society’s demand and expectation in terms of quality of education; 3) the tight competition for student recruitment; 4) the tight competition in job market for the graduates; 5) the low budget for research compared to overall university budget; 6) the lack of mutual partnership and linkage between universities and private sectors, industries, research agencies, as well as with local government; 7) the low number of staff publications in international scientific journals.

Besides, we have figured out as well that the major problems related to human resources management, among others, were: 1) poor human resources planning e.g. recruitment and career path system; 2) lack of incentives and performance appraisal, human resource competency development, and staff deployment system; 3) centralized, uniform, and bureaucratic rules and regulations in human resource management system that limit the flexibility of human resource plan and development; 4) low working ethos due to low salary and strict formal rules and regulation applied to government officials.

Several financial rules and regulations which were applied to public universities resulted in ineffective and inefficient budgeting implementation (cash flow activity and accounting). Besides, a rigid line-item budget allocation system and tariff determination was restrictive in terms of innovations in financial management. We were still facing some problems in applying effectively the existing developmental planning, programming, and budgeting system.
The physical facilities owned by each university have been supporting most academic activities (education, research, and community services). However, the availability of good facilities was not supported by good facility management system. This caused some problems, including: 1) unreliable inventory; 2) undefined asset values; 3) underutilization and uncontrollable university properties (especially the remote ones). All of the universities concerned were in the process of developing ICT infrastructure to support academic activities in ICT-based systems.

The high potential of revenue generating could not be optimized due to some problems such as: 1) weak and improper internal regulation on revenue generating; 2) weak coordination among units and staff; and 3) the existence of hidden unrestricted revenue.

It was recognized that there is a growing need and expectation on the part of society towards higher education quality in Indonesia. This ultimately depends on the quality of students, staff, and programs, as well as infrastructure and academic environment. What is called for is concerted and integrated action to implement quality assurance (QA) system. The problems faced by the universities mostly were lack of well-defined unit for conducting QA and unavailability of QA manuals and the improvement guidelines.

Learning from results of self-evaluation analysis, the four universities have developed and implemented their plan for transition toward full autonomy status to achieve the university vision, mission and objective formulated in their strategic plan. The targeted transition period was five years. This was really expected as a fertile ground for creativity and innovativeness. Various grand strategies were developed by each university to deal with the changes.

As an illustration, IPB’s grand strategy was focused on designing university programs that were effective, efficient, sustainable, and accountable. The designs were then reflected in more detailed and distributed strategies integrated under one umbrella, i.e. achievement of credible quality assurance system, good governance of university management, quality programs, and good ventures (IPB, 2000).

UI’s grand strategy dealt with redefining the vision, mission, goals to be achieved and the objectives which were derived from the long endeavors to become a more autonomous university. The new vision stated that UI wants to be acknowledged internationally as a world class research university. Hence, the centralization of the administration jobs, and decentralization of research and academic activities are the consequences that should be addressed accordingly. Such a reformation system and procedure are implemented both in organization as well as academic research. The ultimate goal of UI is a transformation from a bureaucratic-public university to a well performed organization-research university with its international reputation.

As far as UGM is concerned, the university has made a strategic change by reformulating its vision, mission, and objectives which strive toward international standard of program and services. The management transformation, both in academic, financial, information, infrastructure, as well as human resources, refers to the grand strategies which are optimal integration of academic programs, optimal integration of
administration, utilization and optimization of university resources, public participation in university funding, and performance based management for quality assurance of services.

Those strategies were translated into practical programs that were clustered by the “generic issue” in university business associated with improvements (of university governance, academic programs, human resource management, financial management, and asset and facility management) and developments (of revenue generating activities and quality assurance system). In supporting the transformation program implementation, UI established a working committee as a preliminary to becoming a legal entity named Badan Pekerja Penataan/BPP, IPB established Office for Preparation of Autonomy Implementation (KPIO), and later on UGM established Secretariat for Supporting Autonomy Implementation (SP2O).

Having the new legal status, the universities restructured their organization and defined new systems as well as operational mechanisms. The main organization elements were Board of Trustee, Board of Auditor, Academic Senate, and Executive Board. Other supporting elements of organization varied and were established in different steps.

Under the new structure, transformation on academic programs as well as management functional areas was implemented. Those consist of the improvement of quality and relevance of education program in order to cope with society’s needs; the introduction and systematic implementation of student centered learning paradigm; the development and implementation of quality assurance system for academic programs; the development of staff recruitment, performance appraisal, remuneration, and promotion system; the updating of university assets inventory and valuation along with the improvement of asset management system; the improvement of buildings and rooms management in order to have a greater flexibility and suitability to the changes on the learning and academic programs management; the improvement of library management and its integration into national library network with support of university ICT network; the systematic studies on potential use of university asset and intellectual capital for income generating activities; and the development, improvement, and implementation of standard operating procedures of management processes.

However, the transformation process was not running as smooth as expected. There were several prevailing regulations that were incompatible with the government regulation on establishment of autonomous university as well as implementation of developing systems during the transition period. Law on State Treasury, for example, does not allow the provision of block grant funding from the state to a separate legal entity, because this block grant funding was designed as the scenario on financial management in each university. Law on Civil Servant as well as Law on Labor hindered the implementation of university employment scenarios (permanent employee/tenure, contract-based employees). The expected transformation mechanism of employees’ status from civil servant to university employee is difficult to execute due to conflicting regulations and its social implications. These problems made the human resource management scenarios inapplicable. Another problem was
unanticipated issues on the structure of course fees, which resulted in several student movements against BHMN Universities. Besides, internal management problems as well as internal resistance were also hindered the expected changes.

**University network initiative**

Realizing that the transformation process was dealing with various internal as well as external problems, even superstructure problems, at the end of year 2001 the four universities took an initiative to collaborate in solving the problems through what was called BHMN Network. The objectives of the network were: 1) to share the university experiences on problems and solutions during transition period, 2) to collaborate on drafting the formal legal backup for university legal entity, 3) to strengthen networking and team work efforts for strengthening bargaining position of BHMN universities, and 4) to accelerate academic, intellectual and corporate excellence.

The initiative started with a round table discussion among university executives in Bogor, where each university representative presented their reflection of a one year transformation process, with special emphasis on problems and solutions on internal management. Lessons learnt from the respective universities were found valuable for improving the transformation process in other universities, for example on how the university organization bodies should be established to ensure check and balances in order to enable good university governance. Moreover, how the university should deal with various modes of resistance to the changes. Then periodical meetings (every 3 months) were held in order to discuss a certain aspect of changes, especially related with areas considered as the strength of the host university. Meeting at IPB was focused on university governance; while the one at UI was focused on human resource management; the meeting at UGM was on financial management and revenue generating; and at ITB they discussed asset and facility management. Academic program and quality assurance as the core business of the universities assumed special places in each meeting. As BHMN Network firstly initiated by IPB, KPIO of IPB has been trusted to serve as the Common Secretariat of BHMN Network.

The mutual benefits of the network promoted the involvement of other university elements. The network gradually grew wider, involving most university structures, i.e. Board of Trustees, Board of Auditor, Academic Senate, and Board of Professors. The topics and the substances covered were all of university governance and management. Several working groups were formed to conduct concrete action after the talks. They developed the idea of establishing joint academic programs as well as joint industrial programs: a joint study program in Microbiology and the establishment of a Center for Value Addition (Anonymous, 2004).

In the year of 2003, 2004 and 2006, 3 (three) other universities, i.e. Indonesia University of Education (UPI), North Sumatra University (USU) and Airlangga University (UNAIR), respectively, were also granted the state owned legal entity status. With their new status, the universities also joined and enriched the BHMN Network.
Recently, the intensity of BHMN Network activities has declined. The three-month periodical meeting has been changed to a semester meeting. In addition, the last general assembly that involved all university elements was conducted in year 2007. However, the spirit of BHMN Network is kept burning.

Outcomes

Needless to mention, the network of Indonesian autonomous universities (BHMN Network) has been given a significant contribution to the increasing capacity and the internal dynamics of BHMN Universities. With the network, also supported by I-MHERE project, the transition process to become fully autonomous universities, to some extent, has been accelerated.

Moreover, the BHMN Network has also become the initiator of dialogue among related central government authorities who often had opposite opinions regarding regulations on resource management. Although it was very time consuming, the network did seek always the opportunity to strengthen the legal infrastructure of being autonomous universities. In this case, BHMN Network is gradually becoming a subtle “pressure group” toward the implementation of being more autonomous institution. To date it has yielded some significant results, including: 1) the transfer of authority for civil servant development, especially for those having rank up to III/D, from the Minister of National Education to the respective Rectors, 2) the transfer of authority to open and close of study programs from the Minister of National Education to the respective Rectors, 3) separation of university assets from state assets list that enable their utilization for income generating activities, and 4) the flexibility to manage the non tax state income (tuition fees, contract-based collaboration fund, etc.) without obligation to firstly transfer it to the state treasurer. Those results have helped a lot with university operations. The most important result to be considered is the growing awareness of all university elements on the importance of excellence. Through the network, academic development progress as well as management achievement are shared among the universities. This in turn has triggered more spirits and efforts to excel “Coopetition” (cooperation and competition). It seems to be the right term to describe the relation of the BHMN Network participants.

The future challenges

The four BHMN Universities (UI, UGM, ITB, IPB) are expected by the central government of Indonesia to have more internationally outstanding performance. The expectation is actually also one of the strategic issues of the BHMN Universities. It is challenging and needs serious efforts not only from the university executives but also from all components in the university and the stakeholders as well. The BHMN Universities are committed to fulfil the reasonable expectation. Hence, the increasing capacity and the internal dynamics of BHMN Universities are supposed to be followed by the certain regulations that will stewarded all the BHMN Universities in improving the quality and in enabling the institutions to run the daily operation in a secure and certain framework. Ironically, till the end of transition
process there is no umbrella regulation higher than a Government Regulation for those BHMN Universities. In the transition period the BHMN Universities was asked for lots of adjustment in all line of university management, regardless how the plan was. The issue of the Law on Education Legal Entity at the end of 2008 gives to a certain extent a hope for a more realistic new arrangement.

Lessons learnt
The BHMN Network was helpful for the universities in facing the changes. Each member of the network can take advantage of the change efforts and processes successfully from the other members of the network. There are at least three lessons learnt from the network.

- University transformation is an institutional transformation to systematically enhance the quality of higher education product and process to substantially contribute to national development and global advancement of science, technology and arts.
- The critical success factors for changes are the development of a strategic plan; the redefinition of university’s vision, mission, strategic program and priority; the development of effective leadership; and the synchronization of the dynamics and path of changes to have harmonious integration between functions.
- The barriers for transformation are the conflict of interest, prejudice toward changes, strong influence from previous working system and cultures, limited resources - both in terms of quantity and quality -, and preconception of BHMN status leading to unnecessary reluctance towards transformation.

The “lessons learnt” method that were experienced from the previous endeavour in the adjustment process to be a BHMN can be intensified while waiting for the technical implementation of Law on Education Legal Entity conducted by the government. The government is responsible for the provision of coherent and comprehensive institutional infrastructure to support successful transformation of the universities toward being internationally qualified higher education institutions.

References


Repositioning of the African university: The role of the UNISTAFF programme

Gabriel Katana and Noah Khaemba

Universities in Africa are experiencing increasing pressure to change in order to respond to the challenges facing them today. Among these challenges are the demands for quality and relevant higher education (HE) which should not only be contextualised to local needs but be adaptable at the international and global horizons. African institutions of HE including governments have held several forums to address some of the challenges and identified priority areas and strategies for intervention. In November 2006, African ministers of education discussed how to increase the effectiveness of learning at universities and came up with a ten year action plan that included the strengthening of knowledge networks and promoting quality assurance and management. Other key stakeholders addressing these issues are the African Union (AU) through the Association of African Universities (AAU), the Interuniversity council of East Africa (IUCEA) and the Regional Eastern Africa UNISTAFF Alumni network (REAL). This paper outlines how the University Staff Development Programme, through REAL can complement and enhance the efforts of higher education institutions in Africa to transform and reposition the African University so that it can adequately meet the needs of the local, regional and international communities.

Keywords: Effective learning, knowledge networks, accountability, African university

1. Introduction

For over a decade, a number of higher education institutions and organizations in Africa have taken a number of initiatives aimed at strengthening the capacity of African higher education institutions to address the continents’ human resource needs through development of new knowledge and technology, and deepening their engagement in economic, social, and political development [AU 2006]. Many forums have discussed the improvement of quality in leadership and management; research, teaching and learning and also the strengthening of collaboration amongst key stakeholders in higher education.

Among the organisations involved in higher education, the Association of African Universities (AAU) is a key player in addressing issues affecting higher education and the total development of the African continent in general. In 2001, AAU identified key priority areas to be addressed that include leadership and management in universities, quality of training and research, Information Communication Technology (ICT) and involvement of women in African tertiary institutions. At a meeting of African Ministers of Education organized by the AU in Libreville, Gabon in 2006 the major challenge facing education in Africa namely “increasing the effectiveness of learning”, was discussed and a 10 year plan of action (2006-2015) on higher education was developed. Thematic priority areas in the plan of action included knowledge production with emphasis on the promotion of knowledge networks,
quality assurance and management among other pillars of development [AU, 2006]. Higher education is critical to economic success and long term sustainable development in Africa. This is because it generates new knowledge and produces the required qualified human capital with relevant skills that enhance competitiveness in the global knowledge based economy. Higher education also promotes international cooperation through cross border exchange benefiting both the individual and society at large.

Despite these clear benefits, the higher education sector in Africa still faces many challenges. These include critical shortage of quality faculty to effectively serve the students populace and carry out research; inefficient governance, leadership and management structures; inadequate financial resources; wanting facilities and infrastructure; and an increasing demand from stakeholders for quality, relevancy of the curriculum and equitable access irrespective of gender or nationality. These challenges have manifested themselves in the African context through the inability to retain and attract faculty, overstretching human resources and facilities, low research output and research focus that is perceived not to be relevant in addressing real life issues facing the continent. The pressure for access has also led to massive migration of students that has been highly dependent on the fees charged per programme and uncontrolled admission criteria. To meet this demand HEI have tended to duplicate academic programs yet using the same human resources either on part-time or fulltime basis, and inefficient allocation of scarce finance to non-instructional expenditures. In the face of increasing enrolment, quality of education and research has declined. Institutional quality assurance and enhancement mechanisms are either not in place or very weak and inefficient.

The relevance of teaching and research has not substantively been matched with societal needs. Research capacities are generally poor due to lack of institutional research culture. Many old university staffs have not been actively engaged in research and hence not serving as good role models for the upcoming members. Financial allocations to research have been limited and this has affected the quality of teaching. Though basic research skills are acquired during graduate training, many higher education institutions in Sub-Saharan Africa register a low student enrolment into their graduate programmes. Less than 30% of students are enrolled in fields needed for long term society development such as agriculture, health sciences, engineering and technology, basic and applied sciences¹ that require relevant innovation and problem solving skills. It has increasingly been expressed by commissions and councils of higher education that in order to adequately address the development problems in Africa the research carried out at the higher education institutions should quickly shift to applied research with focus on real life problems.

Recognizing the role higher education plays in addressing the underlying factors in development, it is high time that higher education institutions including governments adopt strategies and interventions through networks where experiences can be shared.

¹ A synthesis report based on consultations made between March 13-28, 2008 and on documents related to higher education and development in Africa.
For this to be realized, it requires capacity building in the relevant pillars of development that is research, design of curricula and institutionalization of efficient management and leadership structures. Collaborations between higher education institutions, both at regional and international levels, have so far focused on science and technology, faculty development, leadership and management, curriculum redevelop and quality assurance. This paper explores the potential the university staff development programme (UNISTAFF) has in training and building capacity and networks for sustainable university transformation.

2. Importance of universities in Africa

Education is widely accepted as a leading instrument for promoting economic growth and this is applicable to Africa. For almost a decade, African countries and their development partners had placed great emphasis on basic education and neglected tertiary education as a means to improve economic growth and mitigate poverty. The Dakar summit on “Education for All” in 2000, for example, advocated only for primary education as a driver of social welfare and left tertiary education in the background [JBG Tilak, 2003]. The East Asian and Indian examples show that higher education with good governance and sound infrastructure is critical to economic success. The impact of higher education on strengthening institutions, governance, social development, scientific innovation and technological advancement is clear. The former UN Secretary General, Kofi Annan stated that “the university must become a primary tool for Africa’s development in the new century. Universities can help develop African expertise; they can enhance the analysis of African problems; strengthen domestic institutions; serve as a model environment for the practice of good governance, conflict resolution and respect for human rights, and enable African academics to play an active part in the global community of scholars.”

Hence universities in Africa have an important role to play in facilitating employment, productivity, national development and transformation of low skills industries to knowledge based economies. National productivity, largely determines levels of living and a country’s ability to compete in a global economy (African Union, 2006 and World Bank, 2002). Higher education enhances a state’s political context by contributing to civil society, enlightened citizenship, self reliance, equal opportunity. Its citizens develop the ability to engage in argumentative dialogue and reasoning and learn to value tolerance and respect (Ginette A. et al., 2008). It facilitates national development by promoting democratic ideals and intellectual and industrial competitiveness through greater social cohesion, peace and trust in social institutions, democratic participation, and appreciation of diversity in gender, ethnicity, religion and social class (World Bank, 2002). Tertiary education also improves the accountability of governments and generates independent research and analysis that supports vibrant debate that can greatly improve the effectiveness of government policy and other services. Universities are critical to building the human capital that in

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turn builds institutions that are regarded as indispensable for development (Devesh K. and Megan C., 2008). With this largely in mind, the 2004 Commission for Africa Report, laid emphasis on measures to revitalise higher education in Africa and to build up African infrastructure in Science and Technology. The capacity and analytical skills needed in local economies and for making important decisions which affect entire societies are developed by educated individual’s (Commission for Africa, 2004).

3. **Major challenges facing universities in Africa**

A distinct feature that has emerged as a result of the interaction of the forces in higher education in Africa is the rapid expansion of higher education institutions. This expansion has taken place while many countries and higher education institutions are still grappling with the question of quality management. In the frontier of knowledge creation and utilization through research there is increasing call for universities to recognize indigenous knowledge and technologies. University staffs therefore need to be equipped with skills that enable them to cope with this realignment of the African university as it responds to the changing societal needs.

Moreover, the higher education landscape has become more complex due to diversified students profiles that include continuing education, internationalization and inclusive education for special needs. There are increasingly many providers of higher education other than the conventional universities who need to be regulated in terms of quality standards. The increasing student population has also mounted pressure on Education Management Information System (EMIS) in the universities leading to inadequate monitoring of student progress and evaluation of academic programmes. Because of the demand to serve in more than one institution, the academic progression of many members of staff has slowed down.

African universities have shared fully in the substantial turmoil to which the world of higher education has been subject over the past two decades and more. The causes of this turmoil lie in transformations in political economy at both the global and local levels, in factors shaping the world of knowledge generation and application more particularly, as well as in specific economic and social demands of the national and local communities in which universities are situated. The increased openness of national borders to knowledge and information; the enhanced mobility and global market for high-skill labour; and the new organisational forms and delivery modes that have resulted from the ICT revolution require developing the skills for acquiring new knowledge and the capacity for using knowledge as a resource in addressing societal needs. The result is a complete transformation of the environment of knowledge institutions such as universities and other higher education organisations.

Accountability up to date is still a challenge for many African Universities. As stakeholders and particular parents and students demand quality services, mobility of staff in search for better terms puts into question the time spent by academic staff in serving the students and carrying out research. More stringent accounting for resources used is demanded by governments. While the university can ill afford to ignore stakeholder interests and demands, the cumulative pressure of such demands in the last two decades or so has put into very serious jeopardy the minimum levels of
university autonomy in the design and execution of its intellectual agenda that is regarded as a condition for the effective discharge of its mandate. As African universities seek ways to cope with the variety of challenges and still thrive, this crowding of their space is proving a very serious limitation in many instances and requires skilful and professional approaches.

4. Some tangible initiatives and interventions

As earlier noted, many organisations have been in the forefront in bringing higher education reforms in Africa. The AU, listed in its action plan priority areas that include knowledge production emphasizing on the promotion of knowledge networks, quality assurance and management among other pillars of development. The main aim is to revitalize the delivery of quality higher education which embraces ICT. As one recognises the outlined objectives in the AU action plan, it is worth noting the efforts of some other key stakeholders on the continent. The activities of AU are geared towards identifying and strengthening existing networks. The Inter-University Council of East Africa (IUCEA) for example has worked out strategies to reverse the impact of HIV/AIDS in terms of prevention, treatment and care in higher education institution in Eastern African Region and the community around Lake Victoria. This has been done through collaborative work between AMREF and IUCEA under the East African/AMREF Lake Victoria partnership programme (EALP). Further the council has continued to collaborate with DAAD in the Quality Assurance Project and together with Germany partner universities published a draft *Quality Assurance Roadmap for the East Africa region*. A conference on Enhancing Quality Assurance in higher education was held in 2007 in Bonn. This involved some 100 experts from various countries in the world who discussed different models of regional cooperation in Quality Assurance. Among the recommendations that were contained in the Bonn declaration was that in order for institutions of higher education to develop and put into place sustainable and continuously operational internal quality assurance systems at national and regional levels, university associations were called upon to support their member institutions in the process of internal quality assurance systems by making the necessary knowledge and instruments available and by organising training sessions and workshops. This is an example of a transformation activity that can benefit from the expertise of the UNISTAFF alumni. A training of representatives from three East Africa countries was held in Germany on the operationalization of a handbook for Quality Assurance in the Eastern African region. Although these efforts have been made at the regional and international level to improve the quality of higher education in Africa, institutional structures and qualified human resource is required to implement some of the strategies at institutions. Exchange of experiences at regional and international forums will be paramount in strengthening the efforts. This is another appropriate entry point for alumni of the University staff development programme and particularly the Regional Eastern African UNISTAFF alumni network (REAL) who are equipped with the relevant skills in three pillars of university development i.e.

3 http://www.iucea.org/?jc=newsletter
Emerging transformation in higher education – International UNISTAFF Forum

research and quality; organizational development; and teaching and learning to play a leading role at institutional and regional levels. It is also the belief of IUCEA that for higher education institutions in Africa to remain relevant in the midst of rapid changes at regional and international levels, there is need to harmonize the standards and criteria on which universities in East Africa will be regulated. Through shared standards, higher education in Africa can be strengthened to attain better position in the competition with other institutions in the world. Other areas of concern are developing collaborative strategies among East African member institutions in the areas of library and information services. This dimension could be embraced in the future UNISTAFF programme.

4.1 Networking

UNISTAFF, a university staff development programme was established at the University of Kassel in 1994 with the aim of training university staff in areas of teaching and learning; organization development and research and knowledge management. Participants have been drawn from Central and Latin America, South East Asia, Middle East and Eastern Africa. The training has been conducted in an interactive international environment. The UNISTAFF programme is one of most important downstream DAAD activities in higher education. Its underlying principle is to build capacity in higher education through knowledge transfer and in a spirit of solidarity among academics and researchers. Since its inception, the programme has been successful among other things in

1. Transferring high level know how
2. Introducing academic programmes such as governance and leadership, research management and teaching and learning
3. Providing a forum for knowledge exchange
4. Responding to development needs
5. Participating in reconstruction of higher education
6. Establishing networks

4.2 The impact of UNISTAFF alumni networks

There are at least five regional UNISTAFF networks (nests) established and about 500 university staff trained around the world. These networks are GIAN, INDOSTAFF, GUCAL and REAL. A total of over 65 alumni from Eastern Africa have to date been trained in the three modules of the UNISTAFF programme. A regional UNISTAFF network was established in 2006. Members of this network are UNISTAFF alumni from Kenya, Tanzania, Malawi, Uganda, Sudan and Ethiopia. The launching of REAL Network in addition to other UNISTAFF alumni networks across the world in November 2006 brought an added dimension to higher education in the Eastern Africa region. This has become a significant pillar that can work together with regional higher education partners in a similar symbiotic way as in the case of CSUCA in Central and Latin America.

Among the activities that have been undertaken by REAL are organizing and hosting of conferences on “Quality assurance in Higher Education” (2006), “Change and
Innovation in Higher Education” (2007) and conducting a Training of Trainers (ToT) workshop in January 2009. The outputs of the ToT are guidelines on curricula for training university academic staff at various levels in the areas of organization development, research, teaching and learning. This training workshop came at a time when need has been expressed by both government and universities in the Eastern Africa to train or retrain university managers and staff in pertinent areas that also affect accountability.

The impact of REAL has been to improve performance of UNISTAFF alumni in their home universities and also cascade the UNISTAFF philosophy to their peers leading to the establishment of centres of excellence and to open access to innovative approaches for sustaining quality higher education across borders. The activities of REAL have drawn the attention of AU because of their relevance in the AU action plan for higher education. By realigning its activities with the objectives of improving quality of higher education in Africa as already planned by the AU, IUCEA and AAU, REAL will be an effective agency in reshaping the African university. UNISTAFF programme has the capacity to facilitate such efforts in promoting the culture of review of higher education curricular (greening the curriculum), encourage investment that enhances academic environments and promote good governance, leadership and management through training and mentoring. Based on the emerging transformations in higher education in Africa, new areas that could be included in the future UNISTAFF programme are training for accountability with respect to time, financial and resource utilization. The target groups for training could extend to specific groups in the higher cadre of management staff. To create synergy of the activities of the UNISTAFF alumni with those of institutions such as the national and regional commissions and councils for higher education, capacity building and awareness programme could be designed for these key stakeholders. In addition, Presidents of Universities should be sensitized to effectively utilize the UNISTAFF alumni in their institutions. Strategies on how alumni networks may make themselves visible and relevant to their local situation should be part of the training. The setting up of the international UNISTAFF board in December 2008 with a membership that includes representatives from Africa, Asia, Europe and South America is going to facilitate the introduction of new paradigms in higher education capacity building and integrating best practices drawn from the diverse regions.

5. Conclusion

The fundamental mission for higher education in the twenty-first century is to establish more effective education systems that provide quality education and build responsible citizenship, encourage lifelong learning for entrepreneurship, professional and vocational skills, and promote research and innovation for the benefit of society. Universities in Africa have to vigorously engage in this mission and provide leadership and skills for development. To fulfill this mission, many strategies have been initiated by various stakeholders in higher education. These include AAU, AU, IUCEA, and National Commissions for higher education and governments. The efforts to transform the African university towards quality higher education need to be enhanced at institutional and regional levels. This objective can benefit from the
UNISTAFF programme which has been training university staff in quality teaching and learning, research management and organizational development. The UNISTAFF programme has the capacity to support continental development initiative by equipping university staff with relevant skills. The support of an international platform for UNISTAFF participants and Alumni provides a unique opportunity for the critical role of higher education in developing the human capacity needed not only to achieve national development but also to meet the requirements of the global agenda. The UNISTAFF programme therefore should endeavour to enhance its structures and embrace new dimensions such as planning and budgeting as part of the skills to be imparted to trainees. Accountability and professional ethics in higher education institutions should be included in the programme so that alumni who more often than not are key decision makers in their institutions will be in a position to steer the transformation process in a more transparent manner. It is hoped that with its relocation from the Institute of Socio-cultural Studies (ISOS) to the International Centre for Higher Education Research (INCHER), UNISTAFF programme should be reviewed to complement the 21st century prospects and challenges in higher education and in the long run help in the repositioning of the universities in Africa through Alumni networks.

References


Development of an Indonesian-German biodiversity network for teaching, training and research collaboration: A multiplier effect of UNISTAFF program

Sitaresmi Ismangil, Wolfgang Nellen, Trina Tallei and Apriliana Laily Fitri

Abstract
The UNISTAFF program from ISOS, University Kassel Germany has brought together sixty scholars from various universities in Indonesia with different scientific backgrounds. Upon their return they are expected to become agents-of-change and create a multiplier effect and contribute to the quality of their respective institutions. One example of this multiplier effect has arisen from the implementation of an alumni project in Indonesia. During the preparations, contact was established with a professor of Genetics in University Kassel, Germany, as a resource person for a Molecular Biology seminar cum workshop developed at Sam Ratulangi University, Manado. The active involvement of the INDOSTAFF (Indonesian UNISTAFF Alumni) Country Coordinator has led to further developments in terms of developing a network in biodiversity that will include not only the UNISTAFF alumni and their respective institutions, but also various organizations that are actively involved in biodiversity issues in Indonesia. This paper will discuss the development of the network, short and long term goals, and the challenges faced by the future network.
Keywords: Network, teaching, research, collaboration

Introduction
In the current global and digitalized world where there are seemingly no borders that divide the countries in the world, Indonesia still has to successfully overcome the impacts of a multi dimensional crisis that hit in 1998. A country that is rich in natural resources and biodiversity, Indonesia has yet to reach its maximum potential as one of the strong Asian countries in the world.

The Indonesian government recognizes the role of higher education in helping the country towards becoming a competitive nation in the world. The HELTS 2003-2010 states that the development of tertiary education has been considered to be very instrumental in contributing to economic and social development as well as in increasing competitiveness of a nation.
Therefore, a higher education institution must always keep up with science and technological development and stay relevant with social and economic needs within its local setting as well as in the global arena, through among other things:

1. contributing to the creation of knowledge,
2. reducing dependence on foreign experts,
3. developing capacity to sustainable exploration of natural resources,
4. developing the needed technology for local and national industry,
5. developing import substitution and improving added value of export products,
6. improving health and social well being, and
7. developing qualified researchers.

(Direktorat Jenderal Pendidikan Tinggi, 2003)

The University Staff Development Program (UNISTAFF) carried out by the Institute of Socio-Cultural Studies at the University of Kassel, Germany, is a training program where the participants develop competencies that go beyond their specific scientific subject matter and contribute to their development as individuals for capacity to become agents-of-change able to respond to the rapidly changing environment surrounding the university. The program has trained sixty scholars from various universities in Indonesia in a span of a 14 year period. These scholars come from different scientific backgrounds and they each hold a potential for future networking in their own professional fields. It is expected that the alumni would create a multiplier effect of the UNISTAFF values at the respective institutions in their home countries. During the period of training in Witzenhausen Germany each participant was required to develop an individual project in one of three areas: organizational development, teaching and learning, or research management. These projects are expected to be implemented in their home institutions. In 2008, the implementation of an alumni project (Trina Tallei from Sam Ratulangi University, Indonesia, UNISTAFF 2007) which included a seminar-cum-workshop funded by DAAD, has brought together a few UNISTAFF alumni that are biologists by training. Based on the advice of one of the UNISTAFF professors, the seminar included a resource person from the Department of Biology at University of Kassel, Germany. The active involvement of the Indonesian UNISTAFF alumni (INDOSTAFF) Country Coordinator has led to further developments. A series of discussions that were carried out during the preparation of the seminar has brought forward the idea of forming a scientific network in the field of biological sciences between Indonesia and Germany that not only involve universities, but also other organizations actively involved in dealing with biodiversity issues in Indonesia.

**Current environmental setting**

The Higher Education Long Term Strategy 2003-2010 (HELTS) document has outlined the steps to be taken by the existing higher education institutions and in 2010 they are expected to hold a high standard of quality and relevance that emphasizes
autonomy, organizational health, and improved access and equity. However, nearing
2010, Indonesian higher education institutions still find themselves dealing with
problems of improving quality, relevance and efficiency. The vastness of the
Indonesian territory results in a difference of quality among universities in Indonesia.
Many universities outside the Java Island still do not have equal access to the
resources available for universities in Java. Efforts for improving the quality of these
universities are continuously undertaken, but there is still more to be done.
At the regional and global level, Indonesian universities are still considered not
competitive when compared to their counterparts from USA, Europe or even in Asia.
Several world ranking surveys only list a few universities from Indonesia, and while
the methods of determining the rankings is debatable, it is an indicator of how
Indonesian universities perform in comparison to their counterparts elsewhere. It is
therefore imperative that the universities undertake innovative and creative strategies
to be able to increase their competitiveness and strengthen their position in the
international academic community.
In the field of biological sciences, the rapid advancements in modern molecular
biology have shifted the paradigm of doing research. Unfortunately, many educational
institutions in Indonesia do not have the necessary resources to support molecular
biology research. Many Indonesian biologists returning from post graduate degree
training abroad often become frustrated at the lack of support for carrying out
research in Indonesia. Another rising concern is a general perception/stereotype that
Biology is considered to be a "soft science" and mainly attracts female students. Many
secondary school students are not aware that Biology actually deals with very
sophisticated technology and equipment. There must be a shift in this type of thinking
in order to produce more highly skilled scientists in the future and part of the
responsibility for this lies with the universities.
One solution to strengthen the capacity of human resources in biological sciences at
the university is to involve and include them in a collaboration that stresses a
partnership to enhance the individual member’s strength and complement each other
to minimize the weaknesses. The HELTS 2003-2010 document highlights
institutional cooperation as one of the implementation strategies in dealing with the
issues. The universities have to compete and at the same time cooperate, treating
competitors as partners. They have to extend their networking and strategic alliance
beyond national and geographical boundaries. Mechanisms must be found to ensure
that qualified staff and students, irrespective of location are involved in the
collaboration and be provided with access to the necessary facilities. Sharing of
facilities, skills and expertise should be encouraged.
It is in this spirit that UNISTAFF alumni from three universities in Indonesia, namely
University of Indonesia in Jakarta, Sam Ratulangi University in Manado and the State
University of Jakarta have decided to build and establish an international scientific
network together with a partner from the Department of Genetics, University of
Kassel Germany.
Objective
The project, currently named "Indonesian-German Network for Teaching, Training, and Research Collaboration (IGN-TTRC) in Biodiversity" aims to establish and develop a scientific network that will significantly contribute to quality improvement in teaching and research of biological sciences.

Short term goals:
1. Improve teaching of biology in university and high schools in Indonesia.
2. Increase enrolment of high school graduates in biology study programs at the university.
3. Strengthening and enhancing the competencies of university staff as trainers for university students and high school teachers.

Long term goals:
1. Develop competitive research projects in the field of biodiversity.
2. Develop a post-graduate course in Biodiversity studies (M.Sc. in Biodiversity).
3. Increase the number of international scientific publications from Indonesia.

Scope of the project
The project will have activities in all the main missions of the university: teaching, research and community development. It is planned that within a time frame of 5 to 10 years, the network will have made a significant contribution in improving the conditions of biodiversity research in Indonesia through these measures:

1. There will be an effort to establish state-of-art science laboratories that train personnel at schools and universities to conduct scientific courses. The World University Service Komite Indonesia (WUSKI) has a Returning Experts program that will be offered to support training courses of returning Indonesian Scientists in Kassel Germany and to supplement salaries in Indonesia. The concept, working protocols and further teaching material for courses are available and are constantly extended by a network in Germany and the Indonesian partners will have access to this.

2. The partners involved will write joint research grant applications. Through these grants, it is hoped to acquire equipment for teaching labs that can be used for high school as well as undergraduate teaching in molecular biology, biochemistry and bioinformatics. The priority will be in multi-purpose equipment that can be used for various courses. Appropriate course protocols for different education levels are available (see 1).

3. There will be developed and implemented a post-graduate degree (M.Sc.) program that is carried by multiple institutions. This approach will improve the mobility of students, synergize the expertise of the participating universities and thus provide students with a broad interdisciplinary education. Taking advantage of infrastructure at different locations, students
will benefit from the best equipment available. In addition, joint grant applications (see 2) will further improve the conditions.

4. In order to overcome the language barrier, joint Indonesian – German e-learning courses will be established (a pilot course is currently running). English lecture material will be made available and teaching in English will be encouraged and supported by exchange visits. E-learning courses for scientific English will be implemented and encouraged.

5. Returning PhDs will be guided by on-site mentors to join institutions where their experience is required. Mutual support of the host group and the returning young scientist will substantially increase the scientific competence and the productivity of the respective research program. Experienced Indonesian and German faculty will provide general and specific support in the development and management of research projects including funding applications.

6. Critical mass will not only be established by the post-graduate program but also by guiding promising M.Sc. students to PhD sandwich programs abroad. This will improve international collaborations and bring back additional specific expertise to the home laboratory. The network will further support national and international collaborations by organizing a joint research platform.

7. There will be engagement with external parties outside the universities, including non-governmental organizations in addition to local, regional and national decision makers.

Implementation strategies
The project is planned to be carried out in three stages, as follows:

Stage I. This stage is also the initiation stage. Initiation was done at a "grassroots" level, namely by individual Faculty/Department staff members at a University. This is especially widely practiced in the area of research where researchers are encouraged to collaborate with colleagues from other institutions when they develop their research proposal. However, the scope of the planned network makes the initial efforts slightly different because in addition to finding suitable university partners, involvement of various external parties, including national level decision makers and the secondary education sector, was a new aspect never considered in previous collaborations. Another important partner is the private sector. Molecular Biology research is expensive and sometimes grant funding do not cover all expenses so a partnership with the private companies would be very beneficial.

Stage one is still in progress. Currently, besides the main "initiator" university partners: Sam Ratulangi University, Universitas Indonesia, State University of Jakarta, and University of Kassel, other universities in Indonesia are also involved. To date, Universitas Gadjah Mada, Jogjakarta, and Andalas University, Padang, have been contacted and they have expressed their interests to be actively involved in the network.
Another university, Bogor Agricultural University (IPB), Bogor has been contacted but there has been no response yet.

The discussions during the initiation stage were mainly aimed at determining the implementation strategies for the network. It was then decided that in Stage I there would be efforts to improve teaching at selected Indonesian universities and high schools. This will be done by conducting scientific workshops at several locations that will develop the competencies of the teaching staff at the universities involved. Stage one should result in increased enrolment of motivated students majoring in biological sciences at the university who perceive biology as challenging high-tech science with a direct relationship to Indonesian interests. In this stage the competence of university staff members to train high school and university students will also be strengthened and increased.

**Stage II.** The establishment of networks. In this stage a network between Indonesian scientists with trainers and mentors in Germany for teaching and research will be established, and also strengthening of internal networks in Indonesia for competitive research. Stage two will extend the measures to training university students on a broader scale. This particular group of students will hopefully obtain teaching competence and may become motivated for research. This starts the self-re-enforcing loop to generate new teachers and trainers that are able to use molecular methods and improved molecular equipment. There would also be a significant investment in laboratory equipment.
A model for the network is presented in Figure 1:

Another important part of this stage is to start the post graduate program in biodiversity. Ideally, in the context of a network, the program should involve multiple institutions. Universitas Indonesia already has a model for a multiple institution academic program, called the "Tripartite program" in the field of Civil Engineering. The program consists of three universities: Universitas Indonesia, Institut Teknologi Bandung (Bandung) and Universitas Gadjah Mada (Jogjakarta) and focuses on student mobility where students are able to take courses at one of the three universities to fulfil the requirement for graduation. This program is at the undergraduate level but it is possible to adapt this to a post graduate program.
Stage III. Strengthening the network. In this stage, the networks will have already established good linkages among members, and carried out joint research projects. One of the main targets at this stage is to increase the number of scientific publications by Indonesian scientists in high impact journals.

Challenges
Whenever there is more than one group of people involved in development of a project, there will be challenges that can hold back the successful implementation of the project.

Identification of appropriate partners/collaborators
Networking involves a group of individuals sharing a common vision on the objectives and rules and being involved in common activities. Developing a "common vision" is often more difficult in practice. However, this shared vision can be achieved if all partners realize the benefits of cooperation with other institutions.

Commitment of policy makers at different institutions
The term "commitment" reflects the willingness of the policy maker or leader at an institution to support a particular program/project in every aspect, from the concept, design to implementation of project along with providing the supporting resources, for example human resources, infrastructure and funding. This is, in short, a leadership issue. Many times the commitment of top managers/policy makers is limited to a verbal commitment without more concrete actions. However, in this case, the commitment of policy makers is strong, as evident at Universitas Sam Ratulangi when the Dean for the Faculty of Mathematics and Natural Sciences issued a decree for the establishment of a Biotechnology Service Unit in 2008.

Legal aspects
The legal aspects of networking have to be considered. This includes preparation of paperwork necessary for formalizing the network such as Memorandums of Understanding (MoU), Letters of Agreement (LoA); moreover, because this collaboration involves biological material from a country, a Material Transfer Agreement (MTA). While this is not really needed during the initiation, preparations should be done simultaneously. For this aspect, a strong commitment from the policy makers is crucial. Care must be taken to create an agreement that is mutually beneficial based on trust, forming an equal partnership. Also, creating a MoU is relatively easy, but the implementation is another matter. It is often found that once the MoU is in place, it becomes 'forgotten' and there is no follow up. There must be a concerted effort from all parties involved.
The issue of "resistance"
In learning about Change Management, the issue of "resistance" is often brought up in the context of an organization for members who are not open to new ideas or just want to stay in their comfort zone. This 'business as usual' mindset often interferes with the advancement of an organization.

At this stage of development, the resistance is not as obvious, but as explained above, the challenge lies more in developing the common vision for advancement of the network.

Conclusions
The development of this scientific network within the framework of the Indonesian UNISTAFF alumni (INDOSTAFF) shows the impact of the UNISTAFF program for the alumni. The program has provided the alumni with additional competencies that are applicable in various scientific domains. This indicates that there is a need for university staff to have skills that could and would enhance their expertise and therefore enable them to perform the main tasks of an academic (teaching, research) and become a major force in creating knowledge at their institutions.

Acknowledgement
Bringing together a group of people and have them share a common vision to develop a collaboration is not an easy task and the fact that this network involves people from several universities is a major achievement of the UNISTAFF program. What UNISTAFF has done for the alumni, specifically in Indonesia, is truly amazing. For that, the authors wish to thank Prof. Dr. Michael Fremerey, for "throwing the first stone", so to speak, and for his continued guidance past the initial contact. The UNISTAFF alumni involved in this network would also like to express their gratitude to the other UNISTAFF professors, Dr. Matthias Wesseler and Dr. Siawuch Amini for enriching their knowledge during the UNISTAFF program.

References
CAPACITY BUILDING:
COMPETENCES FOR THE FUTURE
Capacity building in higher education: The case of Masinde Muliro University of Science and Technology, Kenya

Elizabeth S. B. Abenga

Abstract
Staff competence is crucial if universities are to effectively steer development. This paper gives an evaluative report of a project on capacity building for university teaching staff based on needs assessment, theories of change and competency based teacher education. The purpose of this project is to strengthen pedagogy in the university through training expected to result in increased competence, continued learning, improved access to teaching and learning resources, and regular faculty interaction for sustaining competence enhancement. The project’s domestication, approval and pre-training sensitization workshop for all stakeholders are highlighted. Linkages with other departments are discussed alongside the implementation process and progress focusing on gains, challenges and future prospects. Discussion is made on systemic, contextual, individual and other factors that have an influence on the implementation process with the aim of learning from past experience to advise the future of this project. A way forward is proposed.
Keywords: Pedagogy, competence, capacity building, change

Introduction
Professors of today and tomorrow enter classrooms that look and feel much different from the ones they ever learnt in, with learners’ needs and environments becoming increasingly different and complex. Any society has been known to be as good as their teachers are, therefore competence and effectiveness is crucial if universities are to steer development. The vision of Masinde Muliro University of Science and Technology (MMUST) is to be a centre of excellence in science and technology, with the mission to generate, preserve and disseminate knowledge through research, teaching, innovation and extension. In view of this, the academic spirit that needs to be created is that of commitment to intellectual pursuit, devotion to research and teaching. This means that as MMUST (the youngest public university in Kenya) grows, it must avoid the ever-easy option of transferring practices from older universities and curve out its place and identity through a path that can lead it to be the centre of excellence it has set out to be. One way of doing this is by capacity building through staff development as a key point in achieving quality. In cognizance of the challenges the university has to overcome in making its mark in higher education, it has made recognizable effort to facilitate realization of its vision by mounting several new programs to meet emerging demands from the society. Courses are being repackaged for relevance. It can be acknowledged that faculty has access to a variety of both traditional and modern technology to facilitate them in their work.
Opportunities for staff growth through further studies, and information sharing forums are encouraged and supported. These are clear indicators of an institution that is growing. However, there is always room to make something good better.

The university has the potential of achieving its mission and realizing its vision. A larger percentage of resources, in particularly time, are spent in teaching. The university has employed academic staff with expertise in their various subject content areas or disciplines. However, a preliminary survey revealed that a large proportion of academic staff have no training in teaching but are content specialists. About 68% of the teaching staff has had no prior training in teaching. They lack the theory of and practice in pedagogy. With the fast evolving changes in the field of education even those with prior teacher education need skills upgrading. The need for this program was reinforced by the fact that staff is recruited from various educational and professional backgrounds with varying qualifications and working experiences. Angelo (1993) rightly notes that teaching in the absence of learning is just talking. This has far reaching implications for the effectiveness and efficiency of goal achievement in the programs offered and general quality of the products of our university. The goal of any instructional session is to maximise learning. The lecturers’ capacity to achieve the goals effectively can be enhanced. Quality of teaching comprises a whole culture of teaching and learning of faculty. Openness, sharing, consultative problem solving, self-evaluation, and a willingness to be evaluated by others characterize this culture. Research in teaching has revealed that all other things being equal, teachers trained in particular skills perform better than those not trained at all (Maranga 1977). In education, the methods, pedagogical strategies and media used are as important as the content or knowledge (Cornu 1995). The importance of teaching effectiveness and competence cannot be overemphasised in this paper. The rest of the sections cover details of the programme.

**Theoretical framework**

This paper is based on the needs assessment process, theory of change and competence based teacher education. Next is a brief description of each.

**Needs assessment**

An educational program is directed by the expectations of certain outcomes. The chief activity of education and training is to change individuals, to add to their knowledge, to enable them to perform skills which otherwise they would not perform, to develop some understandings, insights and appreciations. Curriculum theorists (Taba 1949, Kaufman 1975, Bishop 198), Hunkings 1985, Mager and Pipe 1984) and others all agree that whether initiating a new educational intervention or changing an existing one, the process begins with needs assessment. Needs are areas in which actual practice is less than targeted practice (Kaufman 1972). The targeted status encompasses ideals, norms, preferences, expectations and perception of what ought to be. Needs assessment based on this definition requires procedures for selecting or determining targeted status, gathering information to determine current status relative to targeted status, and comparing the two to discover discrepancies and identify the
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need (Saurenz 1996). Needs assessment is a method of determining if an innovation is necessary and/or desirable. It can also be described as a problem-solving tool, which identifies gaps between current practice and required or desired results, and prioritizes these gaps for action. According to Czajkowski and Petterson (1972), the process is to reduce these gaps, therefore providing a means of maintaining a balance between desired and actual situations. To keep provision of education in MMUST in tune with the needs of the students and of the times, it was necessary to carry out needs assessment. Specific competencies were identified for inclusion in the programme.

Change

Theories of change can be identified either prospectively as part of planning an initiative or retrospectively as part of an evaluative process. This project applies the retrospective view and relies more on the normative re-educative and critical mass approaches to change. Staff development efforts are essential for institutional change and that continuous development of teaching staff is the cornerstone for meaningful improvement and reform (Fullan 1991). The current discrepancies in the MMUST teaching staff needed to be minimised. This project adopted Kurt Lewin’s (1995) three-step change model that involves unfreezing – movement – re-freezing. Unfreezing the existing situation or status quo (equilibrium) is necessary to overcome the strains of individual resistance and group conformity. Movement is necessary to move the target system to a new level of equilibrium. This is achieved through capacity building activities. Refreezing needs to take place after the change has been implemented in order for it to be sustained or “stick” over time. This is to prevent participants from reverting to their old equilibrium. It is the actual integration of the new values into the university’s values and traditions and to stabilize the new equilibrium. For this matter, the project was implemented in three phases. It is also expected that change meets resistance. Using Kotter & Schlesinger’s (1979) reasons for resistance (parochial self interest, misunderstanding, low tolerance to change and different assessment of the situation) every available avenue was used to minimise the resistance. This includes workshops, formal and informal meetings. Instead of leaving change up to chance, better to plan and manage to eliminate the odds of problems and help make change for the better. According to Connell & Kubisch (1998) change must be plausible, doable and testable for it to be effective. For this matter the project had specified objectives and an action plan that was communicated to all stakeholders through a sensitization workshop. Lobbying was done to secure financial, technical, political, institutional and human resource to implement it. With clear objectives and timelines measures were put in place to track the progress of the project. The first round of the project implementation was guided by Kotter’s (1990) eight phases of change: establishing a sense of urgency, creating coalitions, developing clear visions, empowering people to clear obstacles, securing short term wins, consolidating and continuing, and anchoring the change.
**Competence based teacher education**

The 1973 Commonwealth Conference on Teacher Education recognized the need for competence in delivery of education. It noted that goodwill is a poor substitute for technical competence in teaching, noting that academic ability cannot overcome failure in communication skills (Commonwealth Secretariat 1974). This suggests that teaching staff should adjust and update their capabilities to keep abreast with changing demands of his profession and increase their level of effectiveness. This has implications for the lecturers’ belief that they have the ability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context (Tschannen-Morgan, Hoy, & Hoy, 1998). It is important that faculty have a sense of personal efficacy in their work. This can be developed through participation in this program, through which capacity building for quality and relevance in MMUST can be achieved.

**The project**

The MMUST university staff capacity building project that resulted from the UNISTAFF 2007 training was expected to yield improved pedagogical competence including motivation for continued learning, improved faculty access to a more enriched resource base on teaching and learning for self-improvement and growth, and initiation of regular faculty interactive meetings for sustaining competence enhancement. It aimed at:

1. enabling the participant to identify the characteristics and needs of the university learner and seek to create the necessary environment to facilitate achievement of those needs and aspirations in the national and international context,
2. enabling the acquisition and updating of pedagogical skills and attitudes to create the necessary learning atmosphere for the students in the context of the university’s functions and national aspirations,
3. providing the participants with an opportunity to identify deficiencies in their competence and work towards their eradication,
4. initiating a joint effort of faculty and management in developing a teaching/learning resource centre for faculty.
Specific objectives
At the end of the program participants will be able to:
1. identify the common university learners needs,
2. identify and select appropriate techniques and resources to facilitate effective learning,
3. construct and utilize appropriate evaluations,
4. identify areas that need change and set specific tasks they have to perform in order to be more effective facilitators of the teaching learning process,
5. plan practice sessions in the areas and tasks identified,
6. execute teaching sessions in the areas and tasks identified and planned for in the second phase,
7. carry out evaluations and use feedback,
8. share and document experiences resulting from the program.

Target group
The program is offered to all academic staff targeting those without previous training in pedagogy, and also tailored to provide those formerly trained but who need to refresh their prowess.

Program structure
The program was planned to run through three phases, sensitisation workshop, training and practicum with consultative meetings. In the second phase each group of participants will consist of about twenty-five (25) members. This would require approximately three groups.

Training modules
Part 1. Institutional/Personal (Self-Awareness and Change)
• The university as an institution of learning: Challenges and conditions influencing teaching and learning in universities in less developed nations.
• The roles of the university lecturer.
• Characteristics of the university learner.

Part 2. The University Curriculum
• University level course design and development based on the Tyler (1950) model.
• Application of the systems approach to planning, implementation, monitoring & evaluation of the university curriculum.
• Preparation for instruction.
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Part 3. Teaching and Learning

- Learning: Meaning, theories.
- Strategies for teaching & learning processes (constructivism, cognitivist approach).
- Adult learning methods and techniques: their application in university level.
- Communication interaction in the classroom.
- Instructional media: Theories, functions and application in teaching & learning.
- Designing and conducting evaluations: Exams setting, marking and grading, curriculum evaluation.

Facilitators

Resource persons were to be sourced externally and internally.

Project implementation

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Fig. 1. Implementation schedule 2007/2008

Key: Grey = plan; Red = not implemented; Green = implementation of changed plan; Yellow = on going
Capacity building in higher education: The case of Masinde Muliro University of Science and Technology, Kenya

Project domestication

The first phase focused on the sharing of the new idea with colleagues and management. This was done formally and informally. First, a report on the UNISTAFF 2007 training and the project proposal were presented to university management. This was followed up by face to face discussion of the project with the departmental head, Dean of the Faculty, Deputy Vice Chancellor (Academic), and Vice Chancellor. The department of Curriculum and Instructional Technology was sensitised on it and there got accepted and adopted. The department then presented it to university management where both the programme and its budget got approval and support. It is important to note here that not all staff was excited about the planned programme. In particular, those in hard sciences and technology disciplines felt that all that one needed to teach effectively was mastery of the content. For this matter the project was planned and executed in three phases using Lewin’s (1995) model.

A one day sensitization workshop for all teaching staff and senior management was planned and executed successfully. This was to unfreeze the previously held opinions and attitudes towards pedagogy and prepare ground for the new learning. This was organised and managed by the department, under the co-ordination of the Deputy Vice Chancellor Academic Affairs’ office. Participants included all academic and administrative staff. The second phase that Lewin (1995) calls movement, involved a two weeks training (4.00-6.00pm) that included presentations, group and individual work, practical tasks, case studies, plenary discussions and feedback from participants. Participant activities are practical oriented as may be applicable and related to their working environment. This is followed by the third phase (re-freezing) involving sharing of experiences, follow up and monitoring of results of the program through single three-hour sessions per week for two weeks. The second and third phases are repeated for each group of participants.

Partnerships

Once the pedagogy training programme got approval, it was realised that another department (Computer Science) had also proposed a capacity building programme for academic staff. Through the co-ordination of the Deputy Vice Chancellor - Academic Affairs office, the departments of Curriculum and Instructional Technology and Computer Science realised their shared vision of building capacity of staff and got together to have one training package. Pedagogy then became the first module, followed by ICT as the second module and Project Management as the third. Participants were then to register and go through the three modules to complete the capacity building programme and be awarded the certificate. The three modules were then coordinated by the Learning Centre. This capacity building for staff in MMUST has the potential for further collaboration with other departments and schools to meet the competency needs of staff. A possible area is in research and publication. The vision of this capacity building project in MMUST is to have it grow to serve staff from other universities in the country.
Challenges
Due to some constraints that were faced, some adjustments were made on the original proposed project in order for it to be operationalised. Some major changes included change of the venue from out of campus to on campus. This was due to insufficient funds. Training dates were also changed from the month of May to September 2008. This was a result of the host department in which most of the facilitators are based being involved in teaching practical student advisement. Change of dates meant that the programme would run at the beginning of the semester rather than during long holidays as had been proposed. This saw the numbers of actual participants go down from the twenty who had registered interest to ten. The time was also changed from 8.30-4.30 daily to evenings 4.00-6.00 daily. This led to much more condensed yet intensive sessions. On campus training negatively impacted attendance by both the facilitators and the participants who would attend to normal duties and responsibilities. Interaction time during sessions was also reduced. The scheduling of the sessions in the evenings saw participants arrive late, fatigued from the day’s work or absent due to bad weather. The session presentations were done by internal facilitators excluding the proposed external facilitation that had been proposed. This may have denied the participants the experience that comes with external expertise.
Delay in paying honoraria for facilitators had a demoralising effect which may negatively impact continuation of the programme as planned.

**Gains**

1. In spite of the challenges faced, there were successes registered. First to note, the sensitisation workshop was well attended and the pedagogy programme welcomed, embraced by both academic and administrative staff. University management gave its full support and encouragement. The training was officially opened by the Vice Chancellor. The university decided to award recognised certificates to participants who completed the three modules. This would boost their credentials.

2. The first cohort greatly appreciated the new knowledge and skill learnt and the need for keeping up-to-date in pedagogical skill and to uphold professionalism in their practice. Their interaction with colleagues in their various departments has increased sensitisation on the benefits of the programme. This has seen the number of those who have registered interest in joining the next group go high.

3. It was realised that different disciplines can learn from one another and cooperate to common pedagogical problems. Disciplinary diversity is strength that can be harnessed to develop multidisciplinary approach to problem solving. Once a need is realised and felt, members are able to warm up to change and turn the university into a learning organisation. This leads to the fourth gain.

4. Those lecturers who participated in the capacity building programme have demonstrated their ability to be critical of their own teaching prowess and have identified areas of interest that were not addressed. These serve as feedback and input for programme improvement and will be ploughed back into the next programme.

**Recommendations**

For more effective and meaningful training in the future it is recommended that:

1. Training is conducted at a venue away from campus to ensure concentration and full session attendance. This will also enable the number of days spent to be reduced to three at most.

2. More groups are target for training during the long holidays of May-August.

3. Self-instructional study materials are prepared and accessed in different formats to enable registered trainees learn at their convenience, accomplish learning tasks. This will reduce the contact hours.

4. External facilitators are included.

5. Further collaboration and linkages with other departments and institutions on university academic staff capacity building programmes.
Emerging transformation in higher education – International UNISTAFF Forum

References
Professional certification for lecturers: A new emerging transformation towards better quality of higher education in Indonesia

Hendrawan Soetanto

Abstract
For more than 25 years Indonesian lecturers have enjoyed their teaching status at universities without obligation to demonstrate their competency as professional lecturers other than having completed their academic degree. In 2003, the Indonesian government introduced a new law on national educational system in which there is an obligation for university lecturers to hold at least a master degree and certificate of professional teaching. The mechanism of professional certification for lecturers has been explained in the law No.14, 2005 and the Minister of National Education (MONE) Decree No. 42, 2007. The philosophy underlying certification for lecturers is that professional lecturers should demonstrate their academic, pedagogical, social, and personality competencies. To prove these competencies any lecturer must be certified on the basis of a written portfolio providing comprehensive information of their track record on teaching, research, community service, and involvement in student affairs that previously determined their present rank; perception evaluation given by students, colleagues and immediate supervisor, and personal description by the respective lecturer. The pro’s and contra’s towards this certification policy have been widely echoed at a national level through the mass media and have attracted the attention of many scholars to comment on it. The main hot issue is focused on whether or not the policy will significantly enhance the quality of higher education in Indonesia through the reward mechanism of at least two fold increase of basic salary.

From the current experience of Brawijaya university, there are some deviations from the philosophy and principles of certification due to lack of information, unclear quality standards of competency, loose control system during portfolio writing and professional misconduct such as plagiarism. Unless these weaknesses are eliminated, the policy of lecturer certification will only be seen as the mechanism of remuneration enhancement rather than quality improvement of higher education in Indonesia. This demonstrates a new challenge to the Indonesian UNISTAFF alumni network to participate in many aspects of activities dealing with improvement of university teaching and learning method.

Keywords: Lecturer, professional certification, quality, higher education

Introduction
It is generally agreed that higher education plays a significant role in producing human resources that would contribute to the prosperity of the country. Unfortunately, for

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1 HS is currently the Director of IESD and Chairman, The Certification Committee for Lecturer of Brawijaya University, Malang, Indonesia
centuries universities were only attended by a small share of the relevant age cohort. The transformation from elite to mass education of tertiary education began just after the second of world war. In Indonesia the growing number of higher education began in the 70’s that bring consequences of quality challenging being posed by the stakeholders upon the graduates who enter the workplace.

Paul (2002) stated that most universities in the world carry out two functions: to transmit high-level knowledge and to produce new knowledge. For this reason higher education must demonstrate their capabilities to innovate science and technology for the sake of national and global wealth. It therefore seems reasonable if the Indonesian government has pledged a great attention to reform higher education to enable the universities to achieve their excellence in human resources production. As a consequence, a dominant theme in the discourse about higher education in Indonesia over the last five years is about how universities change their mindset, goal and objectives that would directly contribute to the nation competitiveness (see Satryo Soemantri Brodjonegoro, 2002; Ikaputra, 2006).

In 2003, the Indonesian government introduced a new law called A National Educational System in which there is a prerequisite for university lecturers (from now and then is called lecturer) to hold at least a master degree and certificate of professional teaching.

The philosophy underlying certification for lecturers is that professional lecturers should demonstrate their academic, pedagogical, social, and personality competencies. To prove these competencies any lecturer must undertake a certification process by writing a portfolio providing comprehensive information of their track record on teaching, research, community service, and involvement to student affairs, relationship with their colleagues and immediate supervisors, and personal emotional expression.

This has ignited a rigorous debate in the mass media especially on the compulsory requirement of holding professional certificate for the senior lecturers. The dispute on this particular matter had ceased as the underlying reasons as well as the mechanism of professional certification for lecturer has been described in the law number 14, 2005 and the Minister of National Education’s decree number 42, 2007 in which the professors are exempted for the process of certification in recognition of their government-appointed status as professional lecturers. Consequently they are also eligible to be a certifier upon satisfactory achievement of certifier training and selection. Nevertheless, there is still an unsatisfactory feeling among the lecturers regarding the exemption of professors from the certification process.
The pro’s and contra’s towards this certification policy have been widely echoed at a national level through the mass media and have attracted attention of many scholars to comment on it.

_The pros:_ the majority of lecturers seem to accept this new policy of the Minister of National Education (MONE) because through certification there will be a profound change in teaching methods, academic atmosphere and last but not least pay. The latter correlates with the new reward mechanism introduced by the government in the new renumeration system that is, a two-fold increase of the basic salary will be granted upon submission of the professional certificate.

_The contras:_ there is a feeling of dissatisfaction when the MONE exempt all professors for undertaking this certification owing to the fact that not all professors demonstrate their competency in teaching.

This paper deals with the current experiences of Brawijaya University (BU) in the process of certification starting from the formation of committee, socialization of the program for internal lecturers, certification process for external lecturers and their likely impact for the future quality of higher education in Indonesia.

**The concept of certification**

Figure 1 describes the concept of certification which stems from the idea that to carry out three main tasks of lecturers: (1) teaching and learning; (2) research and (3) community services, they must satisfy a minimum requirement of academic proficiency, competency in teaching and learning process and significant contribution to the community services. Any lecturer has to master his/her professional field and this will be evaluated through the national certification mechanism. The expected outcome of this certification program is improvement in the quality of the lecturers to carry out its tasks.

**The organization of certification**

Certification is carried out by any university upon approval by the Minister of National Education after satisfying the following requirements: (1) at least 40% of undergraduate and post graduate programs are accredited B (good) or above score by a national accreditation board; (2) at least having three professors holding doctorate degree.
degree; (3) carrying out a post-graduate program; (4) employing lecturers and non-
educational staff according to the national standard of education; (5) having a
technical unit which is capable to carry out certification process and networking with
other universities relevant to the objectives of certification; (6) demonstrate strong
commitment to be the committee of lecturer certification; (7) having experiences in
conducting a competitive funding program; and (8) approved by the minister of
national education.

Each university which complies with these requirements and wishes to be the certifier,
should apply to the Minister of National Education by sending a proposal containing
of rationale, supporting evidence, structure of organisation and work plan. On the
basis of those criteria the university in Indonesia is categorized into three different
categories: (a) managing if the score is \( \geq 49 \); (b) autonomous if the score is between >
39 and < 49; and (c) supervised university if the score is \( \leq 39 \). The managing
university is allowed to certify lecturers from other universities (the same and lower-
rank), manage its lecturer and guides other lower-rank universities during and after
certification process. The autonomous university is eligible to certify other universities
and manage its own lecturers; while the supervised university is eligible to certify other
lower rank universities. Out of these three categories, there are universities that fall
into submitted universities that mean they are only submitting the portfolio of their
lecturers to the prescribed certifying universities. For the first year, there are 11
universities classified as the managing universities where Brawijaya University is one
of them, 15 universities fall into autonomous universities and 23 are the supervised
universities.
Procedures of certification
As shown in figure 2 the procedure of certification at the university was initiated by determination of a national quota by the Department of National Education depending on the available government budget in the fiscal year. The quota was then distributed to the universities concerned through the Directorate General of Higher Education (DGHE) according to the formula as follows:

\[
\frac{\sum \text{lecturers holding master and Ph.D. at the university}}{\sum \text{lecturers holding master and Ph.D in the country}} \times \sum \text{national quota without professor}
\]

The national quota in 2008 was 12,000 of which 3812 were granted to university professors without undertaking certification process. BU received a quota of 251 lecturers consisting of 117 professors and 134 lecturers that were assessed by external assessors. On the other hand BU had assessed 364 lecturers of seven different disciplines of science from 11 state and 20 private universities, respectively.
Following the determination of quota, the university must socialize and train the lecturer to be ready for certification. In addition to that they must have a workload equal to 12 credit semester in the last two years. Selection of students and colleagues for evaluation is determined randomly by the head of department. When the process of portfolio compilation finishes, the head of department submits it to the committee of lecturer certification. This committee will then send the document to the prescribed external university for assessment. Each portfolio is assessed by two external assessors and the process of certification from the preparation until the issue of certificate requires 3 – 6 months.
After assessment of the portfolio, the assessors submit the result to the committee of lecturer certification which is responsible for compiling and computing the scores. If there is a dispute in the score between assessors, the committee will ask three professors to get a second opinion prior to the final decision to be made. The committee then sends the results to both the submitting university and DGHE. The final decision whether or not the assessed lecturer passes or fails is that of DGHE after conducting a special meeting inviting all committees of lecturer certification from prescribed universities. The certifying university will then be responsible for issuing the certificate signed by the rector as the chairman of certifying university.

**Brawijaya University experience**

*The structure of organization*

The rector of BU has given a mandate to IESD to act as the committee of lecturer certification under the leadership of the director of IESD. To assist the chairman of the certification committee in the formulation of work plan, budget and training for the internal and external certifiers, a steering committee consisting of eight professors who were trained specially as the national certifier by the DGHE was formed as the integral part of the organization.

*Socialization and internalization for BU’s lecturers*

The process of certification in BU was initiated by the process of assessor recruitment from the eligible BU’s professors. This process of recruitment was under the auspice of DGHE and 39 people passed the process of selection. The next step was socialization and internalization of certification to all targeted lecturers through a special workshop and training to write the portfolio involving BU’s assessors as the facilitators. The final portfolio was then sent to the prescribed certifying universities after being corrected by the facilitators. This effort was fruitful because all BU’s lecturers passed the certification. For this reason the program will be re-used for the next batches.

*Certification of external clients*

BU received 364 portfolios to be assessed from state universities and polytechnics and private universities. The distribution of disciplines and the number of portfolio sent to BU is presented in Table 1. Three disciplines successfully passed the assessment by 100 %, that is animal sciences, medicines and mathematic and natural sciences while four other disciplines (economic studies, humanity studies, agriculture and engineering) reached a success between 85.11 % and 98.11 % in which Economics is the highest percentage of failure followed by Engineering (14.89 % and 13.41 %, respectively).
Table 1. Distribution of disciplines and number of portfolio assessed by BU’s assessors in 2008

<table>
<thead>
<tr>
<th>No</th>
<th>Discipline</th>
<th>Number of Portfolio</th>
<th>Pass</th>
<th>Fail</th>
<th>% of success</th>
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<tbody>
<tr>
<td>1</td>
<td>Economics</td>
<td>47</td>
<td>40</td>
<td>7</td>
<td>85.11</td>
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<tr>
<td>2</td>
<td>Animal sciences</td>
<td>37</td>
<td>37</td>
<td>0</td>
<td>97.30</td>
</tr>
<tr>
<td>3</td>
<td>Humanities</td>
<td>53</td>
<td>45</td>
<td>8</td>
<td>86.79</td>
</tr>
<tr>
<td>4</td>
<td>Medicine</td>
<td>38</td>
<td>38</td>
<td>0</td>
<td>100.00</td>
</tr>
<tr>
<td>5</td>
<td>Mathematic and Natural Sciences</td>
<td>26</td>
<td>26</td>
<td>0</td>
<td>100.00</td>
</tr>
<tr>
<td>6</td>
<td>Agriculture</td>
<td>81</td>
<td>80</td>
<td>1</td>
<td>98.77</td>
</tr>
<tr>
<td>7</td>
<td>Engineering</td>
<td>82</td>
<td>71</td>
<td>11</td>
<td>86.59</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>364</td>
<td>337</td>
<td>27</td>
<td>92.6</td>
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Looking at the main cause of failure, it seems that the personal description written by the lecturer had weaknesses such as lack of evidence, and unclear description. Nonetheless, the dominant factor of failure was the personal description document especially on the originality and personal character at various circumstances components (see table 2 below).

**Impact of certification on higher educational quality**

There is still an equivocal definition of quality found in the literature that differentiates education from other business. With regard to higher education Peggie and O’Neil (1994) identified at least five different opinion on quality: (a) exceptionally high standards; (b) the interrelated ideas of zero defects and getting things right the first time; (c) fitness for purpose; (d) does equal with value for money; and (e) is transformative. In this context, education should be perceived as an ongoing process of transformation of participants rather than what is traditionally perceived as a service for a customer. Thus, transformative quality in education deals with how to enhance and empower the customer.
Professional certification for lecturers: A new emerging transformation towards better quality of higher education in Indonesia

Table 2. Mean score of personal description from the failed portfolio assessed by BU’s assessors

<table>
<thead>
<tr>
<th>Section</th>
<th>Component of evaluation</th>
<th>Mean</th>
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<tr>
<td>A.</td>
<td>Development of teaching quality</td>
<td>3.13</td>
</tr>
<tr>
<td>B.</td>
<td>Development of main expertise</td>
<td>2.75</td>
</tr>
<tr>
<td>C.</td>
<td>Contribution to development of institutional management</td>
<td>2.79</td>
</tr>
<tr>
<td>D.</td>
<td>Contribution to development of student activity</td>
<td>2.54</td>
</tr>
<tr>
<td>E.</td>
<td>Improvement of community service</td>
<td>2.58</td>
</tr>
<tr>
<td>F.</td>
<td>Personal character in various circumstances</td>
<td>2.44</td>
</tr>
<tr>
<td>G.</td>
<td>Working spirit</td>
<td>2.50</td>
</tr>
<tr>
<td>H.</td>
<td>Personal integrity</td>
<td>2.50</td>
</tr>
<tr>
<td>I.</td>
<td>Openness to criticism, suggestion from others</td>
<td>2.69</td>
</tr>
<tr>
<td>J.</td>
<td>Social role</td>
<td>2.50</td>
</tr>
<tr>
<td>K.</td>
<td>Originality</td>
<td>2.13</td>
</tr>
</tbody>
</table>

Note: score for each section ranges between 1 (very bad) and 5 (excellent)

The view that quality equals high standards may be challenged with the question: Whose standards? Similarly, it also happens in the certification policy of lecturer in Indonesia where the portfolio does not compare between perceptional evaluation with a set of criteria that is agreed by both evaluator and the lecturer being evaluated. Accordingly, it seems too premature to expect the impact of certification on quality enhancement of higher education. This notion is however contrary to the general opinion which suggests that certification would lift up quality of higher education through enhancement of lecturer's pay. This opinion stems from the fact that the relatively lower remuneration of lecturer in Indonesia is one of the main reasons for slower rate of gain in higher educational quality as compared to its counterpart countries such as Malaysia and Singapore. Nevertheless, one may argue that remuneration is not the single determining factor for quality enhancement of higher education, as many examples are available from other countries where remuneration does not correlate directly to science and technology advancement (e.g. China).

The expected change of personal integrity

In spite of the spirit of openness and enhancement of personal integrity, there was evidence of cheating as indicated by the frequent findings on the highest score given (score 5) on the documents of perception, especially filled in by students or colleagues without signature or the name of evaluator. Under these circumstances BU had asked the submitting universities to revise and send them back within the prescribed time frame by DGHE.

Some lecturers of private universities confessed that the technical information of
portfolio writing was lacking from the private university coordinator. Moreover the process of certification in 2008 occurred at the wrong time, because most students were on a break period of long public holiday. This condition has perhaps led to the misconduct found in some instruments of portfolio such as plagiarism (copy and paste action) and deviation in selection (e.g. not selected randomly) of students and colleagues for perceptual evaluation.

More serious criticism on the implementation of article 39, verse 2 of the national law number 20, 2003 dealing with expectation for school teacher competency came from Raka Joni (2007) who stated that there is misinterpretation of four pillars of learning as references for school teacher competency requirement (pedagogy, professional, personal integrity and social competencies). He subsequently argues that the four pillars of learning launched by UNESCO in 1972 was the ultimate learning outcomes regardless of the context and format of education pursued by anyone. Consequently, these four pillars of learning do not fit for the purpose of attribute of school teacher competency. This misperception has caused the loss of personal integrity because teachers are interested only in the accumulation of credit points from activities that may not so relevant and the spirit of passing the certification for rewarding of higher remuneration other than demonstrating genuine competence.

Another criticism on the validation of competence-based assessment in professional education comes from Thilakaratne and Kvan (2006) who suggest that the assessment should not only be limited to occupational performance, but should focus on learning and instruction performance of lecturer. It is thus evidence that the deviation from principles and philosophy of certification has created a pathological state leading to the serious malfunction of the total system due to restrictions in the flow of information and knowledge (Fremerey, 2002) and the likely inherent weakness of the current certification system in 2008.

**Chance for networking**

The dissemination of good practices of higher educational teaching and learning may offer solutions for the current weakness of the certification process. Sharing of knowledge, experiences, values and culture between universities will enhance the acquisition certification philosophy and principles. In this regard the UNISTAFF alumni networking may play their role either as individual or institutional through participation in knowledge and information dissemination within and across the borderline of respective institutional affiliation of the member. The international forum of UNISTAFF alumni such as this seminar will also offer additional benefit through sharing of current information and knowledge from diverse countries of origin.

**Concluding remarks**

Although the underlying philosophy and principles of lecturer certification are promising, the experiences of BU as the certifying university suggest that there are some deviations in the process of certification. The ill-defined lecturer competencies
Professional certification for lecturers: A new emerging transformation towards better quality of higher education in Indonesia

together with the lack of quality standards as well as sufficient flow of information of certification process may deter the achievement of the main objective of certification to improve higher education in Indonesia.

This weakness, however, may be seen as a challenge to strengthen the existing networking and activities of UNISTAFF alumni to participate actively either as individual or institutional to disseminate knowledge and information of good practices in teaching and learning that reflect fostering the value and principles of UNISTAFF.

References


Redesigning the professional development programme at Makerere University for enhanced participation and effectiveness

Betty Akullu Ezati

With frequent changes in universities, it is important that the teaching staff receives continuous professional development programmes to ensure their effectiveness and satisfaction with their work. Yet, there is apathy among the teaching staff at Makerere University to attend the course that has been developed to enhance their curriculum development and teaching learning skills. Using interviews and analysis of workshop reports, experiences during the workshop, this paper confirmed the reluctance of experienced teaching staff to attend the training. This is due to the perception that there is nothing they do not know about teaching. However, after training they expressed happiness about it. This calls for a need to give more information about the training content, mode of training and benefits of the course during invitation. In addition training for experienced staff could be separate from that for the newly recruited.

Keywords: Professional development, universities, staff perception, pedagogy, andragogy

Introduction

Changes in higher education, including reduction in funding (Kasozi, 2003), competition among institutions, increased use of technology, more shifts to learner centered education are combining to transform the roles of both universities and academics (Davis, 2003; Briggs, 2005). In Makerere University since 1990, for instance, funding from government has been declining, organization of the academic year has changed from term to semester system (Makerere University, Senate meeting, minutes 3rd and 4th October; 4.96, 1996), educational qualification required for staff recruitment adjusted to a Ph.D. (Makerere University 16th and 17th Senate meeting, minutes 4.96 October, 1999) and there are calls by central administration to adopt e-learning (Oonyu & Akullu Ezati, 2008). In addition, student numbers have escalated. For instance, prior to the 1970s, the university had a small population of students of about 2000 (The University of East Africa Development Plan, 1967/70), but from 1990, the student population has risen from less than 10,000 to the current estimated 40,000 students (Planning Department, Makerere University, 2003). At present, it is estimated that Makerere University admits 75% of the total university student population in the country (Planning Department, Makerere University, 2003).

It is the increase in student numbers that has created more challenges and attracted public concern. This is because facilities are inadequate (Kasozi, Musisi, Katunguka & Asiimwe, 2002), teaching staff student ratios are high and equipment in short supply. There is a growing public panic about the capacity of the University to deliver quality education. In addition, there is concern that the university is producing graduates that
do not match the demand of society (Mamdani, 2007). This fear points to problems with the curriculum, the delivery methods, quality of the teaching staff and the teaching and learning materials. On the other hand, expansion of university education resulted into more graduates in society and increased awareness of university education among the population. Consequently, there is more demand for accountability from universities by society than there was 10 years ago.

Furthermore, as members of different university decision making bodies, students’ guilds have moved away from agitating for social issues to conditions under which students learn. Students therefore have a medium for voicing their concerns, and the quality of teaching has been one of them. There is more demand made on the teaching staff than there was 10 years ago. The shift to learner centered education, for instance requires that lecturers treat each learner differently. As Davis (2003) asserts given that people learn at different rates and are on different levels at similar ages, means that the lecturer cannot treat all students the same, as they will each require assistance to that next level individually. Thus Gibbs and Habeshaw, (1992) quoted in Davis (2003) posit that, theoretically, the lecturer can adopt differing teaching methods, and offer all students pedagogy that suits them; the use of andragogical techniques for some and pedagogical techniques for others. On the other hand, Cowan (1998), feels that teachers in higher education are ‘regrettably ignorant about the choice and use of pedagogical methods which are suitable for an education that relies more and more on higher level cognition and interpersonal abilities’. This is because in applying for a position as a university teacher, applicants need not present any evidence of teaching ability; a Ph.D. or its equivalent is usually required to show scholarly competence, but nothing is required to demonstrate pedagogical competence, a competence in the very skills one is expected to use on the job (Cahn, 1978). However, “being a genius does not necessarily make one a good tutor” (New Vision, February 2008). Consequently, much of the teaching that goes on in colleges and universities is of very poor quality (Cahn, 1978). This indicates that intellectual competence and pedagogical competence are two different qualities. One cannot be an outstanding teacher without a thorough knowledge of subject matter but to possess that knowledge does not guarantee the ability to communicate it to a student (Cahn, 1978).

Hence while universities recruit first class graduates, concerns have arisen over their capacity to pass on their knowledge to students. Therefore as the New Vision (2008) quoting an official from one of the private universities reported, “they need to be taught teaching methodology, lecture room control, marking etiquette, research supervision and communication skills”. Similarly, Brent (2004) explained that if undergraduate education is to be enhanced, faculty members, academic and students affairs administrators must devise ways to deliver undergraduate education that are as comprehensive and integrated as the ways students actually learn.

As Tizard, Minty and Newton (2001) pointed out, the success of any change depends on the development of staff to meet the demands of new ways of working and teaching. Recognizing this problem, and the need to improve students’ learning, the Directorate of Quality Assurance was set up. The main focus of the Directorate is to
ensure quality of Makerere University graduates. Hence a lot of emphasis is on quality of programmes and courses, academic staff, teaching and learning, student assessment, support services, resources and facilities, and research. Quality Assurance Policy passed by Makerere University Council in June 2007, mandating that promotion be pegged to training in pedagogy. The Directorate of Quality Assurance’s focus on the teachers could be due to the fact that of the eight dimensions of quality identified by Brown, Franco, Rafeh and Hatzel (1998) namely technical competence, access, effectiveness, interpersonal relations, efficiency, continuity, safety and amenities, 4 out of 8 can be achieved if the providers (in this case the teaching staff) are well informed and prepared. These include technical competence, effectiveness, efficiency, interpersonal relations and continuity. In a university setting, such dimensions would be achieved by ensuring that highly qualified staff is recruited, the teaching process is more interactive and learner centered, staff student relations are cordial and students are well supported. Thus effective preparation of the teaching staff will enhance achievement of quality education by over 50%.

As society demands accountability from universities, Makerere University has tried to raise confidence of the public about its ability to deliver quality education by restructuring itself, its paradigm and ways of teaching. This involves changing the students’ paradigm of learning as well as teachers’ paradigm of teaching. Thus the offices of the Deputy Vice Chancellor (Academic), Directorate of Quality Assurance and the School of Education put in place a professional development and pedagogy training programme. Since 2006, workshops for teaching staff have been organized. The workshops aimed at equipping teaching staff with the skills of planning and implementing teaching. Specifically, the training aimed at enabling the teaching staff to do the following:

• Gain an insight into how people learn in order to structure instruction for optimal learning.
• Formulate and write out goals/objectives for a course/module as a starting point for a constructive alignment.
• Choose and structure course content and teaching and examination methods in relation to goals/objectives.
• Choose and adopt teaching methods that stimulate learning.
• Appreciate the importance of pedagogical merits in the academic career.

In order to facilitate the attainment of the said objectives, the training programme was structured into eight modules offered in 4 days. The modules include:

• Theories about learning and knowledge scholarship of teaching.
• Preparations: Course planning and writing curriculum.
• Learning goals and learning outcomes.
• Course alignment.
• Instructional strategies.
• Assessment and evaluation: Testing and examinations.
Student support.
Being a course leader.

The first part of the course centers on how students learn in the context of Higher Education (HE), based on different models of teaching and learning. The effect on the roles of the teacher is also discussed. Another central aspect is communication in the teaching situation, feedback and evaluation. The second part builds on the knowledge and skills achieved in the first part and practical experiences from teaching. It covers other responsibilities of the teacher including planning, examining and evaluating courses.

The problem

Despite the emphasis the central administration is putting on the training in pedagogy and andragogy, there seems to be reluctance from the teaching staff to attend the course. This is evident from the slow pace at which people respond to calls for application to participate. There are times when the training sessions have been postponed because of low turnout. Yet there is appreciation of the course by those who attend them as evident from the evaluation reports. One participant commented ‘why didn’t the university train immediately I was recruited. How much harm have I done?’ It is this contradiction that promoted this study. Thus this paper reflects on the staff perception of the course, perception of what they can gain and explored lessons learnt.

Methodology

The data for this paper was drawn from experiences during the training workshop that has been conducted since 2006 and analysis of the workshop evaluation forms. Since 2006, 6 workshops have been conducted. These included workshop to the Faculty of Science (Department of Zoology and Chemistry), 31st Aug – 04 September 2006 (24 participants), Law - August 2007, Institute of East African School of Library and Information Science & Faculty of Science (24 participants) 6th – 9th August 2008, Veterinary Medicine (23) 13th – 17th August 2008, Faculty of Agriculture (28) 6th – 9th April 2008, newly recruited staff from across the board (44) participants) 11th – 14th Feb 2009. Data from the workshop participants were mainly collected on Day 1 and the last day of the training. In addition, interviews were held with faculty members who missed the training.

Findings

Staff perception of the training

It is clear from the responses of the teaching staff that participation in the training is low. This could be due to several factors. First, some teaching staff reported that they were skeptical about implementation of the training content. This category based their arguments on inadequacy of facilities and high student numbers. Many staff members seemed de-motivated with due to inadequacy of facilities at the University. As
Finkelstein (1984), quoted in Ingrid (1988), asserts, academic staff members evaluate feasibility, desirability in their field, their familiarity with it and how it is likely to affect their organizational structure before embracing any change. Thus in addition to training it is important the institution ensure implementation by availing basic requirements to the teaching staff. However, it is also important to point out that any change that introduces more work for staff is likely to be resisted.

Secondly, there were also those who felt that they could not be away for the training. Timing of the training was always a problem for the majority of staff. It is difficult to resolve scheduling of training given that teaching staff are busy throughout the year. Four of the training sessions conducted were during students’ vacation. However, teaching staff are expected to be at work even when students are away on holiday. This could explain why some teaching staff members were reluctant to attend. Teaching staff uses students’ holidays to conduct research and write papers. As Hughes (1991) advises, training should be scheduled to ensure availability and that participants’ attention is focused on learning. He suggests organizing training during normal working hours. This would send a message to the participants that learning is as important as their job.

Hughes (1991) also advises that weekends should be avoided because that is when workers take time off. Makerere University training sessions have been over weekends. Indeed, during trainings, some participants abstained on Sunday, while others failed to attend Friday and Saturday evening sessions. Possible reason for not attending the course would be more due to the fact that many teachers within the higher education environment do not have the time for new initiatives because they are fully committed to trying to do everything else that they have been allocated (Davis, 2003).

Thirdly, there were some staff members who had attended earlier training on teaching, curriculum development in higher education and they felt there was nothing much to gain from the current one. Furthermore, this category seemed to have had negative experiences during the previous training and this affected acceptance of the current one. One member of staff explained

That training was not interactive and I do not want to be talked to. I have taught for a long time at the university and I have a lot to contribute to the discussion.

This points to the importance of training styles to be used in professional development programmes for university staff. Desmone, Werner and Harris (2002) emphasize the use of adult oriented approach to learning that recognizes that adults are self directed, have large amounts of knowledge and experience, show greater readiness to learn tasks that are relevant and are motivated to learn in order to solve a problem or address needs.

However, training styles adopted were different from the one in the past training. The training was experiential. The participants started with their own experience and made systematic literature searches so as to gain deeper understanding on how theory and praxis relate to their experience. Included in the training is a project assignment aimed at increasing understanding of a chosen pedagogical/andragogical issue. Participants
use their courses, examinations and past papers to identify areas of weaknesses and
improve on them. During the course different teaching methods are used as examples
and then discussed. Generally much time is set aside for discussions about different
teaching and learning issues directly related to the participants’ own experiences of
teaching and learning. Throughout the training participants are encouraged to reflect
on their practices. Indeed evaluation from those who attended the training showed
appreciation of the training style.

Fourth, having taught for a long time, some felt training on teaching and student
learning was not important. This was evident from the responses of the professors.
They felt they knew what to do. This was captured in the response of one of the
professors. He commented

> On the first day I thought we were knowledgeable but after the training I discovered I
> was lacking skills to deliver effectively my subject matter to the students.

Lynn (2002) suggests that professional development should be provided according to
career cycle. This advice suggests that there are variations in needs of experienced and
new teaching staff. So far the training model adopted by Makerere University has
varied; the first two trainings were faculty based, the next two trainings combined two
faculties and the last one had about 11 faculties. All this change in the training model
was due to failure to get adequate response from a specific faculty chosen for the
training. It was discovered that there was isolated interest from different faculties;
however the last training drew participants from many faculties. Nevertheless, with the
exception of the last training, this arrangement meant that newly recruited staff was
combined with experienced ones. The advantage of combining the two groups is that
it provided a forum for the newly recruited teaching staff to learn from the
experienced ones and also to freely share ideas without consideration of power
differences (based on experiences) that characterize relations in some work places.
However, it was observed that during training the experienced teachers were more
willing to share experiences. It is probable that the newly recruited were shy or wanted
more guidance on certain issues.

Fifth, there were also concerns that the training did not focus on individual
development. The participants who provided this response felt that the university was
focusing more on strengthening teaching instead of research. This is because research
and publication carry more weight in promotion. During the workshop participants
from one of the faculties decried the amount of teaching versus research in the
faculty. They called for the need to turn the faculty into a research institute and this
was to be facilitated by improving research support systems at the faculty. Resistance
in this case could be due to personal loss and belief that change is not in the best
interest of the institution (Robbins and Coulter, 2002).
Thus, when those who attended the training were asked for their expectations (needs) of the course, their responses focused on class management, assessment, designing curriculum, as reflected in Table 1.

**Table 1: Participants’ expectations**

<table>
<thead>
<tr>
<th></th>
<th>Law (24)</th>
<th>Agric (27)</th>
<th>Science (24)</th>
<th>EALIS (28)</th>
<th>Mixed (44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techniques for effective teaching</td>
<td>92%</td>
<td>90%</td>
<td>90%</td>
<td>94%</td>
<td>100%</td>
</tr>
<tr>
<td>Techniques for managing large classes</td>
<td>78%</td>
<td>10%</td>
<td>24%</td>
<td>0%</td>
<td>80%</td>
</tr>
<tr>
<td>Maintaining motivation of students from start to end of lesson/helping students who don’t want to read</td>
<td>68%</td>
<td>70%</td>
<td>74%</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>How to impart skills using minimal resources</td>
<td>50%</td>
<td>71%</td>
<td>86%</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td>Good assessment techniques</td>
<td>60%</td>
<td>58%</td>
<td>88%</td>
<td>80%</td>
<td>98%</td>
</tr>
<tr>
<td>Deeper understanding of designing good curriculum</td>
<td>94%</td>
<td>82%</td>
<td>78%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>E-Learning</td>
<td>5%</td>
<td>18%</td>
<td>24%</td>
<td>45%</td>
<td>52%</td>
</tr>
<tr>
<td>How to conduct themselves professionally in class</td>
<td>0%</td>
<td>28%</td>
<td>44%</td>
<td>54%</td>
<td>70%</td>
</tr>
<tr>
<td>Supervision of research</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>95%</td>
</tr>
</tbody>
</table>

From the responses, there is clear indication that the staff expected the training programme to help them to strengthen their teaching. They expected the training to improve their practices in the areas of class management, assessment, designing curriculum, setting good objectives, E-Learning and a good researcher. It is only the newly recruited staff that overwhelmingly indicated skills in supervision of research. One participant explained:

*I expect this course to help me with ways of balancing course content with time duration, time management to finish the course, effective planning of course lessons and gauging depth and width of content to give students of different levels especially at certificate, diploma and degree levels.*

*I wish this training could equip me with ways of engaging students actively in class. In all I need better teaching skills.*

*I easily get irritated by noisy and unserious students and I lack patience with slow learners.*

*I find difficulties marking scripts and dissertations.*
In addition they also noted that the use of technology and power point had not been exploited. They reported that there is a need to use power point to replace traditional methods of instruction. This will facilitate posting and accessing notes on the internet. Analysis of the training modules the participants were exposed to, showed that of the expectations identified by the participants, those effectively handled were assessment techniques, maintaining and motivating students, curriculum designs, handled but not the specific teaching techniques and the ones not included at all were managing large classes, teaching with minimum resources, supervision of research, professional conduct and E-Learning. This therefore means that there is a mismatch between participants’ expectations and what the training offered. This shows that needs assessment should be carried out to identify the gap in each faculty and training tailored accordingly. On the other hand, change can be a threat to people and persons who are not of like mind as far as progressivism is concerned, would find many options unacceptable (Davis, 2003). Thus their influence on the decisions on pedagogy, assessment and curriculum will stifle many innovative ideas.

Lessons learnt
As institutions that generate and disseminate knowledge, universities sometimes design short courses for mainly those outside the university. They hardly design such courses for their own staff. There are fewer, if any professional development courses for university staff compared to teachers at other levels of education. It is probably this tradition that has created a feeling among university staff that professional courses designed by their university are not important to them. Yet, with frequent changes, universities need to organize continuous professional development courses for their staff in order to prepare them for the constant changes. This calls for a need to address, staff indifference and resistance to locally organized trainings. The university should put in place professional development programmes that should be provided to all newly recruited staff and then periodically to all staff. From workshop experiences, it was clear that teaching staff at Makerere University had good knowledge of the content of subject areas but many reported problems with the teaching learning techniques. It was evident that they still have massive training needs. For instance, areas such as E-Learning, examination invigilation, teachers’ ethics and code of conduct in teaching, research supervision skills were identified. Although there is a module on student support, some participants felt they had not covered adequate information on psychology of students, ways of understanding why sometimes students behave the way they do, how to counsel students with social problems that affect their learning. Another participant had this to say

One thing that I would have loved to learn is how to control my emotions, how to handle disrespectful students.

It is important to design core and optional modules that should be offered at different times. The modular design would allow staff to select areas of study related to the varied professional demands they are facing. Participants are able to select modules and build a pathway that is most appropriate to their needs. This is an area that
Regional Eastern African Alumni Network (REAL) could exploit. It is also clear that the current training programme focused on strengthening teaching which is considered less important by the staff because it does not contribute to individual development. Weighting for teaching in promotion is less than for publication. Thus it does not contribute to total staff development. There is not much research which also features as a strong need of the participants. Academic staff roles do not only include teaching but research. Future training could emphasize research.

In addition, the training content should be made available during the call for application. It is probable that this would attract people. Furthermore, the training workshop focused only on what lecturers could do in order to improve quality but not how they can be supported by management to accomplish their work. Teacher support was not attended to. As a result many felt that they would still be faced with dictating notes due to limited resources i.e. projectors. One participant summarized the concerns in this way

\textit{We do not see lecturer support from management, where are the inputs from administrators. Get administrators to attend these trainings.}

Two approaches were tried during the training; one faculty and mixed group. One faculty approach helped to focus the training to the specific needs of the faculty. This was very successful with the faculty of Law. It tended to involve more people from each faculty. During such workshops there were calls for all members to attend. The mixed faculty approach brought younger academic staff but the dynamics involved were helpful for the university as a whole and not so much to the individual faculties. In the mixed group, the training ended up acting as a forum for airing out views to the administration. This distracted the training but it was an indication that a forum for sharing ideas with the main university administration was lacking.

There were mixed reactions on the training duration. While some wanted it extended, others preferred a shorter duration spread over a period of time. The younger staff preferred continuous longer period of training while the senior ones wanted shorter periods. While those who want the training course spread over a long period suggested that it would provide time to try out what has been learnt, which is then reported in subsequent trainings. Definitely this would be beneficial to both younger and senior staff. However, it would require frequent training sessions for which resources may not be adequate. Alternatively, training could be organized at faculty level (faculty rather than the university owning the training) where members could share experiences.

In conclusion, universities need to institutionalize professional development trainings and to encourage staff to attend. Teaching staff members in different disciplines have different values and views and this should be taken into consideration. In addition, teaching staff suffers different tension between institution, demand of research and heavy teaching load. Attempts should be made to minimize the tension by supporting implementation of what has been learnt.
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Change and technological innovation in higher education: A challenging and transforming initiative for a young university

Asenath J. Sigot

Abstract
Information and communication technologies are becoming more and more important in the higher education process, claiming new spaces and conditions of learning, and new teaching methodologies and professional roles for lecturers. The new teaching methodologies aimed at more effective and appropriate learning for professional practice involve the use of computers, audiovisual and electronic tools on the part of lecturers. Lecturers need to acquire specific competencies for making effective use of new technological innovations and educational activities mediated by new technologies. The purpose of this article is three-fold. First, the article examines the meaning of change and technological innovation as it relates to the integration of new technologies in higher education. Second, it explores an initiative of setting up the Learning Centre at Masinde Muliro University of Science and Technology including its purpose and programmes. Thirdly, based on the experiences of the learning centre, the article attempts to identify criteria for organizing successful staff training programmes.

Keywords: Capacity building, collaboration, enhancing learning, ICT

Introduction
Higher education in general and universities in particular have undergone changes largely due to the advancement of information and communication technologies (ICTs). In the information and knowledge society, teachers, lecturers and other professionals should remain at the cutting edge to avoid what McNeil (1992) termed “an academic lag”. In order to cope with change, to meet new challenges, and to develop as professionals, their learning should be constant. Furthermore, academic staff must adapt to new environments that are conducive to learning, self-reflection, systematic problem-solving, investigation, open-mindedness and shared institutional values. The challenges therefore, include how to organize training for staff in pedagogic use of new technologies that could actually have an impact on teaching and learning and lead to transformation in educational practices.

In responding to these challenges and inspired by UNISTAFF 2000 experiences, an innovative learning centre was established at Masinde Muliro University of Science and Technology (MMUST) that has earned recognition for its transformational efforts. Focused on efforts to enable both academic staff and students not only to increase their learning productivity and accountability through acquisition of ICT skills but also to prepare for professional careers and lifelong learning. The Learning Centre
(TLC) organizes training for academic staff in pedagogy and in the use of new technological innovations that have had an impact on teaching and learning. In technological transformation in higher education, it is necessary to address the concerns and perceptions of staff in the light of the need for changing their attitudes and to ensuring ownership of the change process. The new technological innovations point to a new role for the management, for the teacher, for the student, and for course material. It centers on the construction of knowledge by the student, a teacher or lecturer as facilitator. Furthermore, information is no longer something to organize, transmit and memorize but something to work with, think with, discuss, negotiate, and debate with partners and colleagues through networking. This article presents a successful collaborative ongoing project that examines how new technologies and the efforts to integrate them into teaching and learning in pedagogically sound ways have made impact on educational practices. The purpose of the article is three-fold. First, it examines the meaning of change and technological innovation as they relate to the integration of new technologies in higher education. Second, it explores an initiative of establishing TLC at MMUST, including its purpose and some of the programmes offered. Thirdly, based on the experiences of TLC, the article attempts to identify criteria for organizing successful staff training programmes and other emerging factors. The article underscores the importance of institutional support and commitment and points out why people who use the new technological innovations must be provided with training, technology access and encouragement to use the technology in their day-to-day work. The article concludes with the premise that, promoting educational change through ICT is a complex issue that needs to be approached from multiple perspectives and also looked at, in the light of the lessons learned, by others and in discussing and reflecting on the new ideas.

**ICT, change and technological innovation**

Before exploring the initiatives of TLC, it is better to clarify what we mean by ICT, change and technological innovation. ICTs refer to the electronic means for the generation, storage, transmission and dissemination of knowledge through channels such as Internet, hypermedia, and distributed online learning (Aviram and Talme, 2005). This is in line with the vision and mission of MMUST. ICTs are not only changing the way the institution function and perform its role, but also it is modifying the economics of higher education and the modality of institutional and personal relations (Espoo, 2000; Thomson, 2000).

Integration of technological change in higher education involves the consideration of at least three important dimensions of innovation that have repercussions on university institutional culture and the professional development of lecturers:

- Changes in the educational objectives and in the conception of the teaching and learning process
- Changes in students’, lecturers’ and management roles
- Changes in university organization and structure
Technology has been merged into education in almost every aspect and has also been seen as an engine for change. Understanding the process of technological innovation and change is absolutely crucial, particularly when introducing the innovation to a young institution. Technological innovation is emphasized as generation, acceptance, and implementation of new ideas, processes, products or services in an applied setting (Mohr, 1969; Thompson, 1967); or a change which involves not only a change in materials but also a complex of changes with regard to their use (Beal and Bohlen, 1968).

Technological innovation is a change for the better or something that is both new and beneficial (Havelock, 1970). Sometimes innovation and change are used interchangeably in teaching and other places (Marklund, 1972). The discussion here focuses on change in educational context, particularly in higher education institution. Rogers (1995) made it clear that an innovation is not a static object, it interacts with the context of the organization, thus a dynamic reciprocal process: The innovation and the institution change together to create something new.

Managing change and technological innovation requires multidisciplinary skills and knowledge from different backgrounds (Nadler, 1993:85-98). Change and technological innovation is not necessarily a top-down or a bottom-up approach. A horizontal approach has been employed to help increasing collaboration and peer-to-peer decisions to accept and implement change (Ostroff, 1999). Both individual, departmental and institutional change are necessary, at the level that will create an impact.

Jennings and Dirksen (1997: 111-116) also underscored that it is important to understand that change takes time, effort and commitment from all parties involved. And, that successful implementation is more likely to occur when change agents enlist the help of opinion leaders and actively address the individual concerns related to technology use by the current and potential users. Higher education institutions have adapted to a variety of issues and conditions that have required innovation and change over the past four decades. The need for transformation and change due to challenges facing institutions are extensive and intertwined:

- The advent of telecommunications and computing technology both as a learning process and a delivery system
- The continued press for diversity and new modes of delivery
- An expanded focus on higher education’s role in economic development
- The globalization of teaching/learning and research methods
- The increasing revenue-cost constraints
- The entry of communications, training and research networks and the potential of global institutions and networks
- Re-organizing the primary delivery and academic management support systems.
Casting an enduring vision and strategic framework for the effective implementation of technical innovation seems critical for ICT enhanced teaching and learning.

**The learning centre at MMUST**

MMUST was established by an Act of Parliament in December, 2006 as the 7th public university in Kenya. One of its priorities has been to improve student learning experiences through more effective use of technology in the classroom and the delivery of student services. TLC was founded on a belief that the rapid emergence of technology as an intellectual, cultural and economic force requires new types of relationships with other human beings and significant changes in societal institutions. To this end the main purpose of TLC is to organize training of academic staff in order to ensure the full utilization of the new ICTs in higher education and the skills acquired by the author in UNISTAFF, 2000 training. It is a small flexible unit of technical support and generalist educational technology support.

TLC is responsible for coordinating a series of scholarly and developmental activities and projects designed to support:

- Synthesizing current knowledge and developing thinking on institutional change and transformation
- Working with academic staff to facilitate their change agendas and learning processes
- Encouraging the design of initiatives that increase access to technology for students and lecturers
- Disseminating learning about and fostering instructional change and transformation in higher education
- Bringing together academic staff, practitioners and scholars from various disciplines to network for information sharing, content creation and collaborative research
- Instill a culture of innovation in teaching and learning in a technologically advanced environment
- A learning-centered caring community committed to continuous improvement through lifelong learning.

Thus, TLC is designed to provide experiences that support the academic staff as a model for the application of innovative instructional technology and to provide a professional development and training unit for internal and external groups and organizations. At TLC, academic members of staff share and pioneer innovative, emerging practices through best practice sharing sessions. Capacity building modules have been designed to promote team building, trust, communication, problem-solving and lifelong learning.

**Capacity building in higher education**

The main purpose of this project is to strengthen pedagogy in the university through design and implementation of a staff training programme. The target includes all the
The specific modules include:

Module I: Enhancing Teaching Effectiveness of Staff
Module II: ICTs for Capacity Building
Module III: Project Management and Data Analysis

Organization of modules

The Department of Computer Science and the Department of Curriculum and Instructional Technology are the two leading departments at MMUST that co-operate, collaborate and facilitate the program on capacity building for staff. The Computer Science staff consists of 8 lecturers, and 5 technicians and 4 part-time lecturers. The Department of Curriculum and Instructional Technology has one full professor, one associate professor, four lecturers, two part-time lecturers and one technician.

The TLC projects are facilitated by staff from various departments that form an interdisciplinary team. Computer Science Department has been carrying out successful projects in ICT enhanced teaching for the last 3 years. During this time staff training in the use of ICT was provided in the form of voluntary in-house or external workshops ranging from full-day sessions to one or two week workshops.

The year 2007 turned out to be a critical one from the view of integrating new technologies into use by all staff. A laboratory with 50 networked computer stations equipped with Internet connections was set up. University Management provided training funds for all the workshops since the major focus was to commit all staff to developing its ICT competence. The draft ICT policy also specified that all academic staff would acquire sufficient skills in the use of the ICT within the first two years of employment. These challenges were responded to by launching three specific training programmes; Senior Management ICT skills course, Computer Literacy course for all the staff and Capacity Building Module I, II and III for academic staff.

Module I

Enhancing teaching effectiveness of staff

To effectively and efficiently achieve quality education in a young university, a culture of quality education needs to be entrenched early in its formative years. One way of doing this is by capacity building through staff development as a key point in achieving quality.
The objectives of this module include:

- To assist participants in identifying the characteristics and needs of the university learner and seek to create the necessary environment to facilitate achievement of those needs
- To enable participants to acquire and update pedagogical skills and attitudes for necessary learning atmosphere
- To provide participants with an opportunity to identify deficiencies in their competence and work towards their eradication
- To initiate a joint effort of staff and management in developing a teaching/learning resource center
- To share and document experiences resulting from this programme.

The academic staff from the Department of Curriculum and Instructional Technology facilitated the module that ran for two weeks. The programme included presentations, group and individual work, practical tasks, case studies, plenary discussions and feedback from participants through sharing of experiences sessions.

The module contents include:

- Institutional/personal/self-awareness and change
- Challenges and conditions influencing teaching and learning
- The role and characteristics of university lecturers
- Course design and development
- Application of systems approach to planning, implementation, monitoring and evaluation of university curriculum
- Preparation of instruction
- Strategies for teaching and learning processes
- Communication interaction in the classroom
- Instructional media: Theories, functions and application in teaching and learning
- Designing and conducting evaluations.

Module II

**ICTs for capacity building**

ICTs have become an integral component of capacity building in higher education. ICTs are influencing and challenging the young university to a high degree. Academic staff is able to explore the potential of Internet to improve their performance in teaching and learning. The use of ICTs will also make them more effective and transparent. Furthermore, ICTs will enable them to build capacity through online research and networking.

The objectives of the module are to:

- Enhance computer skills amongst the academic staff
• Improve efficiency and effectiveness of education delivery amongst teaching staff
• Enable the participants to acquire basic computer skills
• Enhance inter-institutional collaborations and networking.

The emergence of networking and Internet have extended the computer’s reach and recast the computer as a communication tool. It is a tool for looking outward as well as inward. Linking more people and devices through a shared network alters how we work, learn, socialize, and recreate. Hence, the constant development of ICTs changes the world rapidly and puts forward the requirements for every individual. The lecturer has to adapt to fulfill these requirements and to improve the perceptions of his/her new world and to develop skills to cope with these changes. As ICT is used more in education, the lecturers’ and the teachers’ roles are increasingly integrated with those of support staff, administration and technical staff.

The ICTs for capacity building module include the following sessions:
• Presentation skills with Power Point
• Internet and network operating systems
• Use of Internet tools to communicate with students and to look for information
• Corel Draw and other graphics and illustrations.

Module III

Project management and data analysis
A large variety of data and information is being processed by multimedia information systems. This is an era of data intensive scholarship and data intensive science for high tech research projects. Data intensive techniques must be incorporated in research practice. The scale of computing, storage, and networking is changing profoundly. In an era of data-intensive scholarship, scholars in the humanities and social sciences will also need more access to large data sets, instruments and archives. Hence, data will be the problem of the future: handling larger and larger volumes, mining and visualizing complex data sets, and managing the data-sharing issues such as privacy, confidentiality and archiving. All these point to changes in the skills and education needed by the research, professional and general workforce.
The objectives of the module are:

- To enable participants to acquire computer skills in project management and data analysis
- To provide awareness on some of the data-intensive techniques in research
- Familiarize participants on Project Management Software
- Acquire basic skills on database Management
- Learn more about SPSS

Criteria for organizing successful staff training programmes

As the university purchases large amounts of technology for staff to use, it must also provide staff development in the use of this technology. As a catalyst to change in classroom practice, technological innovation can help educators promote active and participatory student learning. But the key to success isn’t in the computers, graphing calculators or access to networks and the Internet. It has liberated educators and learners whose understanding and creative use of technology can help them achieve undreamed of levels of excellence for themselves and for their students.

Some key criteria for organizing successful staff training programmes can be drawn from the experiences at TLCs capacity building modules. First of all, the commitment of management and senior administration was significant. Creating an enduring vision and strategic implementation framework for the effective staff training on technological innovations was critical. Reliable ICT infrastructure, adequate support services and incentives for staff to experiment with information technology in their classes, contributed to successful staff training. Second, the commitment of the participants was also significant: even though a few participants dropped out during the programme, the majority of the participants were committed. The following factors could have contributed: a sense of belonging to a close community of learners, collegial pressures, and university policy on ICT. The majority of the participants themselves regarded the following as critical factors in contributing to the success of the programme; the length for training, the time of the day, financial investment and staff incentives such as the possibility of obtaining points for promotion to the next grade.

All the participants thought that it was very important to have adequate time to discuss and reflect on new ideas. They also felt that the combination of theory and practice was useful for experiential learning. The lecturers learned to collaborate with others, which proved an enriching experience for many.

All the participants expressed a wish to continue in follow-up training modules. Furthermore, all the participants have been encouraged to share their experiences in seminars with a compulsory element of using power point techniques. This has inspired lecturers to integrate technological innovations in their teaching. The initial success of the capacity building modules has motivated other staff to demand similar training sessions in future that will enable more of them to participate in the training.
Some emerging factors
In technological transformation in higher education, it is necessary to address the concerns and perceptions of staff in the light of the need for changing their attitudes and ensuring ownership of the change process:

- Successful learning teams are those who can combine good pedagogic practice with an understanding of the strengths and weaknesses of different media and technologies.
- Collaboration networks that include telecommunication network service providers, policy makers and educators are needed.
- The challenge for university management is to continue to vision the future and create the enthusiasm.
- Information is no longer something to organize, transmit and memorize, but something to work with, think with, discuss, negotiate and debate with partners through networking.

Concluding remarks
The need for technological innovations in a young university cannot be overemphasized. In a world that is increasingly complex, technological and globalized, higher education institutions have the great responsibility of preparing staff and students in a more comprehensive way, for which new mechanisms of institutional collaborations and networking are essential. The transformational process takes time and institutional commitment is absolutely crucial if change is to be successful. Furthermore, staff and students must be engaged in the reforming process since reform will be based on the development of ‘learning communities’.

The academic staff members under the TLC programme work together, communicate and enhance student and learning engagement through collaborative approaches. Student collaborations (learning from students) peer education, staff collaboration (learning with staff), and professional collaboration across institutions (learning with colleagues) have enhanced learning. However, the introduction of new technological innovations requires major changes in professional roles. The need for specialized roles and the need for academic staff to gain skills and knowledge for effective use of the new technologies and the requirement for extensive training cannot be overlooked. The new technologies in global education point to a new role for management, for the lecturer, for the student and for course material. The challenge for MMUST management is to continue to envision the future.

We may conclude in the words of Postman (1995):

“The technology is already here; we must use it because it is here; we will become the kind of people the technology requires us to be; and whether we like it or not, we will remake our institutions to accommodate the technology. All of this must happen because it is good for us, but in any case, we have no choice.”

References
Innovative skills and strategies in teaching large undergraduate classes at Egerton University

Helen Omondi Mondoh

Abstract
Egerton University like other universities of the world has evolved from being elite in the 1980s, to some sort of mass production institution in the 2000s. This is made necessary in order to accommodate vastly increased student numbers and a diversified student population. Consequently, the university has to deal with large classes (more than 150). Large classes represent an anomaly, and present a special challenge for teaching staff and students at Egerton University. A lot has been ascertained and discussed at various forums at the University about the importance of quality teaching and learning; active learning, student-centred teaching, and shared responsibility for the success of student learning outcomes. The most outstanding concern has been how lecturers can personalise their teaching and make it more interactive when they have so many students to deal with. How do they deal with the inevitable corollaries of large classes - increased marking loads, increased contact time with students, and a greater administrative burden? This concern, raised many times and repeatedly by a growing number of lecturers at Egerton University, poses a dilemma. As an attempt to come up with workable solutions to the dilemma, and also as partial fulfillment of the UNISTAFF 2007 course, the author proposed a project on large classes. The purpose of the project was to design and implement an approach to assure quality teaching and learning in large classes; through use of innovative skills and strategies. The project was guided by three specific objectives. The initial successes and challenges of the project implementation are detailed and discussed in the conference paper. It is expected that the discussion will elicit reactions and also provide an opportunity for colleagues to draw useful lessons.

Keywords: Large classes, innovative, strategy, skill

1. Introduction
Egerton University is striving to become a centre of excellence in education and research in Kenya. The university was established under an Act of parliament (CAP 214, 1987) of the laws of Kenya, and given the mandate of teaching, discovery, transmission and preservation of knowledge, corporate social responsibility, and promotion of social fairness; advisory and consultancy services.

The University’s vision is to become a world-class university for the advancement of humanity. The university strives to generate and disseminate significant knowledge and offer excellent education to contribute to, and influence national and global development.
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In its Strategic Plan (2005-2015), the University has identified key strategic priorities which focus on: Academic Programmes; Research and Development; Science and Technology; Distance Education; Community, Outreach and Extension; Environmental Conservation; Partnership and Networking; Gender Equity; HIV/AIDS; The Lord Egerton Castle; Corporate Governance; Staff Services; Resource Mobilisation and Management; Quality Assurance.

The University has three divisions, namely: Academic Affairs, Administration and Finance, Research and Extension. The division of Academic Affairs consists of eight faculties namely; Agriculture (FA), Arts and Social Sciences (FASS), Education and Community Studies (FEDCOS), Health Sciences (FHS), Engineering and Technology (FET), Environment and Resource Development (FERD), Commerce (FC). The College of Open and Distance Learning (CODL) is also under this division. Working closely with the Academic Division is [1] Graduate School [2] Board of Undergraduate Studies. The university offers diploma, undergraduate degree and postgraduate degree programmes on both full-time and part-time bases.

External pressure coming in the form of rationalisation of university institutions in Kenya has led Egerton University to open more campuses, which has required more staff to travel extensively between the campuses to deliver lectures. More recently (2002), school-based programmes were launched and are being coordinated by the Faculty of Education and Community Studies. The growth has also been accompanied by dramatic reductions in funding levels from the concerned ministry. As such, Egerton has been compelled to expand her revenue base by increasing the number of self-sponsored students. These factors have worked together to alter university culture. The stretching of resources across campuses has been accompanied by a host of challenges and in particular maintenance of quality standards. The most significant challenge for Egerton and its attempt to promote access to higher education is the tremendous growth in student numbers since 1987. The growth has resulted in large classes, since the student growth has not been matched with that of the Faculty.

Students also feel that the impersonal atmosphere in large classes makes them feel anonymous, lost and out of place; and these feelings lead to decreased motivation. There are also other challenges to grapple with, namely student evaluation, assessment and feedback, student behaviour and discipline.

Many lecturers are unable and unwilling to adapt to the changing realities; many of them obstinately continue to employ teaching methods that are suitable for small classes. Although one may argue that the ideal solution would be to divide all large classes into small ones, this is not feasible. The economic and traditional realities that dictate most decisions at the institution will not allow it. There are budgetary constraints that limit recruitment of additional teaching staff and acquisition of additional teaching and learning facilities. Consequently, the move would over-stretch the existing inadequate facilities; and over-load further the already burdened lecturers. The alternative is to come up with a serious attempt to improve the situation within the realistic and comprehensive context and priorities that lecturers face at this institution.
There is very little data examining degree standards in Kenya based on student participation. However, attempts have been made in the US, the UK and Australia through various studies by, among others, Carbon, 1998; Felder, 1997 and Davis, 1993. The problem has been that most of these studies have neglected to ascertain the influence of the class size on teaching and learning, or the effects that the class size have on student satisfaction, self esteem or attitudes to the course or entire study at the university.

Another revelation has been that in identifying trends with large classes, the problem is that what constitutes a large class differs according to the discipline, the nature of the class (such as lecture, tutorial or lab work), and the perceptions of lecturers and individual students. It is further complicated by the reality that the problems usually uniquely characteristic of large classes often occur with small classes in certain situations, such as where student numbers increase markedly from one year to the next or when a lecturer meets the class for the first time, discipline, assessment and policy.

It is in the light of the above scenario that the author of this paper proposed a project that focused on large undergraduate classes.

2. Purpose and objectives of the project

The purpose of the project was to design and implement an innovative approach to assure quality in teaching of large classes; through use of innovative skills and strategies.

The specific objectives were to:
1. To conduct self-studies and document good strategies and skills employed by lecturers in large classes
2. To develop and share with Faculty strategies and skills that ensure connection between lecturers and students
3. To equip lecturers with strategic and teaching skills that will make them responsive to unusual situations that face students in large classes

3. Guiding questions

1. How do I start a semester?
2. How do I personalise the large class?
   • How can I reduce the feeling of anonymity by students in a large class?
   • How do I motivate students in a large class?
   • How do I personalise teaching and make it more interactive?
3. How do I present the material?
   • How can I improve my lectures in a large class?
4. How do I get students involved?
   • What kind of active learning activities can I/they do?
   • How can I use technology in a large class?
4. Methods, approaches and results of implementation of project

In order for the work to progress from an informed point of departure, a baseline survey was conducted to establish the as it is situation with regard to large classes. The survey provided data for those who should be later involved in the next activity: a special workshop for academic staff in the FEDCOS. The assumption was that we have faculty and students who could share their experiences with large classes. The FEDCOS staff would then be involved in the Pedagogical Skills Workshop that is usually organised by FEDCOS on an annual basis.

All shared information from the workshops was disseminated through a special report, and at Faculty get-together or board meetings. The sections that follow describe the various activities.

4.1 Baseline survey

The survey was carried out at the FEDCOS. The exercise went a long way in making objective 1 reality. Data for the survey was collected by use of questionnaires for academic staff and students in the Faculty. The solicited information from both academic staff and students respectively was based on the categories:

Academic staff

- Management of the paperwork: handing out, collecting, and recording tests and other assignments, make-up work
- Management of distractions: talking, late arrivals, early departures
- Perceived anonymity of the students: difficulty of learning names, of taking attendance, of getting students to come to class, of getting students to participate in class, of getting students to do assignments in a timely manner
- Lack of flexibility in class activities: difficulty in varying activities, in doing group work, in enhancing critical thinking and writing skill
- Use of ICT
Innovative skills and strategies in teaching large undergraduate classes at Egerton University

- Team teaching
- Diverse background and preparation of the students

**Students**
- Knowing what is relevant or important information
- Asking questions
- Hesitation in appearing “smart” to their peers
- Experience with time management, studying, assignments, or other skills necessary for success in college.
- Flexibility in participation in class activities such as group work
- Coping with perceived anonymity and their diverse backgrounds which sometimes leads them to challenge authority and to push boundaries
- Activities that they do or can do to lead to success of learning outcomes
- Stemming distractions, e.g noise, lateness, early departure from class absenteeism
- Relationship with lecturer
- Improving the classroom environment and respecting property and teaching/learning facilities.

**4.2 Special workshop on large classes**
In order to fulfill Objective 2, a special workshop was the avenue for lecturers and students to share with the Faculty strategies and skills that ensure connection between lecturers and students. The workshop content drew from what was solicited through the surveys, and further included brainstorming sessions on e-learning, and web CT.

The participants in this two-day workshop were academic staff from FEDCOS together with some selected students (class representatives) across the four year groups. The Faculty funded the workshop, which was held at the FEDCOS conference hall, and was attended by all levels of academic staff.

The broad topics for discussion included:
- Meeting a new class
- Starting a semester
- Personalising the large class
- Presenting material to a large class
- Getting students involved in a large class
- Managing a large class (discipline, attentiveness, attendance, participation and related matters)
- Recruiting and working with Teaching Assistants (TAs)
- Conducting tests and examinations in a large class
- Giving feedback to a large class.

These topics were enriched through subtopics drawn from the highlights 4.1 above.
The facilitators were mainly academic staff from within FEDCOS, who have had long experience with large classes. Students were also allowed to share their experiences with lectures on the above topics during the plenary. As expected, one outcome of the workshop was a sensitised and informed group of lecturers with new skills and strategies of dealing with large classes. The second outcome was academic staff identified as trainers during the pedagogical skills workshop in matters related to large classes. The third outcome was a sensitised group of students who could have peer influence on other students to improve learning in large classes.

4.3 Pedagogical skills workshop

In order to fulfill objective 3, the existing pedagogical skills programme was improved and exploited as the best avenue for training. Additional content area to the programmes was identified out of the special workshop, and further laid emphasis on: creating a small-class atmosphere in a large class, encouraging class participation, promoting active learning, use of resources and instruction workshops.

The Pedagogical Skills Workshop is held every year at Egerton University, since 2006. During 2006 and 2007, the following were themes during the three-day workshop:

- Role of university in a society
- Role of lecturer in a university
- University curriculum design and development
- Learning and teaching in a university
- Methods of teaching and learning in a university
- Instructional media and media commonly used in universities
- Planning for instruction in a university
- Assessment, measurement and evaluation
- Managing laboratory, teaching and practical work in a university
- Effective use and management of engineering workshops.

Participants during the first two workshops were mainly assistant lecturers. The workshop of 2006 targeted 65 but trained 60. In 2007 the target was 60 but due to other unforeseen circumstances, only 35 graduated. During 2008, this project enriched and strengthened the pedagogy program of FEDCOS through inclusion of the theme on large classes. The participants not only involved assistant lecturers but also other levels of academic staff.

The outcome of the workshop was disseminated in form of a report circulated to Faculty. Graduates of this workshop were given a semester to try out the innovative strategies and skills after which FEDCOS would evaluate the impact of the training on teaching in general, and teaching large classes in particular.

All shared information from the workshops and pedagogical programmes have been disseminated through the various media at our disposal namely: Faculty get-togethers, Faculty meetings, and seminars. Other possibilities are newsletters, bulletins, and a list-serve where members of various faculties in the university could share good practices at their various departments.
4.4 Suggested innovations by academic staff and students

Meeting a new class
Self introduction by lecturer detailing department, location of office, days and hours available for consultation is very important and must not be overlooked. The lecturer should also get to know the groups in a mixed class and the names, identities and phone numbers of the group and class representatives. During the first meeting, it is crucial that the lecturer circulates a form for all students to register their names for future reference. This builds a sense of belonging to the group.

Starting a semester
This is related to the previous point, and as such what is discussed under the immediate previous point is valid here. Besides, it is important that the lecturer distributes and discusses the course outline, booklist and relevant references with the class for clarity. It is at the start of the semester that a lecturer should spell out his/her expectations and the class should do likewise. This will later be useful in self evaluation and also student evaluation of the course. This is also the time to set with your class dates for important activities such as field trips, continuous assessment tests (CATs), class presentations, group/class/individual, assignments. You may also form groups at this time and together set ground rules. Last but not least, it is important to discuss the timetable in case of required adjustments to suit all groups in the class.

Personalising the large class
It is very important for the lecturer to learn names of as many students as possible in the class. This may sound like a tall order but it is possible if you begin by learning the names of class representatives and group representatives. You could further learn a few more names of your class each time you meet the class using the following techniques:

- Go to your lecture early and get to meet and interact with early birds before class begins
- Walk with a few but different students after every class and get to know them better
- Ask questions in class and ask the respondent to introduce self before responding
- Allow a few questions from students and ask student to introduce self before asking the question
- Take pictures of groups of students and try matching faces to names; a few at a time
- Use name tags during group activities where practicable.
The other way you could personalise a large class is through practising eye contact and whenever possible walking around the lecture room. It is also important to speak audibly and clearly for the benefit of each individual in your class. Group activities are also very important in this venture. Try as much as possible to make your lecture as informal as possible.

**Presenting material to a large class**

Most students complain about lectures, and suggest that lecturers should steer clear of lectures that are commensurate to notes taking dictation sessions. They prefer informal lectures that involve discussions, use of examples during exposition, practical and group activities. Good practices further suggested include: Use of projections during presentation where possible, improved audibility, clear writing on the writing board using chalk or pen that is legible from the back of class. Further, it is important to circulate or project lesson outlines before to aid discussions and to encourage students in preparation prior to class.

**Getting students involved in a large class**

This can be done through the following activities:

- Use class and group representatives to distribute and receive learning materials
- Embrace more group work
- Organise for individual and group assignments
- Enhance brief student presentations in class
- Organise simulations of some situations in context
- Recruit students graduating with excellent marks as TAs with the aim of training them further, and assign them groups to work with. Use them also to mark assignments to improve on feedback.
- Embrace PowerPoint presentations by students and yourself whenever possible
- Assign students tasks to find additional information on various topics as assignment

**Managing a large class (discipline, attentiveness, attendance, participation and related matters)**

A large class brings with it a lot of miscellaneous challenges. Some of the suggested good practices in management of large classes are as follows:

- Set and enforce ground rules with class; this should keep issues related to above in check
- Speak audibly and clearly
- Go to class on time and end in good time for students to run to next class
- Planning well and in good time for each class in terms of content, reference
material, teaching & learning aids, and evaluation

- Write clearly and legibly on board; choice of board and colour of chalk or pen, letter size and position (reflection or glare) and size of board are very important in this regard
- If distributing teaching/learning material, ensure adequacy
- Recruiting and working with Teaching Assistants (TAs) to assist in taking care of perceived anonymity of the students: difficulty of learning names, of taking attendance, of getting students to come to class, of getting students to participate in class, of getting students to do assignments in a timely manner
- Impromptu roll calls by lecturers to check chronic absenteeism and lateness should be embraced.

Conducting tests and examinations in a large class

- Giving feedback to a large class in good time
- Use TAs to assist with marking of assignments
- Adopt multiple choice items for easy marking
- Mix up items on multiple choice type tests and have different versions of equivalent forms of tests for the students in order to stem cheating
- Ensure that you have adequate invigilators; TAs and graduate students could assist with invigilation
- Employ other forms of assessment instead of just the traditional paper-pencil tests; projects, seminars, presentations, assignments (also online), term papers are a few examples of alternative forms of assessment.

5. Supporting factors

- The Pedagogical Programme is already in existence at the University and only requires regular updates improvement, to provide a good entry point for training of lecturers
- The Dean FEDCOS and Chairs of departments in the Faculty are already involved in the Pedagogical workshops and are aware of the existing gaps.
- The university already has a newsletter through which information could be disseminated
- The Faculty has a standing committee on publications that could spearhead dissemination of useful information related to the subject
- The Directorate of Quality Assurance at the University is very keen on quality and supports innovations in this direction. The Directorate works with my Faculty; FEDCOS to conduct surveys and I anticipate that it will continue doing the same
- Academic staff and students are experiencing a lot of challenges with growing numbers of students and are open to any ameliorative intervention
• Egerton University is keen on access to quality education and will support innovations in this direction
• The project is sustainable since it is part of existing quality interventions in the face of expanded student numbers that are already enjoying support of university management
• The university has a Webmaster and ICT specialists who with more commitment can assist in innovations of teaching and learning by use of ICT (e-learning, Web CT etc), and establishing Faculty networks through list serves

6. Challenges to implementation of project
• Lack of formalised networks within the university and with related stakeholders
• Small membership of UNISTAFF alumni in the university has slowed down on understanding of certain innovations
• Most lecturers in the university though open to new ideas, feel comfortable in their comfort zones and do not readily embrace change; some do not realise the importance of the pedagogy workshops and have to be threatened with sanctions by university management to attend the workshops; they tend to stick to old ways of doing things and implicitly but erroneously believe that their experience gives them all the skills they require
• University being slow in improving the classroom environment; for example provision of public address system, providing movable furniture in lecture rooms, timetabling with lecture hall to lecture hall distance, or weather patterns in mind; ensuring that there power outlets are functional in all classrooms at all times, providing a laptop for every lecturer (some lecturers require training on computer use) and a projector in each classroom, ensuring enough computers with internet for all students

7. Suggested adjustments to realise innovations
7.1 Student involvement
• Involving postgraduate students where possible to assist with distribution of material and assuring class participation
• Involving students who have completed their undergraduate programme and are between graduation, master programme or employment. These can be attached to the Faculty on a voluntary basis
• Involving students in Faculty workshops to share their experiences
• Recruitment of Teaching Assistants
• Increasing group work activities
• More involvement of class representatives in distributing and collecting learning material.
7.2 Faculty get-together
This is an activity where staff meets informally and share matters that affect the Faculty in a more relaxed atmosphere. The get-together can involve some partying and hence more interaction. There is a lot of sharing through such forums. This has strengthened common positive commitment. Presently, we invite staff to these functions, but an improvement would be to involve students too to make them feel relaxed among their lecturers.

7.3 Team teaching
Although this is going on, it is done in a serial manner instead of a cooperative style. A few adjustments, such as planning, implementation and evaluation in a team spirit, need to be made. The focus for this team teaching should be large classes, with lecturers in the team learning from each other’s concrete and positive experiences rather than just knowledge. On the issue of planning, detailed course outlines should be distributed to every student during the first lecture of the semester.

7.4 Evaluation
An evaluation tool given to students to monitor and give an evaluation at least three times in a semester will be useful. This may sound a bit ambitious but once lecturers and students are sensitised, it should become easier, since my Faculty has a standing committee that deals with quality assurance, and can spearhead this activity. On student assessment, use of CATs, assignments and exams should be streamlined to also improve on feedback. Assignments and project work can be given to groups.

Use a variety of techniques both formally and informally to determine how much and how effective students are learning. The formal method includes quizzes, tests, examinations, term papers, assignments and laboratory reports. Informal techniques will involve the lecturer asking questions and giving comments.

7.5 Faculty website and ICT
Some negotiation is required to this direction since the university only has the main website. University management approval is required towards this end. On ICT, the university is at an advanced stage of providing ICT facilities to every Faculty. What is required now is to train academic staff on ICT and e-Learning.

7.6 Networks
More members in Faculty and university should be trained using UNISTAFF methods to build a larger membership of REAL.

7.7 Student records
Accurate and up to date class lists and registration forms are necessary. The university should aim at providing lecturers with lists of registered students per course to be sure that the right students attend the right course.

7.8 Physical environment
The physical learning environment should be improved with regard to seating, sound and audibility, visibility of writing board, and movement within the classroom.
Furniture that allows for rearrangement for group activities is also necessary. Introduce public address system in class and maintain power outlets to allow use of projections during presentation.

7.9 Time tabling
Adjust to suit weather and group size and distance from lecture hall to lecture hall. Assign large classroom to large class; also avoid scheduling lessons in the afternoons when thunderstorms are likely to disrupt classes.

8. Outcomes
- Self-studies conducted and documentation of good strategies and skills employed by lecturers in large classes
- Strategies and skills that ensure connection between lecturers and students developed and shared with faculty
- Lecturers equipped with strategic and teaching skills that will make them responsive to unusual situations that face students in large classes

9. Lesson learnt
Large classes are a reality at Egerton University and they pose particular challenges as we have seen. We should acknowledge that teaching a large class effectively is hard work, but it is possible if one comes up with innovations that are within economic reach, and that will require minimal adjustments to the existing structures. This will minimise resistance and unwillingness to try. It is my conviction that if necessary logistical arrangements are made well in advance, and lecturers provide plenty of active learning experiences in class, instead of relying on formal lecturing, large classes can come close to being as educationally rewarding as small ones. The lecturer's satisfaction in a large class may be even greater than it would have been in a small class. I still believe that if you do it with 100 or more, then you really have accomplished something.

There are opportunities in handling large classes which will help assist lecturers improve their organisational and management skills, interpersonal skills, presentation of subject matter, learning activities & experiences, and evaluation skills.
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Integrated approach for strengthening student competences and skills towards improvement of relevance and competitiveness

Setyo Pertiwi

Abstract

The graduates of Bogor Agricultural University (IPB) are prepared to have general competences in agriculture and specific competences as formulated in the program specification of each major to make them competitive in the job market. However, results of tracer studies and users surveys indicated that about 52% of the graduates need more than four months before getting their first job and there is a lack of graduates' survival in their occupation. Besides, there were also criticisms about their technical skill, comprehension of new technology, soft skills, managerial skill and entrepreneurial skill. All of those skills are essential in employment. Therefore, strengthening the graduates' competences and skills is indispensable to improve their relevance and competitiveness in the job market.

The result of university wide self evaluation carried out in year 2006-2007 indicated that the weaknesses of the graduates are the result of various problems. Among other things there is an un-optimal education process. This is indicated by students complaining of the one-way teaching practices by most of instructors, student assignments that have low contribution to the comprehension of learning materials compared with efforts and times required to do it, and practical as well as co-curricular activities that are not integrated to build student knowledge, understanding, and skills.

To answer the challenge, a task force has been established with a specific task to make in-depth analysis of the self evaluation result and based on it formulate the plan for improving education process, especially at undergraduate level. The result was a concept of integrated approach for strengthening student competences and skills, especially through improvement of teaching and learning process with student centered learning approach covering major specific competences, soft skills and entrepreneurial skill. This is dealing with reconstruction of subject deliveries, intensifying the roles of the university farm in curricular as well as co-curricular activities, especially for enhancing students' hands-on experiences with economically profitable agricultural production scale and process, linking staff research with teaching, and involving students on technology dissemination through technological service system. The concept was implemented in the year 2008, partially funded by the Directorate General of Higher Education through competitive-based funding mechanism.

This paper will discuss the detail concept and its underlying thought, the designed activities, the selected study programs to be involved in implementing the concept, experiences of one year implementation, and further plan for improvement.

Keywords: Student centered learning, competences, hands-on experience, relevance
Introduction
The vision of Bogor Agricultural University (IPB) 2020 is as a leading higher education institution of international quality in the development of science, technology, art and human resources with tropical agriculture as its core competence. With this vision, the missions to be accomplished are: 1) To achieve higher education of high quality and relevant to the present and future needs of society, 2) To develop environmentally friendly science and technology through advanced researches, 3) To improve welfare of human beings through the application of developed science and technology, and 4) To establish civil society based on righteousness and right principles. Opportunity for IPB to achieve the vision and missions is widely open because of the country’s richness in germ-plasm and tropical biodiversity. Those are the potential resources to support food security, community health, and community income towards improvement of community welfare.

To achieve its vision and missions, one of the strategic programs developed by IPB in its strategic plan is the development of academic quality programs, covering education, research, and community empowerment (IPB, 2000). Academic activities conducted by IPB is reflected in the wide range of agricultural sciences covered by the departments and research centers, from social-economic sciences, to natural and environmental sciences, marine sciences, mathematics, and computer and information science. The study programs offer the wide range of competence currently required in the development of agricultural industries, marine resources and sustainable development.

During transition period toward full autonomy status, reengineering of undergraduate and diploma study programs has been carried out along with reorganizing departments and faculties. This was the answer of previously carried out self evaluation results which indicated that there was overspecialization on undergraduate education program and overlapped mandates among departments at IPB (Pertiwi, 2002). In this process scientific mandates of each department was revisited and redefined based on available staff’s competences as well as needs for development. This resulted in new organization of Departments and Faculties at IPB, and also the study programs offered. It is therefore, since academic year 2005/2006 IPB consists of 8 faculties, 33 departments, School of Graduate Studies, one Directorate providing general basic courses for first year students of undergraduate programs, and one Directorate managing 14 diploma study programs. Reengineering of undergraduate education program has resulted to what so called major-minor system of education program. Each department offers one major and one to three minor for undergraduate study program. With this major-minor system, the graduates of IPB are prepared to have general competences in agriculture, specific competences as formulated in the program specification of each major supported with selected additional competence (minor) to make them competitive in the job market. To ensure continuous improvement, periodic self-evaluation as well as assessment on academic programs is carried out, including tracer studies and user surveys.

Result of the most recent tracer studies and users surveys indicated that about 52% of the graduates need more then four months before getting their first job and there is a
lack of graduates’ survival in their occupation. Besides, there were also criticisms about their technical skill, comprehension of new technology, soft skills, managerial skill and entrepreneurial skill. All of those skills are essential in employment. Therefore, strengthening the graduates’ competences and skills is indispensable to improve their relevance and competitiveness in the job market.

Following the tracer studies and users surveys, a university-wide self evaluation has been carried out in year 2006-2007. This covered evaluation on student intake, education processes, as well as efficiency and productivity of education process.

The first finding was that education programs at IPB face the decrease of senior high school students interested in entering agricultural education, especially on study programs dealing with on-farm activities. This in turn limits the possibility of the study programs to recruit the best high school students. This situation also happened to other universities offering agriculture related study programs. It was predicted that the low incentive to those working on on-farm employments, issues on the failures of agricultural sector and natural resource management, as well as limited information on the advantages of agricultural sector are the roots of the problem.

Other findings were related to the disparity of quality as well as efficiency of education process among departments as the results of, among others, uneven investment for development and/or its effectiveness. Figure 1 shows the result of principal component analysis and cluster analysis on the performance of the departments. In general, there are three groups of departments, i.e., departments that still have problems on relevance, efficiency, and quality of education (group A), departments that have solved efficiency problems but still need to improve quality and relevance (group B), and departments that have been well developed in terms of quality, efficiency, and relevance (group C), and therefore ready to become IPB’s flag carrier.
A less than optimal education process was found to be the cause of weaknesses of the graduates. This was indicated by students complaining of the one-way teaching practices by most of instructors, student assignments that make a low contribution to the comprehension of learning materials compared with efforts and times required to do it, and practical as well as co-curricular activities that are not integrated to build student knowledge, understanding, and skills. What is called for is a concerted and integrated education process improvement program for improving relevance and competences.

To answer the challenges, a task force comprising 20 members representing faculties, unit responsible for planning and evaluation, and unit responsible for quality assurance has been established with specific task to make in-depth analysis of the self evaluation result and based on it formulate the plan for improving education process, especially at undergraduate level. The taskforce worked in close contact with departments and faculties to confirm the facts, make in-depth analysis, then collect, consult, and exercise ideas, until finally it formulated an improvement program approved by faculties as well as university management.
Integrated approach for strengthening student competences and skills towards improvement of relevance and competitiveness

Improvement program and rational

In general, the objective of the program is the improvement of relevance and efficiency of undergraduate education programs. Relevance is defined as the suitability of education programs with national as well as global needs, while efficiency is defined as efficient use of resources to produce quality outputs, i.e. competent graduates who have strong competitiveness in job market. The objective will be achieved by an integrated approach as illustrated in Figure 2.

The focus of the program is improving education process to equip students with knowledge and skill. Special emphasis is placed on strengthening students with field (hands-on) experiences on economically profitable farm/production activities. Considering other factors that may affect relevance and efficiency, the program also covers improvement of productivity and relevance of research, improvement of co-curricular activities, and improvement of agricultural education attractiveness. Those activities are designed to be interrelated.

Improvement of education process

Focus on improving education process will have consequences for the curriculum (learning substances), class, practical, co-curricular activities as well as facility management.

The current world of work requires university graduates to accomplish their tasks and responsibilities based on creativity and initiative, in addition to their academic training (World Bank, 2000). Besides, the graduates are also expected to have capacity for job creation (technopreneur). Therefore, beside general agricultural competence the students should be equipped with major specific competences, soft skills and entrepreneurial skill. Then, in order to excel, it is important to adopt delivery methods best suited to achieve learning objectives, by shifting from teacher centered learning to student centered learning, which accommodates the needs to balance between academic excellence and fitness for quality purpose, the needs of the students, and more flexible learning approach. This is dealing with reconstruction of subject deliveries (class and practical), including incorporation of technopreneurship concept and soft skill development on teaching-learning process, linking staff research with teaching, involving students on technology dissemination, and integrating co-curricular activities with students’ learning. The roles of university farms in curricular as well as co-curricular activities should be intensified, especially for enhancing students’ hands-on experiences with economically profitable agricultural production scale and process. This activity at the same time can be used as the medium for improving learning method based on actual problems and updating the learning materials. This is the key factor in improving efficiency and productivity of education process, also in minimizing the gap between graduates’ competences and market needs. The result will be a shorter waiting time for the graduates to enter job market.
Figure 2. Design of activities for improving relevance and efficiency of education programs
Improvement of research productivity and relevance

University research is not only for the advancement of knowledge and community services, but also has functions to educate students and prepare the new generation of researchers. Therefore, involving students in university (staff) research is indispensable. Such involvement will improve relevance and quality of the graduates. To be a good ground for student training, improvement of research productivity and relevance should be carried out by synergizing the potency owned by IPB to prepare students for academia, industry and government. Priority should be given to research activities from which the results can be utilized by direct partners as well as society. Involvement of students then can be extended to the dissemination of research result. This is related to learning by services. A system called Technological Service System should be established to facilitate the dissemination process.

Improvement of co-curricular activities

Quality and effectiveness of students’ co-curricular activities should be improved, especially by prioritizing those related to soft skills as well as entrepreneurial skill development. For this purpose, involvement of students on Students Creativity Program offered by Directorate General of Higher Education as well as other competition programs should be intensified by integrating it with curricular activities, i.e. as parts of students’ assignment. Empowerment of Students’ Coop should also be carried out by improving system and mechanism for mentoring and consultation. More students are encouraged to become involved in Coop activities since it is an actual medium for strengthening business experiences. Interested groups of students will be also facilitated with revolving funds for implementing their business ideas and plan in the teaching farm.

Improvement of agricultural education attractiveness

Basically, attractiveness of agricultural education is expected to be one of the outcomes of activities described above. Improvement of graduates' competences and skills which contribute to their competitiveness in employment in one side, and improvement of productivity and relevance of research which contribute to the university reputation as well as community welfare in other side, are expected to improve high school students’ and their parents’ perception of agricultural sector as well as agricultural education. However, this should be supported further with intensive promotion activities, especially by developing campus agro-edu-tourism which provides the community with educative recreational facilities. Teaching Farm will become one of the objects offered in which the visitors can directly get pleasure from farm activities, mostly machinery operations and harvesting. Improvement of student recruitment schemes, especially those related to partnership and talent scouting should be of high priority.
**Intended outcomes and resource required**

Improved graduates’ competences and soft skills are expected to improve their competitiveness in the job market, their survival rate as well. Furthermore, activities to strengthen students’ field experiences in economic and profitable scale of farm are expected to demonstrate to students that agriculture is one potential source for a good income as long as the techno-economics principles are appropriately applied in selecting commodity, technology and its management system. This will affect students’ confidence to choose employment in agricultural sector, or working as agricultural entrepreneur after graduation. Continuous efforts in this aspect in turn will also contribute to improve the attractiveness of agricultural education. Combined with activities to improve research relevance as well as productivity will prove the potential of appropriate technology to increase revenue, and at the end improve community welfare. The effectiveness of the program as well as its designed activities will be measured by several performance indicators. The main performance indicators are presented in Table 1.

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<tr>
<td>1</td>
<td>Applicants-Admission Ratio</td>
<td>By Talent Scouting</td>
<td>4,0 ± 3,5</td>
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<td>By Entrance Test</td>
<td>12,0 ± 9,8</td>
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<td>2</td>
<td>Efficiency in Education</td>
<td>0,20 ± 0,03</td>
<td>Ratio of number of graduates and total student body; respective year</td>
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<td>3</td>
<td>Average undergraduate study completion time (months)</td>
<td>54,3 ± 5,0</td>
<td>Moving average, last three years</td>
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<tr>
<td>4</td>
<td>Percentage of graduates with study completion time ≤ 48 months (%)</td>
<td>29,7 ± 11,5</td>
<td>Moving average, last three years</td>
</tr>
<tr>
<td>5</td>
<td>GPA</td>
<td>2,90 ± 0,11</td>
<td>Moving average, last three years</td>
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<tr>
<td>6</td>
<td>Number of staff’s scientific international publication (title/year)</td>
<td>89</td>
<td>Number at respective year</td>
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Several kinds of investment are required for implementing the programs. Those are related to resources for preparing the readiness of academic staff as the main
implementers of the program, investment on books, teaching aids and equipment for facilitating student learning and practices, and also resources for developing teaching materials as well as teaching methods. Due to limited available internal resources, IPB have to seek external resources to support implementation of the program.

Implementation

Since 1995, Director General of Higher Education (DGHE), Ministry of National Education, has introduced several competitive based funding schemes for supporting quality improvement programs in higher education. One of the schemes is PHK-I, i.e. Institutional Based Competitive Grant. The eligible cost components supported by the funding scheme are degree training as well as non degree training for staff, procurement of equipment, books, and education supporting facilities, and also incentive for staff for developing innovation in teaching.

Taking this funding scheme as opportunity to support the implementation of the development program, IPB submitted the development program as the proposal to DGHE. Considering the limited amount of grant offered, IPB should select a few numbers of study programs to be developed under support of the funding scheme. For this purpose, 4 departments belong to group B have been identified as the most suitable for the proposed program. Those are Agronomy and Horticulture, Agricultural Engineering, Animal Production Technology, and Management. Concrete activities and mechanisms relevant with the selected departments were designed to implement the concept.

After a thorough evaluation by peer evaluators, since the year 2008 the concept was implemented, partially funded by the DGHE through the above mentioned competitive based funding scheme. Support from DGHE will be applicable for 3 years period, in line with targets set to obtain significant (measurable) results of the improvement program.

The improvement program is implemented under direct supervision of Vice Rector of Academic and Student Affairs, assisted by program coordinator and person in-charge for each activity. An internal monitoring and evaluation team has been established to continuously monitor and evaluate the implementation progress, identify problems as well as its achievement.

In the first year, implementation of the program was started with a series of workshop for internalizing student centered learning (SCL) principles, technopreneurship concept, as well as soft skills development methods in academic staff. At the same time, the departments involved in the program carried out need assessment to identify as well as to focus the major specific competences to be strengthened. This was the result of the following selected focus: students taking major on Agricultural Engineering are strengthened in their design and manufacturing skill; students of Agronomy and Horticulture are strengthened on plant breeding, seed technology, organic farming as well as precision farming, while students taking a major in Animal Production Technology are strengthened in poultry production technology, as well as processing technology related with meat and dairy; student taking a major in
Management have a supplementary program in applied managerial skill, especially managing farm enterprises.

Then, the teaching staff were encouraged to develop and implement the SCL-based teaching methods which are oriented to ease the comprehension of teaching materials, thus improving knowledge, competence, soft skills and interest. Innovation on learning method should be adjusted with characteristics of the subject. For example, comprehension of pragmatical learning materials is deepened through reconstruction of practical as well as tutorial with problem-based learning or experiential learning approach.

Assignments are designed to enable students identify the existing problems in the community and try to solve it by using their knowledge and skills. Incentive was given to staff, on a competitive basis, for developing innovation on teaching method. Teaching aids, books, as well as equipment required for implementing the innovation were made ready. The capacity of technicians who will assist the instructors and serve the students in the field practices was upgraded through trainings.

Adjustment of teaching farm activities was also carried out to enable its effective integration with curricular (education) activities of the respective major. The teaching farm is functioning as production unit in which students can have practical experiences, be familiar with potential problems to be faced in actual situation, and exercise their ideas to solve the problems as well as to develop the business. For this reason, activities in the teaching farm were grouped into seed and transplant teaching industry, the teaching farm on integrated farming, the teaching farm on environmental controlled agriculture, and the teaching farm on packing house and marketing. This grouping was carried out based on majors to be served, i.e. Agronomy and Horticulture, Agricultural Engineering, Animal Production Technology, and Management, although the services are not limited for those majors. A Standard Operating Procedure (SOP) for accessing the teaching farm was developed to help all potential users.

In the research and community service area, mapping of the staff’s potential and development of research road map was carried out in each department. This will be used as the basis for developing a research umbrella as well as research agendas. It was agreed that in the first stage, research on new rice varieties will be prioritized, especially to synthesize some accumulated research results on this commodity. They will be implemented through partnership with various institutions, some on a competitive basis. Technology service system for disseminating research results is currently in conceptualization process, but dissemination of Good Agricultural Practices (GAP) on paddy rice fields has been carried out in Cianjur District, West Java.

Efforts have been made to promote the education programs through various approaches, including visiting and distributing brochures to high schools, upgrading web site, carrying out periodic open house, and intensifying student recruitment through partnership scheme.
Implementation results
A year is too short to expect significant results of the improvement program. However, to date some progress can be claimed as the results of the activities carried out in the first year.

Staff awareness and understanding on student centered learning principles generally has been improved, indicated by their efforts to reconstruct their subject delivery method by using this approach. Sixteen courses/subjects have been fully reconstructed after the plans were evaluated by a peer review team. Some of them utilize the teaching farm for enhancing field practice although still not integrated one with others. Some of the course materials have also been made available in the web, enable the students to access it in their convenient time. The courses have been implemented in on-going semesters and there are positive feedbacks coming from the students. Participation of students on scientific as well creativity competition has also increased significantly. However its impacts on students’ academic performances are not known because the semester has not finished yet.

Research activities have not increased since most of the research funding has been allocated on the previous year evaluation process. However, there has been significant increase in research proposals submitted by staff to various funding sources. This can be expected to contribute to the increase of research activities in the coming years.

An increase in application for admission has happened, especially those through partnership scheme. Since students admitted through this scheme have an obligation to return to their place of origin after graduation (for supporting regional development), IPB responded to this increase by increasing its annual intake capacity from 3,000 students to 3,400 students. This enabled the increase of students accepted through partnership scheme, from 200 persons in 2007 to 285 persons in 2008.

Further plans for improvement
In the early stage of implementation, integrated approach for strengthening students’ competences and skills has given many benefits to the involved departments, especially those related to improvement of education process, effective utilization of university resources, and improvement of research culture. Therefore, the program should be continued as planned. Involvement of some more departments in the program is also under consideration along with improvement of implementation strategies based on experiences gained in the first year. It is expected that in the long run this program will involve all departments at IPB.

To ensure the sustainability of the program, IPB should strengthen its position through the investment that has been made. Such strategy must be discussed with all university elements. The institutional commitment to sustain the program should be clearly described including the allocation of budget, staff and other resources for continuing the good practices. Partnership with domestic as well as international institutions should be further developed to strengthen the improvement program.
towards internationalization of academic programs of IPB.

References


Information systems, development and innovation in Guatemala

Carlos Perez Brito

Abstract
In Guatemala, where statistics and information systems do not yet play a central role in planning and decision-making processes, a USAID-funded project was initiated in 2007 to systematically collect data and information for the education component of the social sector. The project utilizes up-to-date business intelligence tools and software for gathering, storing, analyzing, and providing access to data. The primary outcome of the intervention has been the development of the National Integrated Information System, an online accessible platform that includes all information from the social sector (i.e., education, health, finance and population). The paper will discuss four primary factors that are considered crucial in successfully innovating information systems.

Keywords: Information systems, innovation, education, integrated information systems

1. Introduction
Despite the recognition that information is a type of resource for public policy, planning, and decision-making in the public sector of developing countries (Cruise O’Brian and Helleiner, 1980; Páez-Urdaneta, 1990; Eaton and Bawden, 1991), the general perception of its importance lags behind other resources (Camara, 1990 p.55; Neelameghan 1980 p.6). Public officers commonly do not acknowledge the role of information as a vital resource, and sometimes are unaware of its potential value. Part of the problem derives from the lack of information systems or weaknesses of the existing ones that do not help them handle different sources of information. Sometimes, public officers tend to doubt the quality of the existing data and that unreliability impacts on the overall success or failure of public policy (Martin, 1984). Information has power only when used and applied effectively (Martin, 1984; Páez-Urdaneta, 1989; Boon, 1992; Meyer, 2005), as expressed pointedly in Kevin Kelly's (2007) comment “the value of data is the number of people that use it.” This article argues that information is a key development resource in the public sector of developing countries (Eaton and Bawden, 1991). However, the extent to which public officers see information as a resource and also handle, use and apply information effectively depends upon several factors, namely, the awareness of the need for information, availability of information sources, access and accessibility to information sources, and information technology (IT), capability including both human and technological infrastructure (adapted from Bester, 2008; Weill, 1992). These categories echo those that have been identified by Brown, Chervany and Reinicke (2007). This paper presents a descriptive analysis and discussion of the National Integrated Information System (NIIS) and it is described as an innovation in the country.
This USAID intervention builds upon the understanding that the existence and improvement of all the aforementioned factors as part of an extended public information system will eventually determine the use and usefulness of information as a vital resource. The significance of this intervention is that it is not simply an IT project and the goal was not to provide IT as an end in itself, as do countless IT development projects worldwide, but more an intervention that places emphasis on information as an innovation by transforming organizational culture and structure of public institutions with the larger goal of using information for evidence-based public policies, transparency, and accountability, in this particular case, effecting improvement in the quality of public education in Guatemala.

2. Project background

The USAID has supported the Ministry of Education of Guatemala in several data collection efforts and IT projects dating back to 1990 with the initiation of the Education Management Information System (EMIS). During those years, the focus was on collecting and producing data; however, it was only in the last three years that EMIS was the target of systematic analysis to increase information usage. In 2007, as part of a project to strengthen the education sector of Guatemala, a USAID-funded project was designed to carry out policy dialogue of key reforms (more investments for the sector, teacher career development, accountability for students’ performance) needed to improve the quality of education in Guatemala as well as to strengthen the MOE’s management system including those related to information. A clear mandate of the project was to modernize the existing MOE information systems, systematically collect other relevant data and sources of information and integrate them. The project was accompanied by the introduction of the most up-to-date tools and software, including Google Earth, iThink\(^1\), and Business Intelligence (BI)\(^2\) software such as Business Objects, among others. Concurrently, the MOE began a process of re-engineering and improving quality management under the ISO 9000 norm.\(^3\)

Soon after the first phase of the project, it became clear that information was the common denominator of the entire intervention since both governmental officials as well as USAID project members clearly recognized information as a strategic resource. In fact, information management became the source of several innovations at the MOE and other key public institutions including the Ministry of Health. Management of information in itself comprised the starting point of a cycle of structural reforms to achieve transparency and accountability via improved information systems. Some of

\(^1\) iThink is a software and a tool for mapping, modeling, simulation and analysis. It allows communication between processes and problems. It was developed by isee systems. (http://www.iseesystems.com/softwares/Business/ithinkSoftware.aspx accessed January 15, 2009).

\(^2\) Business Intelligence (BI) is a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions (SearchDataManagement.com accessed December 12, 2008).

\(^3\) ISO 9000 is a family of standards for quality management systems maintained by the International Organization for Standardization (ISO) and is administered by local accreditation and certification bodies. In Guatemala, the ISO 9000 was granted by SGS, a private company with accreditation to provide ISO representation and services.
those key innovations and reforms included: full and open access to education data and information from the Ministry of Education via Internet, integration of education data such as enrolment, students’ evaluations and performance, basic school infrastructure with data from the Ministry of Finance, budgets, execution, distribution, and teachers pay roll.

One of the most visible outcomes of the intervention has been the development of the National Integrated Information System (NIIS). The NIIS serves as the platform that is accessible online⁴ and includes, so far, some of the information of the social sector (i.e. education, health, finance and population).⁵ It was originally designed and developed at the Ministry of Education but includes data and information from other ministries and public institutions such as finance, health, and the National Institute of Statistics (INE) among others. By providing the necessary tools to perform queries, reports, and analyses of the information, the innovative aspect of the NIIS enables the user to view the multiple databases as one unit while at the same time maintaining the individual formats, relationships, locations and codes of each database (USAID/AED, 2008a) (Figure 1 to 5). Although the NIIS became the focal point of the intervention, the implementation of this technology, the multiple innovations surrounding its development, and the reforms needed to make it sustainable are what deserve a systematic examination to understand the nature of information as a resource and a development intervention. To reiterate, the technological dimensions of the project were not as critical in the overall intervention as the structural and cultural transformations in creating and enabling environment to properly and effectively implement the technology. For example, the development of the NIIS is what most people in and out of the country recognized as an innovation. However, the goal of the government and international donors supporting the initiative was to develop the system to be used as a tool for decision-making. Even thought the NIIS has been adopted by the MOE, as it will be discussed later, its power as a tool decision-making power can be seen in several analytical documents and reports developed such as the Index of Municipal Educational Advancement, and the Atlas of Municipal Social Investment,⁶ that combines data from enrolment, coverage, performance and finance, the Atlas of Social Investments (USAID/AED - ICEFI 2009), education, health, water and sanitation that combines data from all those sectors as well as investment from the Ministry of Finance and municipalities.

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⁴ A password is required. It is granted by the MOE in about two days, after the potential user provides some basic data such as full name, organization, e-mail, etc.
⁶ Both can be found at http://www.proyectodialogo.org/index
3. The Model: Information as the intervention

In a context in which information is limited and not used as a vital resource, the effectiveness of its use for planning and decision-making for policy in the public sector is dependent upon four primary factors: a) awareness of the need for information that foster a environment that values and rewards evidenced-based decision-making; b) availability of information sources; c) access and accessibility of information sources; and d) IT capability referring to both human and technological infrastructure to provide reliable services.

3.1 Awareness of the need for information

Bester (2008: 39) argues that information is of no value if its usefulness is not appreciated. Therefore, information has to be seen as a resource to solve problems or achieve specific goals, for example, information to design public policy. However, the awareness of the need of information depends on people’s experience and that experience sometimes is built in environments in which evidence-based decisions and policies are not highly valued. Nevertheless, awareness can be increased. In the case of Guatemala, the awareness of the need for information originated both internally and externally. Internally, the leadership of the former Minister of Education and her core team during her tenure between 2004 and 2007 played a significant role enabling a positive environment that valued and rewarded evidence-based decision-making. Being a computer engineer by training and the former head of a research center, the former Minister had a clear idea about the nature and attributes of information and its value as a resource. As noted by many studies concerning the implementation of information technology projects (Brown, et al., 2007), the Minister’s commitment and support in implementing the information systems was essential for the success of the project. In part, the awareness on the part of the ministry was the result of an increasing demand for useful information in decision-making processes such as resource allocation based on number of teachers and students in each school, distance among schools and geographical references, schools’ physical conditions, and budget executions at school level, among others. Besides strategic decisions, the MOE needed a system to manage a sizable quantity of information generated by the largest public institution in the Central America region. An assessment of the system conducted by a key technology advisor showed that basic queries such as the number of students, teachers, and schools gave varying results depending on the division that provided the information. The authorities faced serious limitations in providing accurate information concerning resource allocation to school districts, much less the specific resources needed by them with regard to infrastructure, capital and human resources. Furthermore, other issues that were identified included extended turn-around times for information requests, overburdening of personnel by the large quantity of information requests, and disorganization of information (Arias, 2006).

\[\text{The Ministry of Education, as of December 2008, was comprised of 142,500 teachers and 8,500 administrative staff members. (MOE’s Human Resources Department. E-mail request in January 10, 2009).}\]
The external influence of the awareness came from a project sponsored by USAID called Dialogue for Social Investment and by USAID itself. It is important to notice that USAID through different projects has funded information collection and information systems in the education sector for the past 15 years. For this reason, the MOE is one of the few Guatemalan public institutions with education data since then. The interaction of the three parties involved in the project, the MOE, USAID and the Dialogue Project resulted in the creation of an information community with similar information needs, whose members were eager to generate information and knowledge about the education and social sector of the country. This information community, in addition to the strong leadership mentioned above enabled innovations and changes brought on by the introduction of new technology with organizational restructuring. Even though resistance to such changes was expected, a later survey sponsored by USAID on the topics of ISO 9000, NIIS and system modeling found a very positive self-reported attitude toward the use of computers and information technology (IT) among key informants many of them identified as early adopters (Trujillo, 2007). Those key informants represented government authorities, members of the implementation team, personnel from international donor agencies, and users from USAID and other USAID projects (Trujillo, 2007). Using a Myers Briggs Type Inventory (MBTI) personality type to show attitudes toward change, the survey also found that two-thirds of the informants (66.67%) have personalities less resistant toward change; in fact, most of them were clustered around personalities associated with “innovators” and “early adopters” (Rogers, 1964:185). Although additional research is necessary, the presence of a highly motivated group with a strong tendency to use IT, whose personality types were associated with innovation, was probably an important success factor in the development of the NIIS because very little resistance was perceived, contrary to expectations.

Subsequently, however, at the time of writing this paper, the expected resistance to the structural transformation associated with technological introduction and innovation was indeed encountered. This came in the context of changing government administrations at the beginning of 2008, when others consequently replaced the strong political leadership that was one of the internal engines behind the successful project implementation. In fact, the MBTI personality types from personnel from the current administration are not strongly associated with “innovators” (Trujillo, 2007).

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8 More information about the USAID/Dialogue for Social Investment Project can be found at http://www.proyectodialogo.org/

9 As defined by Bester (2008, 38), information community refers to an environment where groups of people are aware of the importance of information, interacting as a team to access information. This, in turn, enables them to fulfill their needs, thereby facilitating their development.

10 According to Rogers (1964), innovators are the first individuals to adopt an innovation. Innovators are willing to take risks, youngest in age, have the highest social class, have great financial lucidity, very social and have closest contact to scientific sources and interaction with other innovators. Early adopters. This is second fastest category of individuals who adopt an innovation. These individuals have the highest degree of opinion leadership among the other adopter categories. Early adopters are typically younger in age, have a higher social status, have more financial lucidity, advanced education, and are more socially forward than late adopters.
Similar types of resistance to those discussed by Joia (2007) and Markus (1983) were unofficially reported to USAID and project staff, including people-based resistance that can be attributed to a lack of training and first-hand knowledge about the systems, and political resistance associated with the change of government and administration. However, at this point, no formal studies or analysis on the issue of resistance to the innovation have been conducted.

### 3.2 Availability of information sources

According to Bester (2008, p. 39) unless information sources are available to and accessed by the public, they are of no use. The external leading experts of the USAID Dialogue project carry out a workshop to identify information needs among the different units of the Ministry of Education. The workshop included an informal diagnosis and analysis of the traditional methods of gathering, retrieving and disseminating information within the MOE. It also included an inventory of equipment, databases, human resources, processes, and electronic communication networks. As expected, the analyses showed that there were different individuals and units responsible for providing information and were in isolation from one another. Moreover, because data were sourced in different formats and software (on paper or in Excel, SPSS, Access, Oracle, SyBase, SQL Server, etc.), the diverse types of data were not integrated with each other.

Though the MOE has collected information for the past 15 years and maintains important databases on education indicators such as enrolment, coverage, completion and investment, very little analysis was conducted internally using those data. In addition, the number of staff members with the adequate expertise to develop strategic reports was very small. Consequently, the MOE faced difficulties that stemmed not only from data scarcity and difficulty of access, but also from the absence of relevant expertise necessary to transform data into information and make information useful as a strategic resource for public policy.

### 3.3 Access and accessibility of information sources

To give access as the way to provide information to the public (internal and external) is a first step to begin defining the relationship between institutions and users. However, more than access, accessibility is a critical second step to ensure that users and potential users are given assistance to overcome initial limitations. Bester (2008, p. 39) argues that it is also important to distinguish between access and accessibility of information because the public might have access to data and information, but if the language is foreign and not understandable there is no accessibility of the content. During most of the initial implementation phase, the issue of access was considered the primary challenge to overcome, and thus in recurrent meetings; analysis of the best ways to provide access to available data dominated the discussions. Many members of the team believed that once the issue of access was resolved, most of the problems related to information would dissolve as well. Likewise, in the MOE context, the traditional problems of data access were reduced to hardware, software and human resource issues rather than meeting the demand for information. The model for data access in Guatemala was not different from many countries in which requests of
Information usually follow a linear process that starts from politicians and government authorities going to analysts, planners or advisors, and then on to IT personnel who extract information from its storage location. Under this model, the IT personnel are the gatekeepers of information access, and they see themselves as the owners of the information. Decision makers’ incapability or reluctance to use data as a resource and the existence of a culture that does not value evidence-based decision-making exacerbates this model. Similarly, the IT personnel are the owners of the solutions as well as the reporting, an inefficient process that could take weeks or even months. Under such organization culture, IT personnel power comes from their knowledge of data availability despite their limited production of information and knowledge. Yet the organizational structure dictates planners, analysts, and researchers to depend on them for access to or production of raw data reports.

The inability to present evidence and key information to support new educational programs put high pressure on its information systems. The information team proposed a model in which access to information was less restricted, creating a web intelligence interface with greater accessibility to the database warehouse (See figure 3 and 5 Annex 1). Besides access to databases, data sets and special reports were created to supply an increasing demand for information on specific topics such as coverage, investments, report cards, and evaluation on students’ performance. In terms of accessibility to MOE’s internal users, special attention was given to produce easy-to-read reports integrating the most common data and statistics requested by MOE’s authorities. In terms of public information, one of the first reports produced using the NIIS was the Index of Municipal Educational Advancement (2008) that continues being an important document to analyze educational investments at local level.

This proposed model bypassed IT personnel, at least in terms of generating information, because more attention was given to access, accessibility and use of information than continuing the traditional linear model of interaction between the system and the IT personnel. The idea was to create a new pattern of interaction with the information systems in which the internal political variant was reduced and more people were given full access to data bases and information. In fact, both the development of the NIIS as well as the effort to certify the MOE under the ISO 9000 norm were viewed as vehicles for innovation and promoting organizational change as both reforms were undertaken concurrently, complementing each other. Because information was considered a strategic resource, the NIIS was designed from a reactive and interdependent perspective (Weill, 1992, p. 13) in response to the MOE’s development strategy, with the goal of reducing time and turn-around of information requests, enabling the foundation for future application systems that support educational processes, and providing flexible access for later and expected uses. This challenge generated one of the most important innovations implemented by the team: the use of BI solutions and technologies in the public sector to integrate educational data.
In 2007, the MOE became the first public institution in Latin America to use BI applications for gathering, storing, analyzing, and providing educational data access to internal users and the general public through the NIIS. Before 2007, there was no evidence that other ministries of education or even public institutions were using BI applications for integration of educational and social data. Business Objects' representatives to the region did not know about any other public institutions using its software. In fact, public sector was a very small part of its business portfolio in the Latin American region. Several public organizations followed suit and appropriated the BI approach including some private companies. By 2008, the Ministries of Education of El Salvador and Costa Rica and the Ministry of Health in Guatemala had adopted the technology and innovation and began its own implementation of information for decision-making. Contrary to what Joia argues that government organizations adopt the same modernization tools as those used in the private sector, particularly business models and technologies such as the internet (Joia, 2007), in the case of the MOE, it was to the contrary. After the NIIS's implementation was completed, the MOE received private sector delegations to observe firsthand the information system and applications. This situation deserves further research and analysis in order to document collaboration and cooperation efforts of government to government (G2G) and government to private sector (G2PS) (Joia, 2007). In October 2007, almost at the end of the initial implementation phase, the Minister of Education requested to USAID the acquisition of a universal access license to the Business Objects' software in order to provide unlimited access to the general public of all educational information accumulated over the years. The only restriction is MOE's request that all users have to be registered and provide some basic data in order to provide a password to the entire system. The NIIS was inaugurated and presented to the press with the integrated databases and information on education, finance, teachers, infrastructure, population and several household surveys developed by the Guatemalan National Statistics Institute (INE).

3.4 IT capability: human and technological infrastructure

Weill (1992) says that IT infrastructure includes hardware, operating software, communications, and other equipment to enable business applications. However, he argues that a mortar is required to bind all IT components into robust and functional IT services. The mortar includes a specific body of knowledge, skills sets and experience defined as the human IT infrastructure. Sometimes IT development projects give excessive emphasis to technology without much care for the human dimension, treating hardware and knowledge as a commodity to be transferred (Chatway and Wield, 2000). In fact, technology transfer is one of the most popular subjects in development studies and has become a deliberate action of development agencies of all types (Wilson, 2002, p. 219). For that reason, IT capability is often

12 The diffusion of the innovation in each of the sectors and countries deserves further analysis since it provides important knowledge about treating information as a development intervention.
discussed solely in terms of the technological dimension. However, the human infrastructure is just as important, if not, more critical, in order to achieve successful implementation of IT projects (Weill, 1992). Though a core team of individuals with the technical and managerial expertise required to provide reliable services was present, a more extended human IT infrastructure was needed to increase usage, integrate policies, planning, design, construction and operations and technological capability necessary for a viable IT infrastructure. For that reason, soon after the official presentation of the NIIS, the attention shifted from learning about the technology to learning how to use the technology. It is important to notice that, initially, most of the effort focused on explaining the new technology that was adopted. However, in order to increase use, acceptance and routinization (Cooper and Zmud, 1990; Dasgupta, 1997) a comprehensive training strategy was developed to respond to the increasing pressure to make investment in the new technology relevant to more users internally and externally. The MOE and SAID/Dialogue Project carried out a series of training workshops for potential users from universities, research centers, public institutions, and civil society organizations and NGOs. After more than 10 training workshops, USAID also sponsored a one-day conference on information systems for decision-making with all participants in the training workshops. The goal of the training strategy was to strengthen basic competencies and minimal technological learning about the new system, its tools and features. However, it was clear that development of technological learning would require longer assistance and a different approach because it is associated with human capital, human resources, and extended physical and social networks needed in order to create new information and new knowledge (Pérez-Brito, 2007, p. 381). The idea of integrating data and information from external sources beyond government institutions was defined by the USAID/Dialogue Project as a “data club” in which the Dialogue project will invest in training of users, integrating information and providing technical assistance to organizations, (public and private) if those institutions agreed to provide full access to their databases and information permanently and freely. In return, institutions’ part of the data club will have full access to everybody else’s information. In fact, this data club idea became the strategy to first engage the Ministry of Finance, the Ministry of Health and Secretariat of Planning to provide access and integrate its databases. Although, the data club concept has worked so far, it is clear that a more formal and legal framework needs to be defined by a competent body in order to secure access and integration procedures and minimize political risk.

Government institutions as a collection of public agencies and units, each of them with their own information and knowledge, must ensure that agencies are linked to share their explicit knowledge and experiences as a collective action (Joya, 2007 and Olson, 1965). The rational is to make people participate in an extended information community by sharing information as a way to secure personal benefits resulting from

13 Diffusion of IT in an organization: a) Initiation: Identification of Problems and Solutions; b) Adoption: Visible Organizational Support; c) Adaptation: IT Modifies Organizational Routines and Organization adapts to IT; d) Acceptance: Employ IT at work; e) Routinization: IT is part of daily activities; f) Infusion: Organization realizes increased effectiveness from IT.
receiving and giving access to data and information from other institutions (Pérez-Brito, 2004, pp. 23-33). In addition, it is important to recognize that diffusion of any innovation sometimes requires changing attitudes and perceptions attached to personal experiences and beliefs. In this context, training as a way to increase usage, can be limited by existing cultural and organizational structure that do not allow sharing knowledge and experiences in a collective action or not value or reward evidence-based decision-making. Therefore, the training strategy aimed to integrate all of the explicit knowledge and experience from staff at different levels of the organization is critical in order to sustain continued changes and diffusion of the innovation in the organization.\textsuperscript{14} USAID/Dialogue Project designed three types of training courses according to the nature of the target users: a) technical training on structure and analysis, which was developed exclusively for staff and external users with a high level of technical expertise and who have the responsibility to analyze information and develop reports; b) training on report and interpretation for mid-level managers and researchers, the goal of which was to provide information about the technology and its different features, how to use it to create basic reports, how to access data and basic analysis of reports; and c) a help package, which was less than a course because its purpose was to orient the general public in the use of the web intelligence unit, how to navigate the site, and how to find information.

Despite the NIIS being a user-friendly technology, it still requires a minimum set of qualifications to use it. As noted by one of the key IT experts, aside from the integration of state-of-the-art technology such as business intelligence and significant external technical assistance, most of the NIIS components already existed but were isolated from one another (Somerville, 2008). In fact, Somerville believes that the real success in the design and development of the NIIS relies on the knowledge, experience, education, creativity, and motivation of many of the MOE staff that have the specific body of knowledge, skill sets and experience (Weill, 1992). Moreover, the external technical assistance team simply served as technology brokers to put old ideas together in new and invaluable ways (Hargadon, 2003).\textsuperscript{15}

Guided by Kevin Kelly’s (2007) words, “the value of data is the number of people that use it,” the second phase of the project consisted in creating a network of users among the educational community of Guatemala and elsewhere in order to consolidate the NIIS and integrate more data and information available from other sources, in effect, expanding the information community. Responding to a request from USAID, a proposal was developed to strengthen and expand the NIIS. The proposal included an analysis of scenarios and several considerations to consolidate the overall intervention in the long run: technical considerations such as basic hardware, internet, and intranet; political matters such as the integration of data from external sources, access, and use; institutional issues such as negotiations with the

\textsuperscript{14} Diffusion of Innovation is a theory developed by Everett Rogers of how, why, and at what rate new ideas and technology spread through cultures (Rogers, 1964).

\textsuperscript{15} The concept of technology brokering is the ability to creatively recombine ideas, people, and objects from past technologies in ways that spark new technological revolutions by exploiting existing networks and the social side of the innovation process (Hargadon, 2003).
political leadership and their role; legal challenges addressing the lack of a legal framework to expand the NIIS to other public and private institutions; cultural aspects including the perception and value of information as a resource and the organizational culture of institutions; and financial considerations consisting of the amount and sources of national or international funds required for the expansion and scaling up (USAID/AED, 2008b).

The technological infrastructure of the NIIS includes a series of Business Intelligence technology that provides for the organization, administration, access, manipulation, queries, and visualization of data. Some of its main characteristics are: Unification of all the data available, establishing standards for the collection of new data, regardless of their original format; Integration of data under a common structure establishing a new data universe and a new master catalogue with individual coding; Provide tools for links, queries and reports increasing transparency of data base formats for the planner and analyst; Provide direct access to data through the intranet or internet enabling users to visualize all the data available; Information technicians are not necessary for end user use (USAID/AED, 2008a). The NIIS was implemented in five different steps:

1. Diagnosis of information needs among the different organizational units including an analysis of traditional methods of gathering, retrieving and disseminating information. It also included an inventory of databases and equipment (database servers, data formats, and storage), human resources, organizational processes, and electronic communication networks. All relevant parties who produce data participated in this process (Figure 1 and 2).
2. Integration of data from different sources within the MOE, including data already available and from other relevant public institutions (Figure 3).
3. Linkage of all databases creating a new unique data universe with all the possible education relations (Figure 3).
4. Development of an interface with query and report tools, which allows for user-friendly data analysis (Figure 4).
5. Design and implementation of a training program for use of the integrated data platform (Figure 5).

4. Conclusion

As an externally introduced intervention, the goal of the development project was not to provide IT as an end in itself, but rather to foster the effective use of IT as a means to achieve evidence-based public policies, transparency, and accountability in the relevant public institution, namely in the Ministry of Education of Guatemala, with the long-term effect of improving the quality of public education. With an emphasis on information as a development intervention, the organizational culture and structure of public institutions were transformed in order to create an enabling environment to properly and effectively implement the technology. Of the four primary factors most relevant in the engendering of effective use of IT in public policy, as discussed in the
paper, the focused efforts on improving access and accessibility as well as strengthening the human infrastructure proved most vital in the successful implementation of the project. As noted before, the NIIS and the development philosophy and concept behind has been already exported to other sectors and countries such as the Ministry of Health in Guatemala, the Ministry of Education in El Salvador and Costa Rica and there is interest to replicate it in Honduras, Brazil, and Paraguay.
Annex 1.

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