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Opportunities and problems of comparative higher education research: the daily life of research

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Abstract Higher education had a predominant national and institutional focus for a long time. In Europe, supra-national political activities played a major role for increasing the interest in comparative research. Comparative perspectives are important in order to deconstruct the often national perspective of causal reasoning, for proving benchmarks, for theory-testing, for opening up the horizon for potential reforms, and for the analysis of the growing internationality of higher education. However, many practical factors make comparative research on higher education vulnerable: decentralized funding, coincidental compositions of participating countries, difficulties of reaching a conceptual and methodological consensus in multicountry research teams. Often, comparative research projects take quite a long time, before the major findings are published eventually. Moreover, often data are presented across countries without sufficient explanations of the respective context. Comparative research on higher education, thus, often does not fulfil the initial hopes, but obviously is such an important approach that efforts are indispensible to cope with the challenging conditions.

Keywords Higher education research · International comparison · Research methodology

Introduction

Comparative research plays an important role in the humanities and the social sciences. This is due to the fact that our attention tends to focus to cultural and social phenomena in our vicinity, e.g. literature in our language, social interaction according to our customs, etc. Special effort is needed to look beyond our vicinity, such as learning other languages and

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undertaking field research in an alien environment, in order to gather information on phenomena beyond our vicinity, and special additional intellectual effort is needed in order to understand whether such phenomena are merely curiosities from far away or relevant for us.

There is an abundance of literature in various disciplines of the humanities and social sciences about the character of comparative research. Without referring to the details of these discourses, we can view these conceptual discourses as convincing in making us aware that comparative research is not a branch of research with a unique theoretical background; rather, comparison is a *basic logical approach* of observation and interpretation. Additionally, comparative research establishes a *borderline between a familiar cultural and social space and other non-familiar cultural and social spaces*; thereby, most frequently a nation is viewed as the familiar space, and comparative research is "international comparative research" in comparing phenomena across nations.

Moreover, comparative research is likely to be a *specific branch within a discipline*, if collection of information and interpretation of findings predominantly focuses on a specific cultural and social space—for example, if law concentrates on the legal system of a specific country. In that case, comparative analysis is likely to be undertaken by a small, additional branch of that discipline. Finally, comparative research in the humanities and social sciences is characterized by two features: by enormous *efforts needed to collect a breadth of information* and by a continuous *debate on the relevance of knowledge beyond vicinity for understanding one's ways of thinking, culture and society*.

Comparative higher education research, obviously, *does not differ fundamentally from other comparative research* in the humanities and social sciences (cf. the overview in Teichler 1996a); yet, it might differ gradually from what we could consider the main stream. We have to take into consideration that higher education is a relatively small area of research—possibly too small to encourage the development of clearly distinct branches such as comparative research as compared, for example, to educational research where a sub-discipline of comparative education has emerged (see Mitter 1992). But is worth noting as well that higher education research is an area of research prone to pay attention to international comparison because higher education is a social arena in which border crossing (knowledge transfer, mobility and cooperation) is a matter of procedure.

In the first part of this article (The growing interest in international comparison, Key purposes and potentials of undertaking comparative research, Key purposes and potentials of undertaking comparative research, Key purposes and potentials of undertaking comparative research sections), a general account will be given on comparative higher education research where these issues of a small field as well as of the internationality of higher education come into play. Thereafter (Key purposes and potentials of undertaking comparative research, Key purposes and potentials of undertaking comparative research, Is comparative higher education research exceptionally vulnerable?, Notwithstanding: the remarkable benefits sections), the argument will be presented that comparative higher education research has a third characteristic: the actual comparative empirical research processes turn out to be enormously complicated. It has to be admitted from the outset that evidence for this third issue cannot be provided at ease. Most research reports actually do not inform about the daily life of research and the complications incurring; moreover, the analysis focus on the case of higher education research and consequently does not provide information about similar issues in other branches of comparative research in the humanities and social sciences. Yet, the findings might suffice to support the view that more attention should be paid to the actual problems of the daily life of comparative higher education research in order to eventually find ways for improvement of this relevant branch of higher education research.

The growing interest in international comparison

About five decades ago, most publications on higher education—no matter whether they were written by policy makers, practitioners, journalists or higher education researchers—had a national focus or addressed smaller units—e.g. individual universities, individual disciplines, individual study programmes—within a country. If, for example, the difficult route between the doctoral award and the appointment to a professor position was discussed, no country was likely to be named at all in such a publication; rather it was taken for granted that one's own country was meant. And if occasionally somebody argued that the route looks differently in another country, he or she could be sure to get the reaction: "This cannot be compared".

This strong *national focus* of the discourse on higher education in the past can be viewed as a surprise, because higher education traditionally can be considered as a sector less bound by national barriers than most other sectors of society. The logic of science and various disciplines are characterised as universalistic. Search for new knowledge all over the world is conceived as necessary in order to be on the cutting edge. Academics can transgress borders in their professional career relatively at ease as compared to other professions. And temporary visits abroad of academics as well as temporary study abroad have a long history of being regarded as beneficial. Cosmopolitan values are believed to be more widely spread among academics than among most other professions. International reputation is considered to indicate an exceptional quality of academic work (cf. Teichler 2001).

However, the regulatory and funding systems of higher education are national as a rule. Curricula vary between countries more strikingly than one would assume according to the knowledge system. Clark Kerr (1990), in describing this divide of national and international dimensions, noted a conflict between "the internationalization of learning and nationalization of the purposes" of higher education.

Over the years, *interest to look across countries increased* in the domain of higher education research as well as in the public policy discourse. This can be described in terms of "trends". Higher education changed so quickly and dramatically since the 1950s that the confidence was shaken that one just could go on as in the past, and it seemed natural to look around how the others cope with these changes (see Mitter 1992, p. 1,790). International experience extended through media reports, increasing cross border travel opportunities and growth of international trade. The break through of information and communication technology made knowledge all over the world accessible. English became increasingly the lingua franca of academic communication. Finally, the belief spread that we are increasingly embedded inevitably into global trends, forces and interactions—no matter whether the terms "globalization" or "global village" might be viewed as characterizing this situation more appropriately.

One can also describe this growing attention being paid to a look across borders as the result of policies deliberately counteracting the idiosyncrasies and the relative isolation of national systems of higher education. In Europe, different *supra-national actors* were the major players in this direction. We can identify *five most influential activities* of that kind within four stages of development (see Teichler 2011).

In the first stage, efforts were made to increase the mutual understanding between the various European countries. Activities were undertaken to facilitate student mobility in the hope that knowledge of other countries would dilute prejudices and increase sympathy for other ways of life and thinking. Since the early 1950s, the Council of Europe promoted conventions to be signed and ratified by individual countries for the *recognition of study*—more precisely for the recognition of prior education as entry qualification to higher education, of periods of study for mobile students during the course of study, and of degrees for mobile graduates. Similar activities were undertaken subsequently by Eastern European countries and across Europe with UNESCO involved, and eventually led to the Lisbon Convention for the recognition of studies in 1997 (see Council of Europe 1997; Teichler 2003).

In the second stage, since the 1960s, most Western European countries as well as market-oriented economically advanced countries outside Europe have collaborated in the search for the best ways to accommodate the quantitative expansion of student enrolment in higher education thereby aiming both, to contribute to economic growth and to the reduction of inequalities of educational opportunities. The OECD suggested expanding the enrolment capacity of higher education through the upgrading and the extension of relatively short study programmes—as a rule at institutions without a close link of teaching and research, and various European countries opted subsequently for a diversification in higher education through institutional types (see Papadopoulus 1994).

The third stage was characterized by increasing cooperation, mobility and the search for concerted European dimensions of higher education. This has initially been put forward in the European Union since the 1990s. The ERASMUS programme, inaugurated in 1987 for the promotion of shortterm student mobility within Europe, is the most prominent example (see European Commission 1994; Wächter 2008).

In the fourth stage, the individual European countries jointly aimed to pursue similar higher education policies and to strive for a system convergence. The Bologna Declaration of 1999 called for the establishment of a common cycle structure of study programmes and degrees (see Curaj et al. 2012). More or less concurrently, in 2000, the European Council (the assembly of the heads of governments of the countries of the European Union) signed the Lisbon Declaration. Accordingly, public and private expenditures for research and development should be increased on average to three percent of the Gross Domestic Product by 2010, thus helping to make Europe "the most competitive and dynamic knowledge-based economy of the world" (see European Commission 2005). These European campaigns obviously were ambitious in their intention to increase common characteristics of national higher education systems in Europe.

In many countries, *higher education research* has remained until the 1970s a *very fragmented and parochial area of research* which hardly deserved the umbrella term "higher education research" (see Fulton 1992; Teichler 1992). There were varied individual projects in many countries (see the literature review in Nitsch and Weller 1970–1973), but Burton Clark's initiative in the early 1980s to mobilize trend reports from the key higher education researchers at that time suggests that higher education research was only a visible entity in select Anglo-Saxon countries (Clark 1984). Since the 1980s, however, higher education research spread more widely across countries (see Sadlak and Altbach 1997; Teichler and Sadlak 2000). Many projects continued to focus on individual countries or phenomena within individual countries as one might expect, but some comparative interest has already become visible reflecting a search for most "modern" solutions of higher education. Finally, the foundations of the European Association for Institutional Research (EAIR) in 1979 and of the Consortium of Higher Education

Researchers (CHER) in 1998 were also influenced by the idea that the national communities of higher education researchers were so small in various countries that international collaboration in such academic associations was necessary for an acceptable minimum size for fruitful collaboration. This, of course, led to a *stronger interest in comparative analyses*, as for example the account of the CHER conferences of 1988, 1994 and 1995 shows (see Neave and Teichler 1989; Teichler 1996b; cf. also Begg 2003 as regards EAIR as well as Kehm and Musselin 2013 as regards CHER).

Finally, the major encyclopedias on higher education published since 1990 (Altbach 1991; Clark and Neave 1992; Forest and Altbach 2006) can be viewed as efforts to underscore the value of analysing higher education in comparative perspective. This holds true, though many of the individual articles of these encyclopedias are confined by limited comparative knowledge.

Key purposes and potentials of undertaking comparative research

Comparison is a key activity of reasoning. Goedegebuure and van Vught (1996, p. 371) wrote: "Making comparisons among entities and units is one of the crucial aspects of scientific analysis", and there they quote Swanson who had argued in 1971: "Thinking without comparison is unthinkable".

The simple function of comparative research is to make us *conscious of our permanent ignorant comparative reasoning*. We often argue, for example, that "junior academic careers are long and risky" without explicitly stating what we would consider shorter and less risky and what is really worth to be compared.

Additionally, comparison—and we more or less always mean "international comparison", if we talk about comparative higher education research—is needed *to deconstruct assumptions about the general and universal nature of certain phenomena*. For example, even the most widely used terms such as "universities", "students" and "professors" have different meanings from country to country.

Beyond that, such a *deconstruction* is even more needed *as regards assumed causal relationships*. For example, some persons believing to be experts argue that students put more efforts into study, if they have to pay tuition fees. Comparative experts easily can pinpoint countries where this causal relationship is widely believed (for example the U.S.), but they can also name countries where students are believed to study intensively without paying fees (e.g. most Northern countries in Europe) as well as countries where students pay high fees, but do not spend so much time on study according to available surveys (e.g. Japan).

Further, a comparative discourse is often loaded with values—notably beliefs that higher education in the home country has many strengths or, in reverse, complaints that higher education in the home country is extremely weak and in need of reform. Deconstruction of that kind *helps challenge what I like to call "comparative chauvinism"* on the one hand *and on the other "comparative humility"*.

Also, comparative research is often called a *"goldmine" for identifying somewhat which we have not known* before in our vicinity. We detect that there is more than one option. And we might even get aware of "functional equivalences", i.e. different mechanisms serve the same purposes (or, in reverse, how identical mechanisms serve different purposes from country to country).

One might add, in coming back to often value loaded discourses in higher education, that comparison is often taken for *"benchmarking"* or for identifying "best practice". Comparison is crucial, if one wants to find the "best solution".

Similarly—somewhat less normatively—we are interested to find out the areas in which *common or "convergent" trends* occur worldwide or among countries which we take serious as comparable (for example economically advanced countries). In contrast, we might identify areas where variety persists or even grows.

Moreover, international comparison is *indispensible for the analysis of macro-societal phenomena*. The whole country is a single case; therefore, in order to include more than one case, we are bound to do comparative research between different countries. If an expert described the higher education system of the United Kingdom of the 1980s as "binary" (i.e. characterized by two types of higher education institutions), she or he would need other configurations in other countries,.e.g. "unitary" in Italy or "stratified" in Japan to justify that characterisation.

Ninth, international comparison can be highly valuable for the development of theories—in this context of theories in the area of higher education research. On the one hand, comparison has a deconstructive function in making clear often that certain features of higher education assumed in theories turn out to be inappropriate generalisations based on a few cases. On the other hand, the discovery of similarities, dichotomies, etc. across countries can turn out to be heuristically valuable for the development of new theories. Comparison can be a first inductive step towards theory development.

It is should pointed out as well that international comparison, in principle, can be the *basis for theory-testing*. One can try to figure out causal relationships by comparing causes and effects across a sufficiently high number of country cases. For example, one might test whether the assumption is true that investment into higher education leads to economic growth by different rates of expenditure for higher education at a certain time (or a certain stage of economic development) and different rates of economic growth some years later.

Last but not least, we often note *projects on the internationality or the globality* of higher education in recent years (see for example van der Wende and Huisman 2004–2005). They *do not differ in principle from comparative studies* with other thematic thrusts. However, two thematic specifics are noteworthy: They are likely to start off from the assumption of a high degree of similarity across countries to be emerging, and they have to be cautious not to be lured in by this assumption. Moreover, projects on mobility often compare combinations of two countries with other two-country combinations. For example: Do German students studying temporarily in France believe that they learn more abroad than in a corresponding period at home than British students studying temporarily in Spain (see for example Teichler and Maiworm 1997)?

We do not claim that this list is complete. We are confident, however, that it covers the most frequently voiced arguments in favour of conducting comparative analyses in the area of higher education research.

Typical dangers and pitfalls of comparative research

Yet, one cannot merely name the potentials of comparative higher education and call for an increase of research activities in this domain on that basis. Obviously, there are *dangers and pitfalls of comparative research* in comparison to research on one's vicinity. Looking back on many discussions on the state of higher education research the author of this article is convinced that the following cautioning arguments are voiced frequently.

Comparative research certainly often does not fulfil the expectations, because many studies are undertaken which could be called *"higher education abroad":* Detailed descriptions on a single other country without or at most with occasional comparative reasoning. To return to the previously named example: A scholar from another country analysing higher education in Germany certainly will hear and eventually report that junior academic careers in Germany are long and risky, but she or he following the mode of "higher education abroad" is more likely to report who in Germany has stated that argument than examining whether it is appropriate in comparison to many "comparable" countries.

Additionally, we also might consider it a weakness of comparative research, if *scholars are not even aware that they work in the domain of comparative analysis*. Many scholars argue in describing their home higher education system to a home audience or even to an international audience, without being aware that their arguments are shaped implicitly by international comparison. To return to the example above: If German higher education researchers tell a German audience that junior academic careers in Germany are long and risky, they often do this without noting that they have made a comparative claim that they have not really examined.

It might be added here as well that comparative studies are *often characterized by a lack of information*. In studying other countries, we become aware of the fact that we know very much about our own country without systematic information gathering, because we have rich experience. In studying another country, though, we cannot draw from such a wealth of experience and there often undertake analyses with a lack notably of contextual knowledge and understanding.

Further, comparative studies, notably those undertaken by single scholars, often show a *lack of awareness of the national or cultural relativity of terms and concepts*. Even with respect to the most obvious terms, many scholars arguing comparatively even do not know, that a term like "tertiary education" or similar is really employed only in select countries, that a distinction between "undergraduate" and "graduate" education is not universal, that some countries do not have an umbrella term such as "academic profession", that the distinction between "professional" and "vocational" is an Anglo-Saxon idiosyncrasy, that Humboldt did not have the narrow term "science" in mind, but rather the broad term "*Wissenschaft*", when he talked about the character of scholars or academic work, etc. Thus, many comparative studies are full of misunderstandings, because home concepts are taken for granted.

It is worth mentioning as well, related to the previous arguments, that comparative studies are often blamed to be *over-descriptive*. Scholars seem to be so busy to collect masses of information according to conventional thematic categories that they do not reflect whether they implicitly adhere to certain concepts and whether they could improve the study by putting it explicitly into sound conceptual frameworks.

In contrast, as already discussed above, many comparative studies lack self-control how much their observations and arguments are *driven by strong, uncontrolled value judgement*. In some analyses, for example, typical for authors from countries with a weak governmental involvement in higher education policy, government is depicted in comparative analyses generally as an unwise intruder into higher education, while authors from other countries do not exclude the possibility in their comparative analyses, that a strong government could be the "guardian angel" of academic freedom and the necessary counterbalance to endemic deficits of academic self-regulation or strong internal management. Moreover, comparative studies might be driven by the view that common norms could be the yardstick. In contrast, Kerr argued in 1978 that any "current consideration of the comparative effectiveness of systems of higher education is bound to end in failure, but it may be an instructive failure" (quoted in Goedegebuure and van Vught 1996, p. 385).

Moreover, the composition of *countries included in multi-country comparative studies turn out to be coincidental* in most cases. The scholars undertaking the study happened to have prior knowledge about certain countries. In the case of internationally collaborative projects, the scholars happened to know each other ("invitation by opportunity", see Eurich 1981, quoted in Goedegebuure and van Vught 1996, p. 384). Resources needed might have been provided just for certain countries. The availability of literature or the intensity of prior research is salient. It seems to be rather exceptional that the composition of countries is chosen in order to cover all major types of concepts and activities relevant in the study or similarly are conceptually most promising for comparative analysis.

Among the coincidental factors shaping comparative research, *language proficiency* of the individual scholar or within a research team has to be named as well, because language proficiency is highly influential for the choice of countries to be compared. Ironically, the spread of English as a single lingua franca contributes to erratic choice of countries, because scholars pay less attention to the knowledge of foreign languages as essential means for undertaking meaningful selections of countries and for undertaking in-depth comparisons.

It has to be added as well that the counter-strategy against many of the above named problems, namely to form research teams of scholars from many countries, to include many countries in the comparative team, and to analyse the chosen theme in a wide contextual range, sounds just wise in principal. For such a strategy often turns out in reality to be *"over-complex"* and "over-ambitious".

Last but not least comparative research, as a rule, *falls short concerning the expectation of testing causal relationships*. This might be viewed as consequence of a weak design and lack of information, but it also can be due to the fact that different configurations of factors are in play in individual countries thus calling the virtue of an approach into question, that wants to undertake comparative research according to a model of hypothesis-testing (see the different views of Goedegebuure and van Vught 1996; Kogan 1996; Teichler 1996a; cf. the summary of this debate in Teichler 2000, pp. 24–25).

Again, this list cannot be claimed to be complete. Yet, it points out dangers and pitfalls of comparative research frequently named regarding higher education research by those involved and by those looking at its strengths and weaknesses from outside.

Most of the arguments put forward as regards the limitations of comparative higher education research are pragmatic arguments: Comparative research is not bound to be limited according to the logic of science, but rather according to the likely encounters in the daily life of research. And we could get a more precise picture of the actual limitations, if we classified different approaches of comparative research, for example according to their intentions, their inductive vs. deductive thrusts, number of countries included, etc. (see various classifications named in Altbach 1985; Goedegebuure and van Vught 1996; Kogan 1996; Teichler 1996a).

Again, it has to be pointed out that both the strengths and danger of comparative higher education research are not specific to this domain. They are named similarly in analyses on comparative research in other areas of humanities and social sciences.

Complexity as a challenge of comparative research

One could argue that typical limitations in the daily life of research can be overcome, if the researchers involved are aware of the dangers and opt for a wise, thorough and well-resourced research design. However, the author of this article—actually participating in various ambitious comparative higher education research projects—likes to share his experience subsequently that carefully designed and complex comparative projects of higher education research often face substantial problems. Experiences will be reported about projects that were ambitious and complex in two respects. First, studies on various countries undertaken by a team composed of researchers from the countries addressed, and second, studies with questionnaire surveys as the key instrument of inquiry, thus enforcing a high degree of conceptual and empirical convergence in order to agree on a standardized research instrument.

Before experiences with those kinds of studies are reflected, the dimensions of this complex approach taken into consideration should be addressed generally. Three dimensions have to be named.

First, comparative studies vary substantially in *complexity according to the countries addressed*:

- Many comparative studies analyse issues of higher education in a single foreign country—ranging from descriptions of a national case without explicit comparative perspective towards frequent explicit comparison to various other national cases.
- We also note publications on the authors' home country in comparative perspective.
- Highly knowledgeable individual comparative researchers undertake thematic international analyses, thereby referring to a broad range of countries (for example Clark 1983; Teichler 1988; various chapters in Rüegg 2011).
- Some comparative projects analyse a few countries.
- Comparative studies on a large number of countries are rare—except for studies concentrating on statistics.

Second, comparative studies differ strikingly in the *composition of researchers* involved:

- The scholars involved might come from a single country.
- The project might be coordinated strongly from a single country as far as the conceptual framework and the thrusts of observations are concerned; persons from other countries "deliver" information and interpretation for a comparative analysis with a conceptually single-country yardstick.
- There might be researchers involved from most or all countries under scrutiny, whereby the researchers of the various countries form a team in charge of developing the concepts and methods of inquiry.

Third, a comparative study might *address readers from other countries than those under scrutiny and those of the authors*. We note frequently that researchers from one country analyse features from another country and want the publication to be of interest across many countries.

As mentioned above, the subsequent analysis will address a complex pattern, namely the comparative analysis of quite a number of countries undertaken by a team or scholars from quite a number of countries. But also projects of that kind can vary substantially according to the modes of information gathering. Only three examples might be named here to illustrate the breadth of options.

- A popular approach might be called the national expert approach of comparative research. A single scholar or a few scholars outline a conceptual and thematic framework for comparative study and invites experts to rate a report on their respective country. The quality and comparative awareness of the country report might be strengthened through an interim discussion, for example arranged as an international

workshop. The single initiator or the group of initiators finally write a comparative conclusion. Well-known examples of that option are the three projects on various thematic areas coordinated by Burton Clark in the 1980s (Clark 1985, 1987, 1993) and projects on the academic profession by Jürgen Enders (Enders 2001; Enders and de Weert 2004, 2009).
- There are projects that combine multiple modes of information collection (analysis of documents, interviews, etc.) with multiple ways of inclusion of experts. For example, in the major evaluation study of the Bologna Process of the first decade, senior persons of three institutes from three countries and junior scholars originating from a larger number of countries formed the research team. They tried to involve experts from many other countries on an honorarium basis to collect material, report to targeted questions and do some interviews (CHEPS, INCHER and ECOTEC 2010).
- In some projects, coordinators ask scholars from different countries to undertake a secondary analysis of available empirical data according to a common thematic scheme, and they finally analyse comparatively the country reports delivered. This, for example, was undertaken recently in order to examine the whereabouts of bachelor graduates in Europe and the proportion of those who had been internationally mobile during the course of study and after graduation (Schomburg and Teichler 2011).

In analyzing the available higher education research literature, we note a substantial number of comparative studies undertaken in recent years addressing quite a number of countries. Most of them address European countries, thereby reflecting the high public interest (and the chance to get financial support) in cooperation across European countries and in efforts to increase European convergence in some respects. Of course, the literature shows us only the successful cases. Most of these studies rely to a large extent on the already available expertise of persons participating in the project; in reverse, funding and time is not available for solid inquiries in its own right. Among others, the available publications suggest that such types of projects are undertaken in time spans of two, sometimes three or exceptionally four years.

Opportunities and problems of large collaborative empirical studies

It is worth to look behind the scene of the otherwise "neat" publications of approaches, methods and results in order to understand the opportunities and problems of collaborative comparative research. This will be undertaken here with respect to half a dozen highly complex comparative projects comprising various countries and undertaken by scholars from various countries that were characterized by questionnaire surveying as the major mode of inquiry.

Comparative empirical projects are clearly advantageous in an important aspect to projects relying on secondary information: They generate a more or less similar quality of information across all the countries involved. This is enormously valuable, because many other comparative projects are at the mercy of the knowledge and esprit of scholars from the various countries participating and turn out to be quite uneven between countries in the breadth of quality of core information as well as of context information.

Comparative questionnaire surveys are ambitious to generate highly standardized, yet thematically and methodologically varied and rich information. As compared to interview surveys, an extremely *high degree of consensus has to be reached* in order to formulate a common—i.e. at most marginally differing across countries—and commonly accepted questionnaire. Thereby, both a high degree of knowledge and a high extent of cooperative spirit have to be achieved at a very early stage of the project. Notably, a high degree of knowledge on relevant theories, methods and facts accessible *at an early stage of the project,* i.e. prior to the survey, is enormously influential on the project as a whole, because the choices made in the formulation of the questionnaire cannot be reversed anymore in subsequent stages of the project.

The author of this article is so intrigued by the potentials of such comparative collaborative questionnaire surveys that he joined six major projects of that kind over the years (actually three decades) with more than a dozen countries analysed on average and with team partners from all the countries addressed; in most instances the author was involved in the coordination of the project—in two cases as the project leader. The major results of the projects were published in a single book in four instances (Altbach 1996; Allen and van der Velden 2011; Teichler et al. 2013; Teichler and Höhle 2013) and in two books in two instances (Burn et al. 1990; Opper et al. 1990; Schomburg and Teichler 2006; Teichler 2007). Three of the eight books had two or three authors, while five of them were collections of essays edited by between one and three editors (four of them thematically structured and only a single one with country chapters). In the case of one of the projects named above, not only the major results were published in single book; in additions, several books addressed each the major individual themes of the research project (Locke et al. 2011; Bentley et al. 2013; Shin et al. 2013; Huang et al. 2014; Galaz-Fontes et al. 2014).

This personal experience provides the opportunity of looking behind the scene, because the eventually published reports—as usual—do not inform about the ups and downs of the daily life of such complex studies. Actually, the six studies analyzed three thematic areas: The early careers of university graduates, the experience and impact of student mobility, and the views and activities of the academic profession.

The problems reported here reflect experiences made as well (by the author or by colleagues collaborating in the same research unit, i.e. the International Centre for Higher Education Research, University of Kassel, Germany) in other projects somewhat differing in the composition and approach: (a) Half a dozen of survey projects comprising a large number of countries as well, but were undertaken by a research team of a single country (e.g. Teichler and Maiworm 1997; Janson et al. 2009); (b) about a dozen of projects on many countries relying on reports written by experts from those countries (e.g. Schwarz and Westerheijden 2004; Schomburg and Teichler 2011), and (c) even a larger number of other approaches of comparative analyses (as discussed above in section Key purposes and potentials of undertaking comparative research).

In looking behind the scene, we come across a striking operational finding: These *collaborative comparative multi-country questionnaire survey projects have lasted long periods*, i.e. on average eight years from the initial agreement among team members to undertake such a project to the publication of the major report (or of the last major report, if the major reporting was spread across two or three volumes).

Obviously, the research teams had not envisaged such a long period at the beginning. In the majority of cases, the resources for undertaking the surveys were assured within less than a year, and the period for doing all the research work including the final work was expected to comprise two to three years. In calculating a time span of one year for the eventual publication, we might conclude that an average of four years has been envisaged—half of the time span eventually needed on average.

The pitfalls of the daily life in complex comparative studies

Unexpectedly long periods from establishing an international research team to the eventual publication of the major final report, of course, elicit discussions among the participating scholars about the problem embarked and the possible lessons for future projects. In the case of only a single of the six projects addressed above, the overall period was close to that initially envisaged. In the other projects, intensive discussions on the causes of the long process could be observed. Thus, the subsequent arguments can be viewed as a synthesis of such discussions.

Obviously, first, *decentralized funding* clearly makes comparative research vulnerable. The funding patterns of the six projects were quite varied. In one case, money from a single source was successfully applied for all except a single country joining the project later. In two cases, central funds were granted for the majority of countries with a countries funded differently. In a single case, central funds were made available only for some countries as well as for coordinating functions. In another case, funds were raised successfully for the collaborative project from various sponsors each for more than a single country. In another case, finally, all team partners have raised funds in their respective country. Raising funds from various sources lead to different starting times of participation in the project and in some cases to different schedules of surveying. Moreover, only some countries were intensively involved in the collaboration with others and in the analysis of the findings, while others could play in instances even only a marginal role.

Additionally, the participants of five of the six projects deplored that the *composition of participating countries was too strongly influenced by coincidental factors* than by a desirable mix of countries according to the conceptual comparative framework. Various countries viewed as interesting for a creative range of cases actually were missing—either because no suitable partners could be found or because funds could not be acquired for the inclusion of these countries.

In this context, one has to point out the *varying levels of resources often hamper intensive collaboration*. Decentralized acquisition of support for projects often leads to enormous disparities in the actual value of the grants awarded. Moreover, in all of the six collaborative projects addressed here, the grants awarded clearly fell short of the resources considered necessary by the participating scholars. In various cases, they succeeded in making working time and other resources of their own institution available; in other cases, such own contributions by the participating institutions remained marginal.

Another striking experience has to be named: The level of expertise of the scholars from each country involved in the collaborative projects turned out to be enormously heterogeneous. Certainly, one cannot expect that conceptual power, field knowledge, comparative experience as well as the methodological and operational competences are more or less equally distributed in such projects with on average more than a dozen of countries involved and with on average two to three scholars participating in each country, but there were country cases in each of the projects where the country turned out to be primarily a data deliverer without much help for the joint conceptual development and interpretation, for the operations and even in some instances for helping to interpret the country characteristics of the findings.

Further, it turned out to be enormously challenging in almost all projects to *reach a sufficient degree of conceptual agreement* or just compromises for the joint and parallel activities needed in a collaborative comparative survey project. As a rule, each project accommodated a substantial diversity according to disciplinary backgrounds, conceptual thrusts, value judgements implied, communication habits, working styles, etc. A certain degree of diversity in those respects obviously is creative for comparative projects, but in most projects, the participants were convinced that a lesser extent of diversity in those respects would have been desirable. For example, meetings with more than 30 scholars present seeking for the best possible selection of questions and the most desirable formulation of questions turned often out to be a nightmare before compromises were eventually hammered out. A similar heterogeneity of interpretations frequently could be resolved only by giving up integrated interpretations of findings and substitute them by loosely coordinated publication approaches.

Another finding should not be underestimated. Different *styles of coordination* seem to play a major role. A strong and "pushy" coordination obviously is needed in various instances to avoid substantial delay.

Moreover, obviously, the *system of methodological and data coordination* is important. In all projects, a combination of decentralized surveying and data entry and centralized data management was considered appropriate. Delays in several instances were due to the fact that the methodological knowledge and the operational management were weak in select countries and thus led to late availability of the comparative data sets.

A frequent concern, too, was the fact that the *work time devoted to the joint project* varied substantially by country. This held true during each period of the project as well as over the whole period in most instances—altogether of the teams and also among the key persons of the respective teams.

Finally, as a consequence of these problems, the stage of intensive data analysis and interpretation of findings was reached in four of the six projects *only after the major resources of funding of the project have run out*. This led to a more uneven participation of the project partners in this important stage of analysis and interpretation than in the previous stages. Moreover, the total amount of resources and work time became thinner and thinner over time, when actually the findings and the discussion of finding could have become "thicker and "thicker".

Is comparative higher education research exceptionally vulnerable?

Certainly, one could argue that the problems named are not unique for comparative higher education research. The author of this article has reported his own experiences in this area and, thus, cannot provide any clear evidence that these issues are more salient in comparative higher education research projects of that kind than in most other thematic and disciplinary areas of the humanities and social sciences. There are many good reasons to believe that the problems stated above surface as well in comparative projects of other disciplines and research areas. However, two considerations support the view that comparative higher education poses quite above-average challenging problems in the daily life of the projects.

First, higher education research is among the fields characterized by a joint thematic area to which a substantial range of disciplines contributes. The analyses of the various themes, thus, can benefit from a range of disciplines, but might face enormous challenges in assuring the mutual understanding and as well a close and efficient collaboration.

Second, higher education research is among the very small fields of research. There is not much choice in finding congenial partners. Thus, one should not be surprised to note that sizeable teams of comparative higher education research projects turn out to be heterogeneous in many respects and thus are not in good positions, as far as the intensity and efficiency of collaboration is concerned.

Notwithstanding: the remarkable benefits

Collaborative comparative questionnaire survey projects in the area of higher education (and possibly other thematic and disciplinary areas)—this certainly can be generalized—are likely to end with some disappointment. There is a clear discrepancy between the high expectations as regards the potentials of such studies and the actual achievements at the end. The results look from various respects as compromises.

But most participants of the projects referred to in this article eventually have reported valuable experiences and results. Most often, a gain of knowledge is underscored in terms of understanding the variety of higher education systems and their contexts. Common challenges and some common developments certainly become visible. The single strongest impression, that participants of such projects reported, is that of a successful deconstruction of beliefs that certain characteristics of higher education in their own country are characteristics of higher education across countries or even of higher education as such. In spite of the sub-optimalities of such complex projects, the participating scholars seem to be convinced that their reports assure progress in demonstrating to the readers the extent to which there are common trends and features in higher education across countries and in the extent to which variety has to be acknowledged and understood.

In addition, such comparative projects with large teams from various countries seem to have an enormous impact as far as networking is concerned. The hardships of such projects eventually might turn out to be extraordinarily productive in increasing the readiness for further communication, exchange of information and even research collaboration. Certainly, each team member might name one or two team members he or she want to be never in touch again, but readiness for further communication and cooperation seems to grow substantially in many instances.

Finally, all of the projects named here, that have been completed some years ago, have led to a multitude of follow-up activities. A not negligible number of dissertations, hundreds of publications each, and new projects in the same thematic area in some instances are the visible impact. If one had the opportunity to interview the about 200 scholars totally involved in the six projects discussed here, most of them probably would have responded in a summative statement: It was hard, but I would do it again.

References

Allen, J., & van der Velden, R. (Eds.). (2011). *The flexible professional in the knowledge society: New challenges for higher education*. Dordrecht: Springer.

Altbach, P. G. (1985). Perspectives on comparative higher education: A survey of research and literature. In P. G. Altbach & D. H. Kelly (Eds.), *Higher education in international perspective: A survey and bibliography*. London and New York: Mansell Publishing Ltd.

Altbach, P. G. (Ed.). (1991). *International higher education: An encyclopedia*. New York and London: Garland Publishing.

Altbach, P. G. (Ed.). (1996). *The international academic profession: Portraits of fourteen countries*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Begg, R. (Ed.). (2003). *The dialogue between higher education research and practice*. Dordrecht: Kluwer Academic Publishers.

Bentley, P. J., Coates, H., Dobson, I. R., Goedegebuure, L., & Meek, L. V. (Eds.). (2013). *Job satisfaction around the academic world*. Dordrecht: Springer.

Burn, B. B., Cerych, L., & Smith, A. (Eds.). (1990). *Study abroad programmes*. London: Jessica Kingsley Publishers.

CHEPS, INCHER, & ECOTEC. (2010). *The first decade of working on the European Higher Education Area: The Bologna Process independent assessment* (Vol. 1). Enschede: Twente University, CHEPS.

Clark, B. R. (1983). *The higher education system: Academic organization in cross-national perspective*. Berkeley, CA: University of California Press.
Clark, B. R. (Ed.). (1984). *Perspectives on higher education: Eight disciplinary and comparative views*. Berkeley, CA: University of California Press.
Clark, B. R. (Ed.). (1985). *The school and the university*. Berkeley, CA: University of California Press.
Clark, B. R. (Ed.). (1987). *The academic profession: National, disciplinary and institutional settings*. Berkeley and Los Angeles, CA: University of California Press.
Clark, B. R. (Ed.). (1993). *The research foundations of graduate education: Germany, Britain, France, United States*. Berkeley, CA: University of California Press.
Clark, B. R., & Neave, G. R. (Eds.). (1992). *The encyclopedia of higher education* (4 Volumes). Oxford: Pergamon Press.
Council of Europe. (1997). *Convention on the recognition of qualifications concerning higher education in the European Union (ETS, No. 165)*. Strasbourg: Council of Europe.
Curaj, A., Scott, P., Vlasceanu, L., & Wilson, L. (Eds.). (2012). *European higher education at the crossroads: Between the Bologna process and national reforms, 2 volumes*. Dordrecht: Springer.
Enders, J. (Ed.). (2001). *Academic staff in Europe: Changing contexts and conditions*. Westport, CT and London: Greenwood Press.
Enders, J., & de Weert, E. (Eds.). (2004). *The international attractiveness of the academic workplace*. Frankfurt: Gewerkschaft Erziehung und Wissenschaft.
Enders, J., & de Weert, E. (Eds.). (2009). *The challenging face of academic life*. London: Palgrave Macmillan.
European Commission. (1994). *Cooperation in education in the European Union*. Luxembourg: Office for Official Publications of the European Communities.
European Commission. (2005). *Progress towards the Lisbon objectives in education and training*. Brussels: European Commission.
Forest, J. J. F., & Altbach, P. G. (Eds.). (2006). *International handbook of higher education* (2 Volumes). Dordrecht: Springer.
Fulton, O. (1992). Higher education studies. In B. R. Clark & G. R. Neave (Eds.), *The encyclopedia of higher education* (pp. 1810–1821). Oxford: Pergamon Press.
Galaz-Fontes, J. F., Arimoto, A., Teichler, U., & Brennan, J. (Eds.). (2014). *Personal characteristics, career trajectories, identity/commitment and job satisfaction of academics*. Dordrecht: Springer.
Goedegebuure, L., & van Vught, F. (1996). Comparative higher education studies: The perspective of policy sciences. *Higher Education, 32*(4), 371–394.
Huang, F., Finkelstein, M. J., & Rostan, M. (Eds.). (2014). *The internationalization of the academy*. Dordrecht: Springer.
Janson, K., Schomburg, H., & Teichler, U. (2009). *The professional value of ERASMUS: The impact of international experience on former students' and teachers' careers*. Bonn: Lemmens.
Kehm, B. M., & Musselin, C. (Eds.). (2013). *The development of higher education research in Europe: 25 years of CHER*. Rotterdam: Sense Publishers.
Kerr, C. (1990). The internationalization of learning and the nationalization of the purposes of higher education. *European Journal of Education, 25*(1), 5–22.
Kogan, M. (1996). Comparing higher education systems. *Higher Education, 32*(4), 395–402.
Locke, W., Cummings, W. K., & Fisher, D. (Eds.). (2011). *Changing governance and management in higher education: The perspectives of the academy*. Dordrecht: Springer.
Mitter, W. (1992). Comparative education. In B. R. Clark & G. R. Neave (Eds.), *The encyclopedia of higher education* (pp. 1788–1797). Oxford: Pergamon Press.
Neave, G., Teichler, U. (Eds.) (1989). Research on higher education in Europe (special issue). *European Journal of Education*, *24* (3).
Nitsch, W., Weller, W. (1970–1973). *Social science research on higher education and universities.* 3 volumes. Den Haag and Paris: Mouton.
Opper, S., Teichler, U., & Carlson, J. (1990). *The impact of study abroad programmes on students and graduates*. London: Jessica Kingsley Publishers.
Papadopoulus, G. S. (1994). *Education 1960–1990: The OECD perspective*. Paris: OECD.
Rüegg, W. (Ed.). (2011). *A history of the university in Europe Volume IV: Universities since 1945. Cambridge*. Cambridge: Cambridge University Press.
Sadlak, J., & Altbach, P. G. (Eds.). (1997). *Higher education research at the turn of the new century*. New York and London: UNESCO, Paris, Garland Publishing.
Schomburg, H., & Teichler, U. (2006). *Higher education and graduate employment in Europe: Results of graduate surveys from twelve countries*. Dordrecht: Springer.

Schomburg, H., & Teichler, U. (Eds.). (2011). *Employability and mobility of bachelor graduates in Europe: Key results of the Bologna Process*. Rotterdam and Taipei: Sense Publishers.
Schwarz, S., & Westerheijden, D. F. (Eds.). (2004). *Accreditation and evaluation in the European higher education area*. Dordrecht: Kluwer Academic Publishers.
Shin, J. C., Arimoto, A., Cummings, W. K., & Teichler, U. (Eds.). (2013). *Teaching and research on contemporary higher education*. Dordrecht: Springer.
Teichler, U. (1988). *Changing patterns of the higher education system*. London: Jessica Kingley Publishers.
Teichler, U. (1992). Research on higher education in Europe: Some aspects of recent developments. In E. Frackmann & P. Maassen (Eds.), *Towards excellence in European higher education* (pp. 37–61). Utrecht: Uitgeverij Lemma.
Teichler, U. (1996a). Comparative higher education: Potentials and limits. *Higher Education, 32*(4), 431–465.
Teichler, U. (1996b). Special issue on the state of comparative research in higher education. *Higher Education, 32*(4), 431–465.
Teichler, U. (2000). The relationships between higher education research and higher education policy and practice: The researchers' perspective. In U. Teichler & J. Sadlak (Eds.), *Higher education research: Its relationships to policy and practice* (pp. 3–34). Oxford: Pergamon Press.
Teichler, U. (2001). Higher education. In N. J. Smelser & P. Baltes (Eds.), *International encyclopedia of the social and behavioural sciences* (pp. 6700–6705). Amsterdam: Elsevier.
Teichler, U. (2003). Mutual recognition and credit transfer in Europe: Experiences and problems. *Journal of Studies in International Education, 7*(4), 312–341.
Teichler, U. (Ed.). (2007). *Careers of university graduates: Views and experiences in comparative perspectives*. Dordrecht: Springer.
Teichler, U. (2011). International student mobility in the context of the Bologna Process. *Journal of International Education and Leadership*, *2* (1).
Teichler, U., & Höhle, E. A. (Eds.). (2013). *The work situation of the academic profession: Findings of a survey in twelve European countries*. Dordrecht: Springer.
Teichler, U., & Maiworm, F. (1997). *The ERASMUS experience: Major findings of the ERASMUS evaluation research project*. Luxembourg: Office for Official Publications of the European Communities.
Teichler, U., & Sadlak, J. (Eds.). (2000). *Higher education research: Its relationships to policy and practice*. Oxford: Pergamon Press.
Teichler, U., Arimoto, A., & Cummings, W. K. (2013). *The changing academic profession: Major findings of a comparative study*. Dordrecht: Springer.
Van der Wende, M., & Huisman, J. (Eds.) (2004–2005). *On cooperation and competition*. 2 volumes. Bonn: Lemmens.
Wächter, B. (2008). Mobility and internationalisation in the European Higher Education Area. In M. Kelo (Ed.), *Beyond 2010: Priorities and challenges for higher education in the next decade* (pp. 13–42). Bonn: Lemmens.