Nature Centres and Environmental Interpretation in the Baltic Sea Region

Final recommendations/Institute for Environmental Communication and Sustainability – University of Lueneburg (MS 4)
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**Editor:**

Institute for Environmental Communication and Sustainability
University of Lueneburg/Germany
([http://www.uni-lueneburg.de/infu/forschung/interreg.html](http://www.uni-lueneburg.de/infu/forschung/interreg.html))

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Mike Ramftler
1. Introduction

It was the intention of the Institute for Environmental Communication and Sustainability to provide a focussed and structured feedback. For this reason an international survey of environmental interpretation and nature centres in the Baltic Sea Region was conducted in MS 2. The major findings of this survey (p. 14) were:

“1. Terminology: We need to be identifiable.
A first step towards further professionalization of the field of interpretation is to establish common terminological definitions. The lack of standardization is considered a source of confusion to practitioners, the broad public and decision makers.

2. Visitor studies: We need to evaluate visitor data.
As mentioned above, there is a definite need for comprehensive and coordinated gathering of visitor data. In the long run, success will be limited without more complete socio-demographic and psycho- graphic visitor data. Although visitor numbers are important, the approach should not be limited to this parameter. We should bare in mind that the Olympic ideal of “it is taking part that counts” is not sufficient (see e.g. the prerequisite for Naturum-Sites in Sweden, where it is mandatory to have a least 20,000 visitors/year). In the future it will not be enough to refer to visitor numbers, provided that those numbers are recorded and readily available.

3. Values: We need to add value.
In order to strengthen the political influence, it is recommended to work on the economic values that interpretation contributes to nature and societies (see Tab. 1 in survey, p.8).

4. Strategic cooperation: We need to cooperate more strategically.
While valuable, general cooperation may provide limited results without the structure of a strategic approach. This may be achieved, in part, through the establishment of a common network and a mission statement that explains the reason for the existence of nature centres and environmental interpretation in the BSR, including statements of strategic and operational goals and measures.”

A second step was to gather feedback from the project partners during MS 3 concerning the survey and to discuss the survey plus the feedback in the context of an international expert-meeting. The meeting was conducted at the University of Lueneburg from the 9th to the 10th of November 2005. While there was only very little feedback from the project partners in terms of the survey via e-mail, the discussion during the expert-meeting revealed that the findings from the survey still needed to be considered. While the expert-meeting in general was very well received from the project partners, the most important presentation was the one about quality management (see MS 3 report). The LQF-modell presented here was especially interesting, because it provides a potential framework for developing an international strategy.
During the expert meeting as well as during the Copenhagen meeting from the 27th of February to the 1st of March 2006 (MS 4), it became clear that, in order to work on an international strategy, the clarification of a common terminology amongst the project partners would be necessary. Therefore the German partner was asked to provide the project with more detailed input concerning a list of specific project terms. Thus, the Institute for Environmental Communication and Sustainability developed a questionnaire which was circulated twice to the project partners (Appendix 1). None of the partners answered the questionnaire, except for some quality responses from Sweden (Appendix 2). It is suggested that this strong lack of response is due to the complexity of the topic.

The presentation “Interpretation or Informal Education? Defining Interpretation in the Context of Environmental Communication” given at the 1st Interpreting World Heritage Conference in San Juan/Puerto Rico\(^1\) can be found in appendix 3 as a working paper with suggestions for definitions.

The response to the rather theoretical presentation from the (overall > 150) conference participants was very good in terms of number of audience and timewise. A vivid discussion between 28 listeners from 12 countries had to be stopped after 80 minutes while the official presentation time was only 30 minutes. Another indicator for the importance of the issue presented was the participation of the executive director (Tim Merriman) and the president (Evie Kirkwood) of the International Association for Interpretation. The North American Association for Interpretation who organized the international conference also has an official definition project going on in the USA. While this project is still ongoing the minutes of the first meeting of the project group can be found in appendix 4. The terminological area of conflict can also be concluded from the following example:

On the welcome-website of the the NAI it reads:

“The National Association for Interpretation (NAI) is dedicated to the advancement of the profession of interpretation (on-site informal education programs at parks, zoos, nature centers, historic sites, museums, and aquaria).”

On the other hand in the minutes of the definition project the NAI speaks about non-formal education. One reason for this was mentioned by Tim Merriman (NAI Executive Director) who explained that it is a very challenging project with 15-20 partners from various informal learning organisations; a consensus is hard to establish.

A reader with summaries of all presentations given at the 1st Interpreting World Heritage Conference will be distributed electronically as soon as it becomes available from the NAI.

It can be concluded that internationally there is no single, agreed upon definition of interpretation or informal education, respectively, although the topic is “hot”\(^2\). This also became clear during meetings of the informal learning work group in the context of the UN-decade for Education for Sustainable Development in which the German partner participated

http://dekade.org/sites/arbeitsgruppen.html


2. For those readers who are interested in the broader discussion on informal learning, the article from Bernd Overwien is recommended (appendix 5). Besides a thorough introduction into the international discussion, Overwien works out the details of informal learning and the acquisition of competences for work as another important field of informal learning. While the introduction is especially interesting for the purpose of terminology in the EAGLE-project, the second part introduces the reader to another important concept of informal learning. This is just to give the more interested reader the bigger picture of the international discussion. For the purpose of the EAGLE-project informal education/learning is an umbrella term for e.g. “interpretation”.

**EAGLE**

2. Terminology
Nevertheless it is important for the EAGLE-project to come up with definitions for its core terms like interpretation and nature centres (see survey from MS 2). Such common terms could serve as a solid basis on which to build the international BSR-strategy. A suggestion for possible definitions of the terms can be found in Appendix 3.

As another contribution to the field, a new book was published that deals with major management challenges in the field of informal environmental education / environmental interpretation.

**Titel:** Management in der informellen Umweltbildung (Management in Informal Environmental Education).

**Content list:**
- Einleitung (Introduction)
- Rahmenbedingungen informeller Umweltbildung (Basic Conditions of Informal Environmental Education)
- Qualitätsmanagement (Quality Management)
- Das Team entwickeln (Teambuilding)
- Das Leitbild: Vision und Kultur eines Unternehmens (The Vision Statement)
- Informelle Bildungseinrichtungen unternehmerisch managen (Managing Informal Environmental Education Facilities entrepreneurial)
- Qualifikationsperspektiven (Qualification perspectives)
- Bürgerschaftliches Engagement und Qualifizierung (Volunteermanagement)

The book is published in German language.
Appendix 1 – Questionnaire concerning terminology circulated to project partners

Appendix 2 – Response to questionnaire from Sweden

Appendix 3 – Presentation given at the 1st Interpreting World Heritage Conference in San Juan/Puerto Rico

Appendix 4 – Minutes of the 1st meeting of the NAI’s definition project


4. Appendices
Dear National Leaders,

during the Copenhagen meeting it was decided that I should compile suggestions on terminological issues for the development of the strategy paper of the EAGLE project. I have sent out this questionnaire at the beginning of March (!), so far without any answer!

Please urgently answer the following questions from the perspective of your particular country until latest 15th of June 2006:

1. Please give me a short description of how you think that the following terms should be used (for each term not more than 0.5 page). In case one or more of these terms are not used at all in your country or if some might have the same meaning, just let me know. The terms are:
   - nature education, environmental education, nature interpretation, environmental interpretation, nature centres, nature schools

2. Please also send me the words that you use in your country for these terms. If there is not translation for some of them, then just let me know.

You are free to give this job to someone else from the EAGLE group in your country, do it yourself or work on it in a group. But please make sure that this is how these terms are considered from the viewpoint of the EAGLE partners in your country. If you use different terms for the same thing, please indicate this on your paper.

If you have any questions, please do not hesitate to contact me. Please send me your results until 15th of June latest!!!

Best regards,

Lars Wohlers
Response to questionnaire from Sweden

Terminology for BSR Eagle

Nature education (naturutbildning, naturkunskap)

A fundamental, basic education, that must be taught in our preschools, schools and gymnasium.
Basic understanding of the different organisms (including humans), in our ecosystem.
Telling man’s place in ecosystem.
Showing that everything in nature is not made to please mankind...

Environmental education (miljöutbildning, miljökunskap)

Education that will show man’s impact on the eco-systems.
If made wrongly, it focuses just on all problems that has occurred and all worst case scenarios.
If made correctly it focuses on the possibilities that we have as individuals, to push the future in a better way.

Nature interpretation (approx. naturguidning, naturpedagogik)

Nature interpretation is a word that is rarely used in Swedish.
The nearest you can get in Swedish is “naturpedagog”.
That is a word that I have in the title on my business card.
Hardly anyone that I meet knows what it stands for...

Environmental interpretation (approx. miljöövervakning)

Environmental interpretation is like NI a very rarely used word (if translated to Swedish). Of course the meaning is clear that someone shall interpret the impact of different environmental scenarios.

Nature centres (Natur center)

Nature centres or “Nature rooms” are becoming more and more popular in Swedish nature areas.
Especially in well frequented nature areas or in the national parks the nature centres serves as an introduction to the area. Here is usually good maps, pictures of plants and animals that are typical for the area.
Special rules of behaviour for the particular place as well as brochures could be available here.
Nature centres are nearly always financed by the state or municipality in Sweden.
Nature schools (Naturskola)

Nature schools are usually schools in Sweden that serve the ordinary common school. In Sweden we have about 70 nature schools. The schools could be financed in many different ways and also the extent of the activity could differ a lot. In the typical Swedish nature school there work 1-5 persons (half or full time). They serve all the schools in a city, that normally means that far more teachers ask for there services than they have time to help.

A nature school could have buildings of there own where the schools come or could work more or less all the time in the surroundings of the schools. There are also a few nature schools that have a special bus that is equipped for nature observations, and that can take school classes out into the nature.

These are my own personal opinions about these words.

Lund 29/5 2006
Birger Emanuelsson
Interpretation or Informal Education?
Defining Interpretation in the Context of Environmental Communication

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Introduction
The purpose of the 1st Interpreting World Heritage Conference is to forward the profession of interpretation worldwide by starting an international interpretation organization.

There are various tasks an international organization of such kind would have to deal with. Interpretation is free-lance work which so far has no training accredited by official bodies in any country of the world. Therefore, training modules, accreditation systems, perhaps even a code of honor for this kind of work and other quality standards need to be developed. A foundation for all of this is laid by developing a thorough terminology and in answering the question: Who are we and why are we doing this?

This obviously is an important reason why the NAI has started a definitions project “to work toward consensus on a glossary of terms in the non-formal education field.” (NAI Business Plan 2006: 7). One important task of such a project is to define the relationship between the terms in question.

An international dimension
In order for an international organization to be able to easily and clearly spell out what it is all about, it is necessary to link the term to the international communication terminology.

An approach taken by the author is to investigate the discourse of official international organizations, in this case: UNESCO (United Nations Educational, Scientific and Cultural Organization). The term which is suggested to be helpful to connect the somewhat isolated field of interpretation with the international discussion is informal education.

Interpretation – a cloudy term
Interpretation is an established but also often isolated term, which is probably because of its exciting though rather philosophical roots. Even in English speaking countries, interpretation is normally rather seen as just another expression for translation. Still today it seems complicated to explain to non-interpreters what we are talking about. Although the word interpretation is similar in quite a range of languages it still needs a lot of explanation. This is even more the case with regard to languages where there is no similar word. In an interpretation project that included all ten Baltic-Sea Countries (www.bsreagle.net), it became clear that quite a few countries had trouble working with the term interpretation.

To relate to our audiences knowledge is mandatory in our business and we should strive to do so in the terms we use, too.
The UNESCO-approach

Let us return now to the suggestion at hand: using informal education as a connecting element that could more easily tie an international interpretation organization to the international audience and educational discussion.

The UNESCO discussion about education has been going on for decades. It all began in the 1960’s, when a discourse was started concerning the educational crisis at that time (see Coombs 1968).

“The conclusion was that formal educational systems had adapted too slowly to the socio-economic changes around them and that they were held back not only by their own conservatism, but also by the inertia of societies themselves. If we also accept that educational policy making tends to follow rather than lead other social trends, then it followed that change would have to come not merely from within formal schooling, but from the wider society and from other sectors within it. It was from this point of departure that (…) a distinction between informal, non-formal and formal education” was made (Fordham 1993: 2). Around the same time this tripartite categorization of learning systems was also used by UNESCO (1972). The idea was to reach for the overall goal of lifelong education and learning societies.

For at least the last 40 years the discussion about defining educational terms has been ongoing. Various terms have been added and taken away again. Looking back, one gets the impression that it has been a continuous coming and going of terms – except for the three terms mentioned: formal, non-formal and informal education.

While interpretation/informal education could be located in an integrated model of environmental communication (graph 1), the following discussion deals exclusively with the educational side of communication and marketing.

Non-formal or informal?

There is no question that interpretation is rather the opposite of formal education. This can most clearly be seen in articles where the authors narrow down interpretation by distinguishing it from formal (school) education.

So, what about informal and non-formal? Besides the discussion in UNESCO, there have also been authors who have written about infor-
mal or non-formal education and the connections to interpretation (e.g. Peart 1986, Ham/Krumpe 1996, Van Matre 2005). Especially the field of visitor studies which is strongly related to interpretation uses informal learning rather than interpretation (e.g. Bitgood 1988; see also: http://www.visitorstudies.org/).

Non-formal education can basically be described as the overlap (see Graph 1) between formal and informal education (interpretation). This is because on one hand it is formal, since the learners and the source of information know that learning is supposed to happen. On the other hand the learning process happens outside of traditional school settings, which is usually the main characteristic of non-formal education. In other words, non-formal education is mainly a matter of location.

While the current UNESCO-discussion about informal and non-formal is a bit blurry, there was an interesting, straightforward attempt to define them by UNESCO in the 1980’s (Evans 1981). According to Evans, the integrating element in the discussion about the various facets of informal learning (or interpretation respectively), might be to seriously consider the individuals’ intention to learn (Evans 1981, Reischmann 1995, Overwien 2004, Colardyn/Bjornavold 2004, Falk 2005). Therefore an adapted categorisation of learning settings, according to Evans (1981), may be considered helpful for our discussion (see table 1).

**Formal (school) education** – located within institutions called schools, which are characterized by the use of age-graded classes of youth being taught a fixed curriculum by a cadre of certified teachers using (more or less standardized) pedagogical methods. (Examples: most schools).

**Non-formal (out-of-school) education** – any non-school learning where both the source and the learner are consciously intent on promoting the learning process. (Examples: on-the-job-training, also often used for various educational activities in so-called Third World countries).

**Informal education** – results from situations where the intent of the source is to consciously promote learning, whereas the learner may not have the same intent (Examples: mission-driven leisure activities, social work).

**Self-directed education** - results from situations where the intent of the learner is to consciously promote learning, however the source may not have the same intent (Examples: learning in environmental or social action movements, recreational activities that include learning).

**Incidental education** – learning which takes place although the source is neither conscious of attempting to present information, nor is there a conscious attempt to learn on the part of the learner (Examples: dishwashing, individual crisis).

In his original paper Evans (1981: 28) defines informal education as: ‘learning that results from situations where either the learner or the source of information has a conscious intent of promoting learning – but not both.’ While the definitions for incidental, non-formal and formal education are rather straightforward, Evans’s definition of informal education actually seems to combine two definitions. For the purpose of a clearer understanding in this paper, these have here been divided into informal and self-directed education.

Unlike Evans, I am not suggesting that self-directed (or free-choice) learning is part of informal learning. Self-directed learning is exactly that – self-directed (or free-choice). Thus it is not useful to define it as an educational learning strategy motivated by someone externally.
Similar arguments can be found concerning incidental learning. Either it is incidental or it is not. If an organisation tries to promote individual learning and the individual is not intent on learning then the learning will be either informal (intended by the source of information) or eventually self-directed/free-choice (intended by the learner), but not incidental.

Any other definition leads to a hidden formalisation of informal and especially of self-directed learning. Therefore it is also suggested that it is better to exclude incidental learning while discussing formal, non-formal and informal learning. These problematic differentiations of educational terms have probably lead to the development that except for informal, non-formal and formal there has been a strong fluctuation of terms over time.

As a result, the model of environmental communication (graph 1) only comprises the formal, informal and non-formal educational learning strategies.

**Why marketing?**

Aren’t we selling great historical ideas and insights into the world’s most astonishing nature? Aren’t we selling it to a non-captive audience, whose perception is quite comparable to a mass media audience? That’s why we have overlaps of informal education/interpretation with environmental marketing (see Graph 1). Marketing is about conveying messages and outcomes to certain target groups within the general public and marketing instruments mostly have mass media character which is quite comparable to interpretation (advertisements, (media) events, “point-of-sale”/personal interpretation and public relations).

The mass media character of informal environmental education (interpretation) on one hand and of environmental marketing on the other hand explains the functional overlap between marketing and informal education. These two fields of activity have similar mass media functions (see table 2).

<table>
<thead>
<tr>
<th>Information</th>
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<tbody>
<tr>
<td>- Finding out about relevant events and conditions in immediate surroundings, society and the world (…)</td>
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<tr>
<td>- Satisfying curiosity and general interest</td>
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<tr>
<td>- Learning, self-education</td>
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<td>- Gaining a sense of security through knowledge</td>
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<th>Personal identity</th>
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<tr>
<td>- Finding reinforcement for personal values</td>
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<td>- Finding models of behaviour</td>
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<tr>
<td>- Identifying with valued other</td>
</tr>
<tr>
<td>- Gaining insight into one’s self</td>
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<th>Integration and Social interaction</th>
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<tr>
<td>- Gaining insight into circumstances of others; social empathy</td>
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<tr>
<td>- Identifying with others and gaining a sense of belonging</td>
</tr>
<tr>
<td>- Finding a basis for conversation and social interaction</td>
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<tr>
<td>- Having a substitute for real-life companionship</td>
</tr>
<tr>
<td>- Helping to carry out social roles</td>
</tr>
<tr>
<td>- Enabling one to connect with family, friends and society</td>
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Conclusion

While on one hand interpretation has a very strong tradition and history, it is assumed that in order to establish an international organisation, it would be beneficial to connect to the discussion of the international education community, e.g. in the context of UNESCO. Doing so would allow the field of interpretation to more easily link to the international dialogue and to locate our concern in such a way that it could be more easily communicated. Therefore I am not suggesting to set the term interpretation aside but to tie into a bigger, international framework. Such a procedure would be beneficial concerning public and political recognition and support. A term that could serve these purposes is informal education.

References


Purpose: Encourage federal land-management agencies and non-formal educational networks to increase the exchange of ideas, share understandings, and engage in collaborative efforts to improve their visitor education, interpretation and communication programs.

Goals:

• Improve federal agency and partner ability to collaborate in their consideration of free-choice or non-formal learning theories and to learn from each other’s efforts/findings.
• Offer participating agencies and organizations the opportunity to put their learning into practice for the improvement of their interpretation and education programs.
• Bring non-formal education NGO representatives, federal land management agency educators and interpretive program managers together to share ideas and beliefs about the purpose and function of interpretation and education.
• Build consensus around a common vocabulary and definitions in non-formal education.
• Inform each other of vocabulary and definitions differences that will remain and the reasons for the variety of prevailing views.
• Encourage collaborative work among similar organizations with overlapping missions and audiences that might endure beyond the project timespan.

Objectives:

• Complete four two-day workshops with 15 to 20 participants representing NGOs and federal agencies that provide non-formal educational programming and professional development services.
• Create a Definitions Project website with progress from workshops and interim reports.
• The Project Report will include identification of collaborative opportunities to be undertaken beyond this project which will be monitored on the Project website.
• After the project period concludes, a council of non-formal educators will continue to meet annually at the expense of each participant organization.
• NAI will maintain the Project website for the next decade as an organizational commitment to further collaboration.
• An edited book of articles will be printed and distributed to 500 key partners identified by the group and made available for purchase in print and CD ROM formats through NAI (purchase price sufficient to permit reprinting when supply is exhausted).
• Each participating organization will schedule a round table or panel discussion at their respective national conferences during the project period.
Partners

NAI will provide facilitation of meetings and the project process through its Associate Director, Lisa Brochu. Support staff from NAI will be provided as necessary to ensure timely delivery of products.

Participants in the process will be high level individuals (e.g. Executive Directors, Division Chiefs, Directors of Education/Interpretation) from the following groups:

- American Zoo and Aquarium Association (AZA)
- Bureau of Land Management (BLM)
- Association of Nature Center Administrators (ANCA)
- Association of Science and Technology Centers (ASTC)
- National Environmental Education Training Foundation (NEETF)
- American Association of Botanical Gardens and Arboreta (AABGA)
- American Association for State and Local History (AASLH)
- Association of Living History Farms and Museums (ALHFAM)
- Institute for Learning Innovation (ILI)
- National Aeronautics & Space Administration (NASA)
- National Association for Interpretation (NAI)
- National Park Service (NPS)
- National Oceanic and Atmospheric Agency (NOAA)
- North American Association of Environmental Education (NAAEE)
- Society of American Archaeologists (SAA)
- USDA Forest Service (USFS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish & Wildlife Service (FWS)
- U.S. Geological Survey (USGS)
- U.S. International Council on Monuments and Sites (ICOMOS)
- Visitor Studies Association (JAVA)

Tentative Project Calendar (dates should be read as “not later than” and may be subject to change)

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<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Event Description</th>
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<tr>
<td>Aug</td>
<td>05</td>
<td>Invitations sent to participating organizations</td>
</tr>
<tr>
<td>Sep</td>
<td>05</td>
<td>Survey participants</td>
</tr>
<tr>
<td>Nov</td>
<td>05</td>
<td>Establish website and post results of survey</td>
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<tr>
<td>Dec</td>
<td>05</td>
<td>Workshop 1 at NAI Training Center (Fort Collins, CO)</td>
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<tr>
<td>Jan</td>
<td>06</td>
<td>Draft materials from first workshop circulated for review</td>
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<tr>
<td>Feb</td>
<td>06</td>
<td>Results of first workshop posted on website</td>
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<tr>
<td>Mar</td>
<td>06</td>
<td>Workshop 2 at National Conservation Training Center (NCTC) Shepherdstown, WV</td>
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<td>Apr</td>
<td>06</td>
<td>Draft materials from second workshop circulated for review</td>
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<tr>
<td>May</td>
<td>06</td>
<td>Results of second workshop posted on website</td>
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<tr>
<td>June</td>
<td>06</td>
<td>Workshop 3 at NAI Training Center</td>
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<td>Nov</td>
<td>06</td>
<td>“In progress” reports at various conferences held during 2006</td>
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<tr>
<td>July</td>
<td>06</td>
<td>Draft materials from third workshop circulated for review</td>
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<tr>
<td>Aug</td>
<td>06</td>
<td>Results of third workshop posted on website</td>
</tr>
<tr>
<td>Sept</td>
<td>06</td>
<td>Final Workshop at NCTC</td>
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Oct 06 Draft materials from fourth workshop circulated for review
Oct-Dec 06 Results delivered at varied national meetings
Nov 06 Results of fourth workshop posted on website
Jan 07 Final document prepared and distributed; project completed

Coordinators for National Association for Interpretation
Tim Merriman – 1-888-900-8283
Lisa Brochu – 1-866-326-4642
In current discussions in Germany on learning in the enterprises, particularly in connection with E-learning, the concept of informal learning repeatedly appears. A Google search for this concept at present produces almost 100,000 German-language results, with the development over the past few months suggesting an increasing tendency. Largely on a phenomenological level, and rather superficially, recourse is had to a considerable extent to parts of rather popular US publications in the field. Neither the German debate on informal learning at work nor serious English-language research findings from the USA, Canada, or Great Britain are taken account of. The terminology used is in general somewhat sensationalist, for instance „Lernen ohne Seminarstress“ („learning without seminar stress“) (VDI-Nachrichten 2005), „Informelles Lernen in Unternehmen - Vom Schleichweg zur Hauptstraße des Wissens“ („Informal learning in the firm – from a by-way to the main road of knowledge“) (T-Systems 2005), or „Informelles Lernen - Treibstoff der Wissensgesellschaft“ („Informal learning – fuel for the knowledge society“) (Heidecke 2006). Many actors seem not yet to have realised that there is a German reception – which is hesitant, but is becoming broader – of the mainly English-language debates and research results on informal learning. A more systematic reception and further development of the internationally used terminology originates in educational writings relating to development policy (Schöftthaler 1981, Sandhaas 1986, Lenhart 1993, Overwien 1999), and extends to adult education (Dohmen 1996, 2001) and vocational training (Dehnbostel 1999, Straka 2000, Gonon 2002). Recently, representatives of social pedagogy, youth research, environmental education and leisure education have been pointing to the importance of fields of learning outside formal education (Otto/ Kutscher 2004, Lipski 2000 / 2004, Rauschenbach et al. 2004, Wohlers 2001, Nahrstedt et al. 2002). Here, in some cases – with regard to the designing of learning environments – the concept of „informal education“ is taken up (cf. Otto / Coelen 2004).

The debate involves not only the theory of vocational training, adult education, the study of work, or psychology and sociology, but also business management. The focus on informal learning is, however, congruent neither with the development of organisation and staffing, nor with perspectives of cognitive psychology. Nor are approaches of knowledge management suited to provide an adequate appreciation of the particular nature of informal learning. The special quality of these processes lies precisely in the subjective processing of learning, which includes the formation of the individual’s occupational identity and standards of value from the context concerned (Molzberger, Overwien 2004).

The international debate finds the clearest interfaces in the more directly firm-related sectors of German vocational training and adult education. Here, a plurality of approaches and a connection between learning and working have long been urged, and also practised here more than in the context of school. In large and medium-sized firms, at least, qualification periods at the workplace have been increased, and forms of learning that integrate working and learning, such as the quality circle or the „Lernstatt“ (BMW) have been created. The attempt to cope with increasing complexity is going in the direction of a decentralisation of forms of learning that attributes decisive importance to
learning by experience and informal learning within the working process. Within the firm, forms of learning such as „islands of learning“, „stations of learning“, or „tasks of working and learning“ (Dehnbostel 2003 et al) are becoming more widespread.

To some extent, processes of informal learning have been long dealt with in the academic literature, using other terminology. Thus, for instance, Dehnbostel (2004) proceeds from the reality of necessary learning processes, the design of which can represent a competitive advantage for the firm concerned. Types of formal and informal learning and knowledge in the firm are compared and discussed, particular attention being paid to the development of competence as a central idea of vocational training. The „development of competence“ refers to the acquisition of competence in occupational behaviour, and the capacity to act consciously. Learning oriented to action and experience is possible only to a limited extent in central institutions of education and training. On the other hand, Dehnbostel regards a one-sided recourse to informal learning processes – and connected with this refraining from the use of formalised ones – as problematic. Instead, he emphasises the need for the integration of learning by experience and organised learning, and shows approaches to the realisation of such a combination.

In Germany, the range of definitions of terms is as non-uniform as in the English-speaking world. One widespread definition comes from adult education, according to which formal learning is a type of learning bearing the institutional mark and structured according to planning, with recognised certificates. By contrast, informal learning or non-formal learning in courses and the like has its place outside of this sphere. Informal learning takes place in daily life, without regulation. Additionally, there is incidental or implicit learning, an unconscious and occasional form of learning, as a by-product of other activities (Dohmen 2001, 18 ff.).

Dehnbostel considers informal learning as a process in the context of learning by experience in the firm, where is it an important form of learning within the entirety of the kinds of learning and knowledge that take place there. These are represented in simplified form in the following diagram. According to this, learning in the firm can be basically divided into organised and informal learning. Organised, or formal, learning is directed towards the transfer of particular learning matter and learning goals. It aims at a pre-defined learning result, whereas in the case of informal learning, learning takes place without this being a conscious goal of teaching (see fig.1).
Within Europe, the directives of the EU have a strong influence. Already in the White Book of 1995 on general education and vocational training (Commission 1995), the recognition of informal learning is taken as being a necessary consequence of the challenges of technological and informational change and of globalisation. A paper of the European Commission with the title “Creating a European space for life-long learning” names concrete steps for the inclusion of informal learning in an overall strategy, with the “... requirement to institutions of education and vocational training to devote themselves systematically to the evaluation and recognition of non-formal and informal learning.” (EU Commission 2001, p. 16ff.). In the meantime, the European Commission has also laid down which definition of informal learning is valid within the educational debate in the EU. For years, there was a coexistence of differing terminology here. Some protagonists of the debate used the term “non-formal learning” to refer to the kind of learning which is generally discussed under the heading “informal learning” (cf. Bjørnåvold 1999). This confusion now seems to have been removed.

**Formal learning**
Learning typically provided by an education or training institution, structured (in terms of learning objectives, learning time or learning support) and leading to certification. Formal learning is intentional from the learner's perspective.

**Non-formal learning**
Learning that is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's perspective.

**Informal learning**
Learning resulting from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases it is non-intentional (or “incidental”/random) (European Commission 2001, p. 9, 32f.)

**Studies on informal learning and the acquisition of competences for work**

Within the German context, there have been comparatively few studies that explicitly use the concept of informal learning. A number of studies of the German Youth Institute (Deutsches Jugendinstitut), while not dealing with the topic of informal learning as such, include the significance of this form of learning for work perspectives in their considerations. As long ago as 1994, a study on the topic of “Informal education in youth” was carried out (Tully 1994). What is particularly important about this study is the interplay dealt with here between various places and modes of learning in the largely informal acquisition of the set of competences important for the use of the computer. From the same context comes a study on fields of informal learning of school students in their leisure time (Lipski 2000). An essential category of this study is the interest in learning, the motivation to learn of the children and adolescents, contrasting with learning at school. In all, over 1700 pupils in grades four, five and six from various areas
of both eastern and western Germany, and additionally 1300 parents, were questioned. A written questionnaire was complemented by a number of case studies in depth. The conclusions indicate a connection between the pursuit of interests and the need for positive activity, which has a greater importance than passive occupation. Those questioned seek challenges, and frequently consciously combine enjoyment with achievement. Almost two-thirds of the children and adolescents furthermore orient themselves in the pursuit of their leisure interests to sometimes vague, yet clearly recognisable wishes as to their future occupations. One of the most important sources of stimuli for interest or learning here is the peer age group. The findings of the study are contrasted with interviews with teachers, leading to considerations concerning necessary connections between informal and school learning (Lipski 2000, p.35).

Currently, the German Youth Institute, together with the University of Dortmund, is carrying out a study on the informal learning of young people doing voluntary work (see on this Rauschenbach et al. 2005). The first findings of this study, which directly links up with international studies, were presented recently (Düx 2006, Sass 2006). Findings of the investigation show how young people evaluate their experiences in, Greenpeace groups, the Protestant (Lutheran) Youth Movement, the „Falken“ (socialist youth movement), voluntary fire brigades, trades union youth work, or the „Technisches Hilfswerk“ (emergency assistance brigade). It was confirmed that learning experiences particularly relate to the social and personality-forming fields. In addition, specialist knowledge and political, media or organisational competences were also acquired (Düx 2006, 234ff.). The young people questioned considered a certification of their learning experience, according to the situation, more or less helpful. The question also arises as to the extent to which the character of the activity was altered in the process, with a loss of enjoyment and the voluntary element (Sass 2006, 265ff.).

Gerzer-Sass (2004) deals with the question as to how competences for action acquired informally within the family can be transferred to the world of work, and what kinds of procedures of recognition there might be. The family is understood as an essential place of learning where a variety of competences can be and are informally acquired.

Studies on informal learning and the acquisition of competences at work

A number of studies on „learning within the social environment“ were carried out in the context of the German Network „QUEM“². Here, in some cases, the concept of informal learning was also used. Research findings from Canada were also included in this context (Livingstone 1999).

In the course of one qualitative study, Kirchhofer thematises informal learning in everyday life, with a direct connection to the development of occupational competences (Kirchhofer 2000). Processes of informal learning in daily life are identified via daily records. The analysis of the records leads to typifications of learning, and insight into learning situations and strategies of learning. The starting point is an increasing closure of the gap between the living and working situations of many people. Learning situations are constantly arising within the social environment whose results influence the process of the development of occupational competences. Thus the author places

² see: www.abwf.de
particular emphasis on questions of the transfer of competences from the social environment to the occupational sphere.

The particular importance of Kirchhofer's study lies in the detailed rendering and analysis of learning situations in daily life. Thus he shows that learning situations are determined by the content of work, the organisation of work, and the social interconnections in the learning environment. Self-contained routine activities result in a much lower degree of learning than relatively open work processes whose course is not laid down from the beginning. A „learning-promoting“ structuring of the learning environment coming from outside may support the individual’s learning achievement, but at the same time the individual too structures the learning process by making changes in the learning situation (ibid., p. 80). In other words, the learning situation includes components imposed from outside, but at the same time is modified by the individual with a view to learning. Using the opportunity to learn depends on the self-learning competence acquired in the course of the individual’s biography and his/her motivation to learn. Kirchhofer identifies a variety of learning strategies. Observation, imitation and experimental learning are to be found, as is also trial action in the mind. „Social-communicative strategies“ also play an important part. Conversations engaged in and advice received contain pressure to „formulate the programme of action“. Also important is the use of written resources such as instructions for use, specialist literature, or internet articles. The critical analysis of the learning situation is also included among the strategies (ibid., p. 81).

Stieler-Lorenz reports on a study that was carried out in the year 2000 in the area of the former East Germany (Stieler-Lorenz 2002). This centred on the acquisition of work-related and occupation-related competences, consideration being also given to connections to learning within the social and political environment. The results of this both qualitative and quantitative study underline the great importance of informal learning, particularly in fields of learning that have to do with the framework conditions of work (health and safety regulations, labour legislation, the organisation of work, etc.), working with the computer, customer orientation, or work with new technologies and products (ibid., p. 286). In the qualitative part of the study, it is found that, within knowledge-based activities in „traditional enterprises“, just as in „knowledge-based enterprises“ in the field of software, a particularly marked promotion of learning is to be found in the content of work (ibid., p. 306).

Schiersmann and Strauss investigate learning experiences in informal and formal learning contexts, and connect their investigation with attitudes of interviewees on further training, representatively selected and subjected to standardised questioning. The study shows the considerable significance of „informal learning contexts“ for a large group of people of working age. Meanwhile, those concerned had hardly come into connection with formalised further training. Another group with a generally higher level of education and relative clear potential for self-determination had a positive approach to opportunities for further training. The account of the findings, however, leaves open what informal learning components of this group, included in an overall picture, were additionally important. Thus the impression arises here that informal learning is in the first place something for workers with fewer formal qualifications.

A study on informal learning in small and medium-size firms in the IT field is presented by Dehnhostel et al. (2003). In the framework of a quantitative section, 110 firms were questioned, while a qualitative sec-
tion leads to a „concentrated account“ of informal learning in the firm. At the centre of the learning activities described are communicative processes, such as the continuous discussion with colleagues on current working tasks and problems. The structured solving of problems is named as an important mode of learning, as is systematic experimentation against the background of experience. The learning strategies centre on conscious reflection during discussion with colleagues. The internet plays an important part, although its value as a resource for learning is highly relativised. Learning software is hardly involved. Surprisingly important is the use of the printed media, whether in the form of specialist journals or manuals. Strategies for the support of processes of informal learning are to be found in the vast majority of the firms interviewed. A number of supporting measures are being tried out, from the specific use of learning materials to coaching, or have been in use for some time. The firms endeavour particularly to support systematically the communicative dialogue concerning work processes and routines within the enterprise, with the conscious aim of the growth of learning. Forms to achieve this include regularly weekly meetings, team sessions to discuss current problems, or meetings of project leaders to discuss current projects, which are chiefly designed to make work proceed smoothly, but at the same time devote time and space to learning. They can be termed learning-promoting forms of work organisation (Dehnbostel et al. 2003, p. 61ff.). Both the results of the questionnaire and the case study show that firms have recognised the need for a systematic support of (the learning of) their employees, and are already testing corresponding activities. Meanwhile, the promotion of learning within the firm largely takes place on an intuitive basis. The basic attitude is rendered by formulae such as „we can do it“, „pull yourself up by your bootstraps“, or „make a virtue of necessity“. There are hardly to be found any lasting structural concepts specific to the particular enterprise. This confirms that professional guidance is required to support learning at work (ibid., p. 173ff.).

Prospects for the future

The debates and studies on informal learning summarised above leave a number of questions open. It is no accident that one focus of the discussion is on work-related learning. With the increasing complexity of work contents, in future plans for the guidance of informal learning at work will need to be worked out for a number of sectors of production and services. At present, two preliminary experimental models in the field of the IT industry are operating in Berlin and Hamburg. Here, instruments for the structuring and promotion of informal learning are being developed and tested. Activities of this kind need to be further intensified. In the past few years, the system of reporting on further training has taken more account than previously of informal learning. In many cases, the concept of „self-determined learning“ is employed, whose connection to that of informal learning is also largely open (as e.g. in Kuwan 2005). This indicates that there is a need for further research in the clarification of terminology or concepts as well.

As well as paying attention to work-related learning, the considerable number of people are to be considered who are largely not integrated into the labour market. Together with approaches to the promotion and improvement of learning at work, learning within the social environment, which is useful in the work process, should also be given added emphasis. Here, activities of past years can be built upon (Quem). Concepts of training and further training need to be developed that take account of informal learning, recognise competences that have
already been acquired, and accompany social integration. Directives of the European Commission have already led to an increased discussion of instruments for measuring and documenting such competences, which from informal learning (cf. Ness 2005, Bretschneider/Preisser 2003, Frank/Gutschow 2005).

From the side of the firms, the „blurring of educational principles“ (Gonon 2003, Lüders/Kade/Hornstein 1998) and the inclusion of educational arguments in strategies of business management should not allow us to forget that firms pursue their own logic of action in the shaping of processes of learning and further training as well. This logic has little in common with educational concerns (Harney 1998). The designing of forms of learning in the firm, and the taking into account of learning within the social environment, which link up with informal learning and at the same time transcend it, can hardly be meaningfully attained without further insights into the contexts, social relations, and conditioned nature of informal learning.

**Literature:**


Bildungsdebatte Wiesbaden 2004


VDI-Nachrichten: Lernen ohne Seminarstress (Management & Karriere). Düsseldorf 3.6.2005

