

ECER 2012 *The Need for Educational Research to Champion Freedom, Education and Development for All*

September 17-21, 2012 at the University of Cádiz, Andalusia (Spain)

EERA Network: 06. Open Learning: Media, Environments and Cultures

Symposium: Key Concepts and Key Issues in Learning, Education, Media and Culture (Part 1)

Key Concepts in Education: Critical Issues beyond Definition and Discursive Practices

Theo Hug (University of Innsbruck/A)

Abstract

Along with processes of digitization, medialization and globalization of communications and lifeworlds, new topics, subject matters, conceptualizations and methods have been developed in educational research and practice. On the one hand, from a diachronic perspective we can notice how new aspects of education (*Bildung*), upbringing (*Erziehung*), learning and communication have been addressed. On the other hand, from a synchronic perspective we can see a simultaneity of the non-simultaneous in terms of understandings, approaches, methodologies and forms of mediation and collaboration. Although more and more open initiatives and open educational resources (OER) as well as international collaborations and transnational intellectual networks are brought forward, epistemological aspects of the usage of different key concepts are widely underestimated. The paper starts with (1) an outline of selected understandings of education and literacy, followed by (2) a discussion of critical epistemological aspects by way of contrasting and correlating conceptual dimensions. Finally, the contribution aims at (3) a sketch of polylogical design principles for educational knowledge organization.

Introduction

Generally speaking, many would agree that new topics, subject matters, conceptualizations and methods have been developed in educational research and practice along with processes of digitization, medialization and globalization of communications and lifeworlds. If asked for relevant examples, some would point to e-learning practices and the introduction of computers or mobile devices in schools; others would foreground aspects of new learning cultures or the role of media in life-long, life-wide or life-deep learning; and others again would put their fingers on e-inclusion policies, positive chances for a desirable future of learning or problematic aspects like mental enfeeblement or "flickering minds" (Oppenheimer 2003). As soon as we take a closer look we discover a multitude of loosely or not at all connected approaches, concepts, methodologies and opinions. Some of them are widely accepted or at least discussed, some are relevant only to small groups or even just to individuals.

The scope of this simultaneity of the asynchrony of various understandings, conceptualizations and modes of foregrounding themes, problems as well as approaches to solving them is commonly undervalued. Indeed, one might say that, in view of the multitudinous heterogeneity, strategies of ignorance are necessary in order to be able to work on certain issues. This argument can easily be strengthened by pointing to contrary if not contradictory basic positions such as widespread taken-for-granted ways of talking about "social media" or "new media" as opposed to the argument that "there are no new media" (cf. Geoghegan 2005).

Moreover, there seems to be no reasonable chance for achieving even partial connections if we realize the far-reaching consequences of basic decisions as related to, for example,

- different epistemological horizons of reflection in the wake of pictorial turn(s), cultural turn(s), mediatic turn(s), etc.
- various descriptions of generally relevant societal dynamics and diagnoses of "the" times
- conceptual, methodological and technical frames of framing issues as well as ways of dealing with problems of terminology and translation
- communicative, academic and intellectual styles (cf. Galtung 1985; Thiel/Rost 2001)
- interpretations of academic freedom and institutional peculiarities.

Then again, it seems that there are too many centrifugal forces at work, and too many of them in self-sufficient and not very thoughtful ways. However, it has long been impossible to read all important publications on a subject, and there is no end or limitation of academic paper production in sight. Quite the contrary, more and more journals are available, immense amounts of online documents are being published, and books as well as e-readers are on sale as never before. In view of the ongoing production of different forms of knowledge and information dynamics, developing both general and specific concepts of academic information entropy has become a challenging task.

In this paper I am going to outline some critical issues as to key concepts in education like education and literacy and considerations beyond definition and discursive practices in search of viable solutions for middle courses between lopsided approaches, implicitly absolutized positions or mutual ignorance on the one hand and epistemological hopelessness or indifference, arbitrary selection or the invocation of "difference" on the other.

1. Education and Literacy as Key Concepts in Education

If we consult handbooks and introductions to educational studies, we can quickly establish that (a) they contain different terms even if their scope is similar, (b) they do not give the same attention to these terms, and that (c) specific concepts go through historical cycles of usage. For example, in the 1960s and 1970s terms like socialization, qualification, development and learning moved to the center of the German-speaking educational discourses. Roughly 130 years earlier, in the introduction to *Umriss pädagogischer Vorlesungen* (1841), Johann Friedrich Herbart (1776-1841) emphasized two aspects which are relevant for the determination of the study of pedagogy: §1 "The basic concept of pedagogy is the educationability [*Bildsamkeit*] of the student" and §2 "Pedagogy as a science depends on practical philosophy and psychology. The former indicates the aim of education, the latter the route, means and obstacles" (Herbart 1841, p. 1). Elsewhere Herbart discusses terms such as 'variety of interest' or 'moral strength of character' as fundamental ideas and combines the concepts 'education' und 'teaching' in the compound 'educational teaching' (cf. Herbart 1806). He became known not least because he demanded to focus on basic concepts that are "native" (that is, original or endemic to the discipline) and gave the following reasons:

"It would arguably be better if pedagogy remembered its endemic [*einheimisch*] concepts as accurately as possible and made an effort to cultivate independent thinking, whereby it would become the center of a research sphere and avoid the risk of being governed by a stranger as a distant, conquered province." (Herbart 1806, p. 8)

More than 200 years later, the situation has become a lot more complex, and partial or extensive "claims to government" in educational matters do not only come from state, economic or ecclesiastic powers but also from media institutions. Moreover, the scope of issues has been expanded beyond foci related to teaching and now includes diverse extramural topics and the entire curriculum vitae. The field of related disciplines has also widened considerably so that, aside from philosophy, psychology and sociology, in recent times cybernetics, information technology, cognitive sciences, biology and neurosciences have come to play a very prominent role in some areas. In addition to that, we can observe tendencies towards the Europeanization and internationalization of the education system as well as dynamics of individualization, globalization, medialization and mobilization which are highly relevant not only in societal contexts and to our system of education but also to scientific systems and especially to studies in education themselves.¹

Besides, if we become aware of the challenges and interrelated problems of the kind connected to the topics demographic change, media convergence, knowledge-based economy, new work order, climate change, energy supply or environmental and security policy, we will quickly realize that the communication about the educational dimensions of these interrelations is by far not limited to the proper translation of terminologies, which by itself often seems an unsolvable problem.²

While the term 'competence' is frequently used in the German-speaking area today in regard to aspects of education theory and practical pedagogy that are related to these challenges, on the international level the use of 'literality' is more common. Like in the case of the many different concepts of education, the competence debates also contain greatly differing basic understandings (cf. exemplarily Elliot & Dweck 2005; Erpenbeck & von Rosenstiel 2007).

¹ This concerns for example the mobility of researchers, the increasingly standard employment of technology-based collection and evaluation procedures in empirical research, or the education on everyday and scientific myths on the basis of new methods, as it is provided for instance by Hans Rosling concerning "Insights on poverty" (http://www.ted.com/talks/hans_rosling_reveals_new_insights_on_poverty.html) and myths about so-called developing countries (http://www.ted.com/index.php/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen.html).

² The term 'education' for instance may be translated in German to 'Bildung,' 'Ausbildung,' 'Bildungswesen,' 'Bildungsweg,' 'Erziehung,' 'Eduktion,' 'Unterricht,' 'Schulung,' 'Training,' 'Unterweisung' as well as 'Bildungswissenschaft' (the course of studies) and 'Erziehungswissenschaft' (the academic discipline).

Looking at the term 'literacy,' the situation is similar (cf. exemplarily Street & Lefstein 2007; Olson & Torrance 2009).³ It has been fashionable for a while to generate new concepts of literality and literacy, transfer them to various areas, and apply them in metaphorical ways (cf. Gee 1999; Leu 1999; Sting 2003). Many descriptions of new literacies are pragmatically motivated, many are kept very simple (cf. Sheridan 2000), others are quite differentiated (Richardson et al. 2009) and clearly focused (cf. Institute of Museum and Library Services 2009). But it is not only the variety of different conceptualizations and the multitude of compound terms which invite a review of discursive developments. It is also the fact that sometimes different terms are used for similar phenomena, that unclear or hidden meanings are at work, and that epistemological shortcomings are often underestimated.

Large parts of concurrent discourses on literacies and especially on visual literacy (cf. Hug 2011) seem rather odd and restricted to the thinking of the linguistic turn. But these days, dealing with the methodological and epistemological challenges linked with the pictorial turn (Mitchell 1994) and the iconic turn (Boehm 1994, p. 13f) is long overdue. Moreover, also in view of discourses on one or several mediatic turns (cf. Margreiter 1999; Friesen/Hug 2009; Hug 2009) and the digital turn (cf. Kossek/Peschl 2012), it is about time for considerations beyond literacies (cf. Hug 2012). At least in my view the ongoing processes of the literacification of everything seem to be part of the problem rather than part of the solution. Correspondingly, we need conceptual alternatives that are relevant for media pedagogy and educational theory.

2. Aspects of Educational Philosophy and Considerations beyond Definition and Discursive Practices

From a historical perspective, the tension between normative aspects of internal and external legitimation and educational discourses on conceptual clarifications of the core areas and responsibilities of the discipline, on the one hand, and the increasingly multi-

³ In both contexts, numerous compound terms are used; here is an incomplete list of examples: action competence, coaching competence, cognitive competence, communicative competence, competence measurement, design competence, diversity competence, ecological competence, emotional competence, gender competence, intercultural competence, key competencies, leadership competence, media competence, meta competence, organizational competence, pornography competence, self competence, social competence, visual competence, etc.

art literacy, computer literacy, consumer literacy, digital literacy, diversity literacy, ecological literacy, emotional literacy, environmental literacy, film literacy, food literacy, geographical literacy, hacking literacy, health literacy, information literacy, internet literacy, library literacy, multicultural literacy, numerical literacy, sexual literacy, television literacy, visual literacy, etc.

faceted demands of society on the discipline and the educational institutions, on the other hand, can be differentiated by means of educationalization formulas (*Pädagogisierungsformeln*) and their historical relevance. Hermann Veith (2003, pp. 183-201; see Tab. 1) provides a helpful historical overview of reproduction problems and educationalization formulas for the German-speaking area.

Date	Reproduction crisis	Author/Theory	Educational formula
1519	Crisis of orientation	Luther	School teaching
	Crisis of stability	Ratke	Didactics
Teaching (Unterricht)			
1648	Crisis of faith	Comenius	Moral education
	Crisis of poverty	Pietism	Vocational education
	Rationality deficit	Early Enlightenment	Beneficialness (<i>Nützlichkeit</i>)
1740	Crisis of supply	Philanthropism	Usefulness (<i>Brauchbarkeit</i>)
	Structural change	Sextro	Industrial education
Upbringing (Erziehung)			
1789	Erosion of solidarity	Pestalozzi	Popular education
	Crisis of legitimacy	Humboldt	Development of self (<i>Subjektbildung</i>)
	Foreign rule	Fichte	National education
1815	Restoration	Schleiermacher	Humanistic education
	Value shift	Herbart	Character education
1849	Inequality	Diesterweg	Teacher education
	Class struggle	Herbartians	Ideological education
Education (Bildung)			
1871	Loss of tradition	Progressive education	Spontaneity
	Critique of profession	Meumann	Development
1914	Scarcity of raw materials	Stern	Talent
	Consequences of the war	Humanities	Acquirement of culture
1945	New beginning	Pedagogy of the German Democratic Republic	Practical learning
	Rebuilding	Pedagogy of the Federal Republic of Germany	Maturity
1961	Need for innovation	Action pedagogy (<i>Tätigkeitspädagogik</i>)	Creativity
	Education calamity (<i>Bildungsmisere</i>)	Pedagogy of learning	Capacity to act
1990	Globalization	Competence discourse	Self-organization
Learning			

Tab. 1: Reproduction problems and educational formulas (cf. Veith 2003, p. 185)

This overview could be expanded in a number of ways, namely in regard to

- reproduction problems and educational formulas in different countries and regions as well as comparative analyses
- interdependences and interferences of different relevance formulas in national, international, transnational and global contexts
- interplays between cultural, technological and societal dynamics (cf. Rusch 2007) beyond considerations of societal change
- chronological updates and contemporary observations.

Correspondingly, medialization for instance can nowadays be regarded as a pedagogical relevance formula which, together with the 'competence development' formula and key concepts like 'internal/external control,' 'emergence,' 'interconnectedness,' 'participation' and '(new) culture of learning,' marks a contemporary discourse that refers to the changed medialized conditions of socialization and sociation [*Vergesellschaftung*], the dynamics of relevant process logics, and not least the requirements of life-long, life-wide and life-deep learning.

The difficulty constituted by the fact that the relevance of relevance formulas and also the corresponding problem descriptions are relative can be alleviated by steering clear of the pitfalls of epistemological foundationalism⁴ and arbitrary positings. The way to achieve this is to pay differentiated attention to the plurality of relevance formulas and corresponding problem descriptions⁵ and put this plurality into context in a contrastive manner. For epistemological purposes, a non-foundationalist or 'antifoundationalist' approach of the kind proposed by Roel van Goor, Frieda Heyting and Gert-Jan Vreeke (2004) proves promising and useful here (cf. also Heyting 2001). On the one hand, such an undogmatic and non-static orientation accommodates the undecidable character of many questions; on the other, it counters premature, oversimplified or arbitrary solution strategies by means of a threefold contextualization of specific problems and topics (reflection on the meaning context, personal context and discourse context; cf. van Goor/Heyting/Vreeke 2004, p. 176). Such an approach opens up manifold possibilities of historically and systematically de- and re-contextualizing key concepts beyond collections of comparative definitions, beyond

⁴ The problems of classical foundationalism (empiricism, rationalism and transcendentalism) were pointed out more than 40 years ago by Richard Rorty (1979) in *Philosophy and the Mirror of Nature*.

⁵ By way of example, I refer to formulations of the purpose of education in the light of problem definitions and challenges as sketched above, as they have been drafted in various contexts, also online (see, for example, <http://purposed.org.uk/> or <http://educationforthe crisis.wikispaces.com/>).

efforts of translating and integrating existing thesauri, or the more or less taken-for-granted foregrounding of discursive practices in one language. Furthermore, this kind of approach may be characterized as relational insofar as definitions, conceptual, theoretical and methodological aspects as well as corresponding objectives, phenomenal domains and practices may be differentiated *and* correlated from multiple perspectives, without encouraging hegemonic tendencies in the politics of scientific discourse. This applies to intrinsic as well as comprehensive aspects of discourse.

In the course of such a context-sensitive approach, it may also become clear which expressions actually figure as key concepts in which discourse communities and in what way, and to what extent parallels, similarities, differences and historical changes are distinguishable. For instance, for many European educationalists, terms like 'education,' 'media education,' 'literacy,' 'media literacy,' 'competence' or 'media competence' may represent current key concepts of their discipline or at least of media education (*Medienbildung*). To date, however, it seems that corresponding definitions, explanations, characterizations and conceptualizations as well as related aims, structures, systems, practices and ideologies have been contrasted in detail only rudimentarily.⁶

The same holds true for the global level. The United Nations Educational, Scientific and Cultural Organization (UNESCO) for example, during an international expert meeting in June 2003, defined the term 'literacy' as follows:

"Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society."

(UNESCO 2004, p. 13)

The further remarks in the document explain how the proposed operational definition can be used for measurement purposes in particular, and how it is to be understood in the context of aspects of creating literate environments, literacy governance, cultural identity, civil society, community learning, gender equality, formal and non-formal education, as well as the monitoring and assessment of literacy. The authors attach importance to a plural understanding of literacy (*ibid.*, p. 7) and want to suggest "concrete actions by which policy-

⁶ Cf. for example the European Charter for Media Literacy (<http://www.euromedialiteracy.eu/>), although in the result it is fairly difficult to identify the different accentuations and special features of the individual approaches.

makers and program providers might expand and improve their work and thereby address the learning needs of those deprived of learning opportunities" (cf. UNESCO 2004, p. 29). They also refer to the history of the concept, starting with literacy in the sense of the ability to read and write, having knowledge, skills or competence in the sense of socio-economic dimensions of functional literacy as well as dimensions of politically active participation, and the ability to argue critically about the written word, and on to social practices of literacy beyond individual skills. At the same time they highlight that metaphorical uses of literacy "in domains other than those immediately concerned with written texts, such skills as 'computer literacy', 'media literacy', 'health literacy', 'eco-literacy', 'emotional literacy' and the like do not form part of the plural notion of literacy at issue here" (UNESCO 2004, p. 7).⁷ Thereby the authors may sidestep those problems of the literacification of (nearly) everything which are part of the problem rather than the solution (cf. Hug 2012). However, this excludes the subjects and problem areas which have become increasingly important not only or not primarily with letters, words and written texts, but with images, numerals, formulas and digital material of all sorts in globalized, mediated and mediatized worlds.

3. Towards a Polylogical Design for Educational Knowledge Organization

It is quite obvious that neither online tools like Wikipedia nor printed reference works like the *International Encyclopedia of Education* (Peterson/Baker/McGaw 2010) or *The Routledge International Encyclopedia of Education* (McCulloch/Crook 2008) meet the requirements related to the considerations outlined above. This is not so much due to absent contents and conceptual deficits in regard to the justification of epistemological and methodological points of departure. The decisive factors are rather the focus on a medial form, the very limited extent of the pursued linking of information, and the missing efforts to interrelate historical and systematic perspectives. At this point it is certainly possible to argue that, in view of the complexity of scientific requirements, the lack of available grants for basic projects with a global and egalitarian focus, the foreseeable technical difficulties, translation challenges of all kinds, the dubiousness of practical benefit, the shortage of political opportuneness, or the absent orientation on mainstream developments, the endeavor for a multilingual, multicode, multipurpose as well as inter- and transnational project aimed at

⁷ Cf. debates about "new literacies," for example, as discussed in Leu (1999) and *Literacy in the New Media Age* (Kress 2003).

interrelating key concepts and key issues in (media) education seems futile and would amount to the experimental creation of an omnipotent tool. Yet I do believe that there is creative room between monolingual reference works with selected perspectives mostly limited to few countries, continents and scientific-culture backgrounds, and the vain search for an all-in-one device suitable for every purpose.

In my opinion, there are quite useful starting points for developing such an ambitious project without ethno- or Eurocentric dominance and beyond common discursive practices in academia. Specifically, some are provided by the model of polylogical research (cf. Wimmer 2001), which can also be applied to educational and pedagogical questions. Just like it is "necessary to inquire about the conditions for the possibility of systematic philosophy under the premise of different cultural imprints, which can be effective on every level of reflection and argumentation" (cf. Wimmer 2001, p. 382), the effect of implicit assumptions and culturally determined ways of thinking can and must also be foregrounded and reflected on in educational discourse.

Wimmer (2001, p. 389f) distinguishes four types of cultural centrisms which can be seen as "loopholes" out of the dilemmas of culturality:

(a) In *expansive centrism*, there is development only through unilateral impact but not through equal cooperation. "The truth" of a cause is already available and simply needs to be disseminated. The centre influences the periphery, while influences in the other direction do not matter.

(b) *Integrative centrism* is also based on the belief that the own positions are objectively superior, assuming "that their desirability per se is sufficient to attract and incorporate everything foreign" (ibid., p. 389).

(c) *Separative centrism* means an attitude towards other cultures and societies which lacks the claim to absolute superiority. Different convictions and "truths" can coexist side by side. According to this view, not uniformity but plurality is at the foundation, yet the culturally conditioned differences in thinking are regarded as insurmountable or, as it were, natural.

(d) Finally, in the case of *tentative centrism*, one's own view, held out of well-founded conviction, is thought to be a prerequisite for "understanding the equally subjectively motivated differing conviction of others, not only as a fact but also as a legitimacy. Yet at all times, the own view as well as the other view are considered to be revisable. Again, plurality

forms the basis but in such a way that its respective form represents something potentially temporary" (Wimmer 2001, p. 389f).

Moreover, each of these types can be seen in a holistic or in a partial sense, with different notions and positions identifiable on an intra- and intercultural level. The crucial thing is which influence processes are being favored or becoming effective, and whether they tend to show mutually manipulative or seductive, persuasive or convincing characteristics.

Three basic models of such influence processes may be distinguished (cf. Wimmer 2001, p. 392):

(a) Unilateral centristic influence: *Monologue*

Position X tries to influence all other positions so that they adjust to position X. Other positions may ignore one another, they have to be changed, overcome or removed (cf. catchwords like "Westernization," "cultural imperialism" or "acculturation").⁸

(b) Partial reciprocal influence: *Dialogue*

Unquestioned assumptions of superiority play a modified role here. Even when mutual understanding is considered to be unlikely or impossible, the results are still seen as an achievement of everybody involved in the sense of a selective acculturation.

(c) Complete reciprocal influence: *Polylogue*

This model concerns dialogues between several or many positions, the ideal scenario being that all basic concepts, assumptions, starting points and methods are debatable and every participant is equally open to arguments. The nature of the resulting form of the polylogue is that "for each tradition [...] every other one [is] 'exotic' in the sense that each one is foreign to all the others and none of them are beyond question" (Wimmer 2011, p. 392).

Even though the presupposition of actual equal status, the notion of universally balanced interests, and the willingness to question all basic concepts and assumptions have a counterfactual character, the model of polylogical research as a concept regulating practice is still helpful in regard to

- the encouragement of (self-)perception and openness to different approaches and problem descriptions

⁸ On the other hand, even studies which are not geared to the assimilation of all other positions to the own position may show a monological character. For example, the monolingual sourcebook on education in traditional cultures (*Erziehung in Traditionalen Kulturen*, Krebs 2001) provides a number of findings and reports from Africa, America, Asia and Australia. However, the reader does not hear from the described groups themselves; the different views of education and their cultural contexts as well as the educational relevance of the findings are not discussed from African, (Latin-)American, Asian and Australian perspectives.

- the description and analysis of culturally conditioned ways of thinking
- and the stimulus to mutual education, by all means also in the light of a need to rethink the Enlightenment (cf. Elkana 2011).

Concerning the relating of key concepts and key issues in education, this idea that regulates practice may also be helpful insofar as different perspectives, initially based on a few points of crystallization, can be contrasted and contextualized beneficially and from multiple perspectives, without having to invoke all kinds of approaches, conceptions and cultures. To the degree that the points of crystallization refer to key issues and key concepts considered to be important by all participants, and their nature allows for connections to new contrastings and further perspectivations, they also open up possibilities for learning and development as well as education potential for all participants.

In this context, an essential challenge may be to let the contemplative character of the communicative effort come into effect and not misinterpret the polylogical activities in the technical sense of working off routines, thus ultimately subordinating the efforts to technical discourse. The latter can be avoided if (a) the scopes of thought and action are not needlessly limited by permanently established design principles and design patterns, and (b) the participants are actively involved in the processes of reasonably and iteratively (re-)designing the rooms for maneuver. Unlike the design-based research of the learning sciences,⁹ the concern here certainly contains differentiated meta-theoretical rationales and an involvement with categories, theories and methods from design science.

The fact that design science has had to grapple with similar problems of legitimation and recognition as education studies (cf. Glanville 1999, p. 80) is in my opinion an argument for and not against such a debate, one which offers numerous reference points for the flexible design of polylogically-oriented efforts for understanding that include educational key issues and key words (cf. Krippendorff 2006, esp. chapter 7). The point here is not to get a grip on things by means of a correct scientific method, but to design "enabling spaces" (Peschl/Fundneider 2008) which take into account material, social, cognitive, epistemological and technological dimensions, and also to raise our awareness of the extent to which the different scientific perspectivations and approaches may be regarded as restricted acts of

⁹ Cf. the critical observations on design-based research and recent learning sciences in Hug/Friesen/Rourke (2007).

design: "(scientific) research is a subset of design, not the other way round" (Glanville 1999, p. 89).

As to technological aspects of the creation of enabling spaces for polylogical efforts for understanding, a few provisional references must suffice here. On the one hand, some initial steps should be possible using existing tools such as Semantic MediaWiki (SMW)¹⁰ or integrated tools like CoCoFlash (cf. Naeve et al. 2006; Naeve 2001a, b). On the other hand, there exist pioneering works *Beyond Paranoid Computing* (Krieg 2003) which consistently consider polylogical approaches to complex problems also on the level of programming.¹¹

Conclusion

The variety of academic cultures and the proverbial cultural diversity in Europe are too often bemoaned instead of taken as a resource for innovation and future-oriented developments. Within educational, communication and media studies as well, and not least the networks of the European Educational Research Association (EERA),¹² the diverse meanings of key words and key concepts are rather developed and used side by side than put into networked relations. There is a lack of interdisciplinary and integrative theoretical and methodological discussions aimed at clarifications and contrastive contextualization.

As outlined above, working towards a multilingual, multiconodal and multicontextual understanding does not necessarily have to lead to an increase of hegemonic tendencies or to a loss of authority for educational studies and (media) educationalists. On the contrary, polylogical forms of knowledge organization can support mutual understanding beyond marketing hypes and short-lived fashions and promote context-sensitive webs and networks of interconnections. Correspondingly, the point is not to insist on systematicity or to bring methodology and theory to perfection for their own sake, but to clarify subject matters and key issues as well as to strengthen argumentative potentials and to enable collaboration with representatives of other disciplines.

¹⁰ Cf. <http://semantic-mediawiki.org/>

¹¹ Cf. Erez Elul's "pile machine," which in contrast to the Turing machine has a polylogical structure and consistently represents objects as generative structures in the form of relations (cf. Krieg 2005; as well as <http://www.heise.de/tp/artikel/19/19187/1.html>). In his theoretical treatises on non-hierarchical yet layered emerging structures, Peter Krieg refers in particular to the polycontextual logic of Gotthard Günther (cf. 1973, 1990), which also offers numerous connecting factors with knowledge organization in regard to key concepts in education.

¹² <http://www.eera-ecer.de/>

At the outset, I took a stance for "middle courses" between lopsided approaches or mutual ignorance and epistemological hopelessness or arbitrary selection; I hope that my explanations have made clear that these middle courses can make sense and that we neither have to start from scratch nor limit our efforts to historicist reactualizations. Between l'art pour l'art and the principal focus on impact points, creditable and evaluable thoughts, and phrasings worthy of funding, there is leeway for probing and communication which has rarely been explored before.

In regard to future probings, I consider organizational, economic and not least the following aspects to be important:

- We need to modify and differentiate the demand for a rediscovery of "native concepts" that is supposedly due to the danger of "being governed by a stranger as a conquered province" (Herbart 1806, p. 8). The advice may not be historically obsolete if you look at some premature and occasionally encroaching reasonings from perspectives of learning technology, neurosciences, biologism, psychologism or sociologism. Yet to me it appears to be equally important to appreciate that, to put it simply, we cannot do without anything foreign or other. Only the contrast of different perspectives reveals strengths, weaknesses, blind spots and the need for clarification.
- Even as an independent entrepreneur, education studies remain dependent on other disciplines. Still, even in contexts where they are considered a subsidiary of other disciplines, we should remember that "education towards truth is always education towards the truth of the educator" (Mitterer 2001, p. 67). This statement by Josef Mitterer continues to be relevant for educationalists and educational scientists alike.
- If we accept that difficulties have arisen from basing the internal differentiation of knowledge systems on individual media and their dispositives (cf. Leschke 2010, p. 303), transversal and transmedial dimensions become important. This is also true for inventories of educational knowledge. In this respect, it seems reasonable to focus here as well on media forms as classification devices in the transversally linked media system (cf. Leschke 2010, p. 305).
- The debates on media competence, media education and media literacy have reached a point where the opposition between technophobic humanities and techno-euphoric engineering and natural sciences appears to have become obsolete.

Considering all of this, it would be a mistake to interpret the remarks in this paper as a simple call to "do culture" in the academia of educationalists, and less so because there "culturality" is, sometimes abusively, held high in the name of tactically motivated correctness. What is more important are general tendencies of "truth-telling," of implicit moralizing and of the education towards truth in pedagogical contexts. For instance, the analytical potentials of the "art of government" in a Foucauldian¹³ sense are all too often somehow pruned and finally turned into moral stances. In doing so, the concept of de-governmentalization emerges as a concept of re-governmentalization on other levels (cf. Hug 2008). In other words, if Dieter Lenzen and Niklas Luhmann write in the preface to the collected essays on *Bildung und Weiterbildung im Erziehungssystem* (1997) that "Upbringing [Erziehung] is an impertinence, education [Bildung] an offer," it does not only raise the question of a polylogical debate on an object-related level. On a second-order level it also challenges the offers and impertinences of educational studies. The more precisely the key concepts and key issues can be articulated and made plausible also for vis-à-vis non-specialists, the better are the chances of fruitful discourse and successful practice.

References

- Boehm, Gottfried (1994): Die Wiederkehr der Bilder. In: Boehm, Gottfried (ed.): *Was ist ein Bild?* Munich: Wilhelm Fink, pp. 11-38.
- Elkana, Yehuda (2011): Rethinking the Enlightenment. In: *Approaching Religion*, 1(2). Retrieved June 6, 2012, from: <<http://ojs.abo.fi/index.php/ar/article/view/117/97>>.
- Elliot, Andrew J. & Dweck, Carol S. (eds.) (2005): *Handbook of Competence and Motivation*. New York: Guilford Press.
- Erpenbeck, John & von Rosenstiel, Lutz (eds.) (2007): *Handbuch Kompetenzmessung: Erkennen, verstehen und bewerten von Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis*. Stuttgart: Schäffer-Poeschel (first edition 2003).
- Foucault, Michel (1982): The Subject and the Power. In: Dreyfus, Hubert & Rabinow, Paul (eds.): *Michel Fou-*

¹³ With the concept of 'governmentality' Foucault aims at a new understanding of power beyond the problematics of consensus, will or conquest. He writes: "The relationship proper to power would not therefore be sought on the side of violence or of struggle, nor on that of voluntary linking (all of which can, at best, only be the instruments of power), but rather in the area of the singular mode of action, neither warlike nor juridical, which is government" (Foucault 1982, p. 221). Foucault advocates a concept of power which focuses on various forms of social control in disciplinary institutions (for example schools or hospitals) as well as on different forms of knowledge in contrast to widespread conceptualizations of power in the sense of hierarchical, top-down power of the state. Accordingly, the concept of 'government' is not limited to state politics alone. It includes a wide range of control techniques which apply to a variety of phenomena, from one's control of the self to the "biopolitical control" of populations. Thus, Foucault defines governmentality as the "art of government" in a wide sense which includes organized practices (mentalities, rationalities and techniques) through which subjects are governed, and which is linked to related concepts such as biopolitics and power-knowledge (cf. Foucault 2006a, b).

- cault: Beyond Structuralism and Hermeneutics*. Brighton: Harvester, pp. 208-226.
- Foucault, Michel (2006a): *Geschichte der Gouvernementalität* (Vol. 1: Sicherheit, Territorium, Bevölkerung). Frankfurt a.M.: Suhrkamp.
- Foucault, Michel (2006b): *Geschichte der Gouvernementalität* (Vol. 2: Die Geburt der Biopolitik). Frankfurt a.M.: Suhrkamp.
- Friesen, Norm & Hug, Theo (2009): The Mediatic Turn: Exploring Concepts for Media Pedagogy. In: Lundby, Knut (ed.): *Mediatization: Concept, Changes, Consequences*. Frankfurt a.M. et al.: Lang, pp. 63-83.
- Galtung, Johann (1985): Struktur, Kultur und intellektueller Stil. Ein vergleichender Essay über saxonische, teutonische, gallische und nipponische Wissenschaft, in: Wierlacher, Alois (ed.): *Das Fremde und das Eigene. Prolegomena zu einer interkulturellen Germanistik*. München: iudicum, pp. 151-193 (originally published as: Structure, Culture and Intellectual style. An Essay Comparing Saxonic, Teutonic, Gallic and Nipponic Approaches. In: *Social Science Information/Sur les sciences sociales*, 20 [1981], pp. 817-885).
- Gee, James Paul (1999): Critical Issues: Reading and the New Literacy Studies: Reframing the National Academy of Sciences Report on Reading. In: *Journal of Literacy Research*, 31(3), pp. 355-374.
- Geoghegan, Bernard Michael (2005): There Are No New Media: A Narrative of New Media. Paper given at the 4th Media in Transition Conference, May 6-8, 2005 at MIT, Cambridge/MA.
- Glanville, Ranulph (1999): Re-researching Design and Designing Research. In: *Design Issues*, 13(2), pp. 80-92. Retrieved June 6, 2012, from: <<http://www.univie.ac.at/constructivism/papers/glanville/glanville98-design.pdf>>.
- Günther, Gotthard (1973): Life as Poly-Contextuality. In: Fahrenbach, Helmut (ed.): *Wirklichkeit und Reflexion, Festschrift für Walter Schulz*. Pfullingen: Verlag Günter Neske, pp. 187-210. Retrieved June 6, 2012, from: <http://www.vordenker.de/ggphilosophy/gg_life_as_polycontextuality.pdf>.
- Günther, Gotthard (1990): Die Tradition der Logik und das Konzept einer transklassischen Rationalität. Klagenfurt: IFF. Retrieved June 6, 2012, from: <<http://ubdocs.uni-klu.ac.at/open/voll/tewi/AC00472123.pdf>>.
- Herbart, Johann Friedrich (1806): *Allgemeine Pädagogik aus dem Zweck der Erziehung abgeleitet*. Göttingen: J. F. Röwer.
- Herbart, Johann Friedrich (1841): *Umriss pädagogischer Vorlesungen*. Göttingen: Verlag der Dieterichschen Buchhandlung (second edition).¹⁴
- Heyting, Frieda G. (2001): Antifoundationalist Foundational Research: Analysing Discourse on Children's Rights to Decide. In: Heyting, Frieda G.; Lenzen, Dieter & White, John (eds.): *Methods in the Philosophy of Education*. London: Routledge, pp. 108-124.
- Hug, Theo (2008): Education towards Truth? Reflecting a Sentence of Josef Mitterer. In: Riegler, Alex & Weber, Stefan (eds.): *The Non-dualizing Philosophy of Josef Mitterer*. Constructivist Foundations, 3(3), pp. 249-253. Online available at <<http://www.univie.ac.at/constructivism/journal/articles/3/3/249.hug.pdf>>.
- Hug, Theo (ed.) (2009): *Mediatic Turn – Claims, Concepts and Discourses / Mediale Wende – Ansprüche, Konzepte und Diskurse*. Frankfurt a.M. et al.: Lang.
- Hug, Theo (2011): Visual Competence, Media Literacy and "New Literacies" – Conceptual Considerations in a Plural Discursive Landscape. In: Seminar.net - International Journal of Media, Technology and Lifelong Learning. 7(1), pp. 1-17. Retrieved August 8, 2012, from: <<http://seminar.net/images/stories/vol7-issue1/Hug-VisualCompetenceMediaLiteracyandNewLiteracies-ConceptualConsiderationsinaPluralDiscursiveLandscape.pdf>>.
- Hug, Theo (2012): Media Competence and Visual Literacy – Towards Considerations Beyond Literacies. In: *Journal of Social Management* (forthcoming).
- Hug, Theo; Friesen, Norm & Rourke, Liam (2007): Nutzenerwartungen und Wissenswandel - kritische Betrachtungen im Spannungsfeld von nutzloser Nützlichkeit und nützlicher Nutzlosigkeit am Beispiel der Learning Sciences. In: Reinmann, Gabi & Kahlert, Joachim (eds.): *Der Nutzen wird vertagt ... Bildungswissenschaften im Spannungsfeld zwischen wissenschaftlicher Profilbildung und praktischem Mehrwert*. Lengerich: Pabst-Verlag, pp. 173-197.

¹⁴ Cf. http://books.google.de/books?id=OfJMAAAcAAJ&printsec=frontcover&dq=Umriss+p%C3%A4dagogischer+Vorlesungen&source=bl&ots=ArqMUe6jdf&sig=WJvViQo6iW5aS5mFNP3z_SXEzmw&hl=de&sa=X&ei=4fcjUNKYEMfKtAastlH4Aw&ved=0CDMQ6AEwAA#v=onepage&q=Umriss%20p%C3%A4dagogischer%20Vorlesungen&f=false

- Institute of Museum and Library Services (2009): *Museums, Libraries, and 21st Century Skills* (IMLS-2009-NAI-01). Washington, D.C. Retrieved April 15, 2010, from: <<http://www.ims.gov/pdf/21stCenturySkills.pdf>>.
- Kossek, Brigitte & Peschl, Markus F. (eds.) (2012): 'digital turn'? – Zum Einfluss digitaler Medien auf Wissensgenerierungsprozesse von Studierenden und Hochschullehrenden. Vienna: Vandenhoeck & Ruprecht, V&R Vienna University Press.
- Krebs, Uwe (2001): *Erziehung in Traditionalen Kulturen. Quellen und Befunde aus Afrika, Amerika, Asien und Australien 1898 -1983*. Berlin: Reimer Verlag.
- Kress, Gunther (2003): *Literacy in the New Media Age*. New York: Routledge.
- Kress, Gunther & van Leeuwen, Theo (1996): *Reading Images: The Grammar of Visual Design*. London: Routledge.
- Krieg, Peter (2003): Beyond Paranoid Computing. Berlin. Retrieved July 12, 2005, from: <<http://pilesys.com/Beyond%20Paranoid%20Computing.pdf>>.
- Krieg, Peter (2005): *Die paranoide Maschine. Computer zwischen Wahn und Sinn*. Hannover: Heise Zeitschriften Verlag.
- Krippendorff, Klaus (2006): *The Semantic Turn: A New Foundation for Design*. Boca Raton, London, New York: Taylor & Francis CRC.
- Lenzen, Dieter & Luhmann, Niklas (eds.) (1997): *Bildung und Weiterbildung im Erziehungssystem. Lebenslauf und Humanontogenese als Medium und Form*. Frankfurt a.M.: Suhrkamp.
- Leschke, Rainer (2010): *Medien und Formen: Eine Morphologie der Medien*. Konstanz: UVK.
- Leu, Donald J. (1999): The New Literacies: Research on Reading Instruction with the Internet and Other Digital Technologies. Retrieved July 15, 2010, from: <<http://www.sp.uconn.edu/~djleu/newlit.html>>.
- McCulloch, Gary & Crook, David (eds.) (2008): *The Routledge International Encyclopedia of Education*. New York: Routledge.
- Margreiter, Reinhard (1999): Realität und Medialität: Zur Philosophie des "Medial Turn." In: *Medien Journal*, 23(1), pp. 9-18.
- Mitchell, W. J. Thomas (1994): The Pictorial Turn. In: Mitchell, W. J. T., *Picture Theory: Essays on Verbal and Visual Representation*. Chicago/London: University of Chicago Press, pp. 11-34.
- Mitterer, Josef (2001): Die Flucht aus der Beliebigkeit. Frankfurt a.M.: Fischer.
- Naeve, Ambjörn (2001a): The Concept Browser - A New Form of Knowledge Management Tool. In: Proceedings of the 2nd European Web-based Learning Environments Conference (WBLE 2001), Lund, Sweden, October 24-26, 2001. Retrieved July 15, 2012, from: <kmr.nada.kth.se/papers/ConceptualBrowsing/ConceptBrowser.doc>.
- Naeve, Ambjörn (2001b): The Knowledge Manifold - An Educational Architecture that Supports Inquiry-Based Customizable Forms of e-Learning. In: Proceedings of the 2nd European Web-based Learning Environments Conference (WBLE 2001), Lund, Sweden, October 24-26, 2001. Retrieved July 15, 2012, from: <<http://kmr.nada.kth.se/papers/KnowledgeManifolds/KnowledgeManifold.pdf>>.
- Naeve, Ambjörn et al. (2006): CoCoFlash: Conzilla, Confolio, and FlashMeeting Integration for Enhanced Professional Learning. In: Proceedings of the ICALT-2006 conference, pp. 1186-1187, Kerkrade, The Netherlands, 5-7 July, 2006. Retrieved July 15, 2012, from: <<http://kmr.nada.kth.se/papers/ConceptualBrowsing/CoCoFlash-ICALT.pdf>>.
- Olson, David R. & Torrance, Nancy (eds.) (2009): *The Cambridge Handbook of Literacy*. Cambridge et al.: Cambridge University Press.
- Oppenheimer, Todd (2003): *The Flickering Mind. The False Promise of Technology in the Classroom and How Learning Can Be Saved*. New York: Random House.
- Peterson, Penelope; Baker, Eva & McGaw, Barry (eds.) (2010): *International Encyclopedia of Education*. Oxford: Elsevier Science (third edition).
- Peschl, Markus F. & Fundneider, Thomas (2008): Emergent Innovation and Sustainable Knowledge Co-creation. A Socio-Epistemological Approach to "Innovation from within". In: Lytras, Miltiadis D.; Carroll, John M.; Damiani, Ernesto; et al. (eds.): *The Open Knowledge Society: A Computer Science and Information Systems Manifesto*. Berlin, Heidelberg: Springer, pp. 101-108. (Online available at <http://mpira.ub.uni-muenchen.de/10215/1/MPRA_paper_10215.pdf>).
- Rorty, Richard (1979): *Philosophy and the Mirror of Nature*. Princeton, NJ: Princeton University Press.

- Rusch, Gebhard (2007): Mediendynamik. Explorationen zur Theorie des Medienwandels. In: *Navigationen. Zeitschrift für Medien- und Kulturwissenschaften*. 7(1), pp. 13-93.
- Sheridan, Susan R. (2000): A Theory of Multiple Literacies. Retrieved October 2, 2007, from: <<http://www.drawingwriting.com/multlit.html>>.
- Sting, Stephan (2003): Stichwort: Literalität – Schriftlichkeit. In: *Zeitschrift für Erziehungswissenschaft*, 6(3), pp. 3317-3337.
- Street, Brian V. & Lefstein, Adam (2007): *Literacy: An Advanced Resource Book for Students*. London: Routledge.
- Thiel, Felicitas & Rost, Friedrich (2001): Wissenschaftssprache und Wissenschaftsstil. In: Hug, Theo (ed.): *Wie kommt Wissenschaft zu Wissen? Vol. 4: Einführung in die Wissenschaftstheorie und Wissenschaftsforschung*. Baltmannsweiler: Schneider Verlag Hohengehren, pp. 117-136.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (eds.) (2004): *The Plurality of Literacy and Its Implications for Policies and Programmes*. Education Sector Position Paper: 13. Paris. Retrieved July 15, 2012, from: <<http://unesdoc.unesco.org/images/0013/001362/136246e.pdf>>.
- van Goor, Roel; Heyting, Frieda G. & Vreeke, Gert-Jan (2004): Beyond Foundations: Signs of a New Normativity in Philosophy of Education. In: *Educational Theory* 54(2), pp. 173–192. (doi:10.1111/j.1741-5446.2004.00013.x)
- Veith, Hermann (2003): Lernkultur, Kompetenz, Kompetenzentwicklung und Selbstorganisation. Begriffshistorische Untersuchungen zur gesellschaftlichen und pädagogischen Konstruktion von Erziehungswirklichkeiten in Theorie und Praxis. In: Arbeitsgemeinschaft Betriebliche Weiterbildungsforschung e.V./Projekt Qualifikationsentwicklungs-Management (eds.): *Was kann ich wissen? Theorie und Geschichte von Lernkultur und Kompetenzentwicklung*. (= QUEM-report, Schriften zur beruflichen Weiterbildung, Issue 82). Berlin, pp. 179-229. Retrieved August 8, 2012, from: <<http://www.abwf.de/content/main/publik/report/2003/Report-82.pdf>>.
- Wimmer, Franz Martin (2001): Polylogische Forschung. In: Hug, Theo (ed.): *Wie kommt Wissenschaft zu Wissen? Vol. 3: Einführung in die Methodologie der Sozial- und Kulturwissenschaften*. Baltmannsweiler: Schneider Verlag Hohengehren, pp. 382-393.

Bionote

Theo Hug holds a Dr. phil. and is a professor at the Institute of Psychosocial Intervention and Communication Studies at the University of Innsbruck. He is the coordinator of the Innsbruck Media Studies research group. His areas of interest include media education and media literacy; e-education and micro learning; theory of knowledge; and methodology and philosophy of science. He is particularly interested in interfaces of medialization and knowledge dynamics as well as learning processes. Weblink: <http://hug-web.at/>

Address

Institute of Psychosocial Intervention and Communication Studies
 Division of Media Education and Communications Culture
 University of Innsbruck, Schoepfstr. 3, A - 6020 Innsbruck, Austria
 E-mail: theo.hug/at/uibk.ac.at
 Tel.: +43-(0)512-507-4048
 Fax: +43-(0)512-507-2854