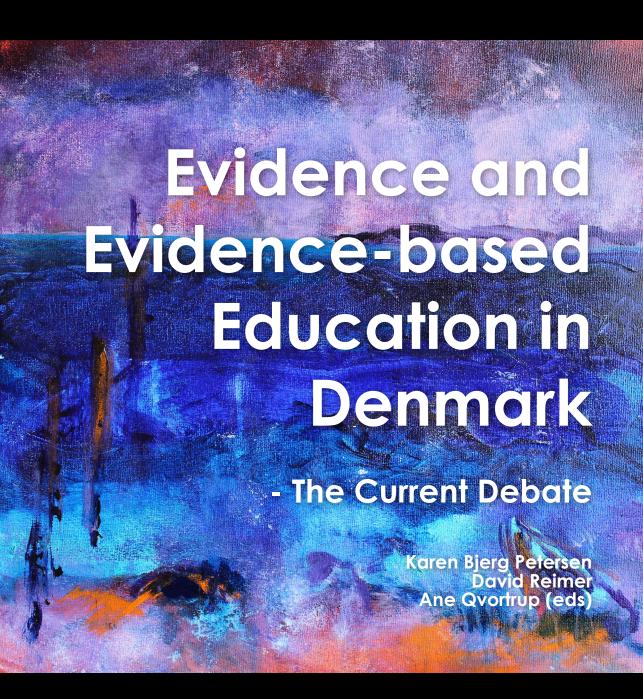
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Evidence and Evidence-based Education in Denmark

- The Current Debate

Karen Bjerg Petersen David Reimer Ane Qvortrup (eds)

CURSIV

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The painting on the front cover is *Les piquets de pêche dans la mer* by Mads Haugsted.

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About This Anthology

By The Editorial Team

This anthology took its starting point in the organisation of a series of research meetings and seminars in 2012-2013 at the Department of Education, Aarhus University, at which the authors – on the basis of their own research – presented and discussed various challenges, opportunities and problems related to the notion and use of evidence in education in Denmark.

The aim of the anthology is to add further depth to the widespread discussions in Denmark by including multi-perspective views and contributions about evidence and evidence-based and evidence-informed education. The collection of articles in the anthology adds a particularly Danish dimension to the ongoing and intense debate about evidence in education that is currently taking place in the Nordic and other European countries, the United States and Australia.

To put the discussions into a broader international context, we are very pleased that one of the most prominent European educational researchers, Professor Gert Biesta from the Brunel University London, agreed to participate in a seminar in the first stage of the project as well as to comment on the articles in this anthology. You will find his comments after the introduction.

We, the editorial team, hope that this anthology will be interesting not only to researchers and other stakeholders in the Danish educational sector, but also to an audience in other countries who are interested in discussions about evidence and issues related to its implementation in education.

Introduction

 Approaches to The Notion of Evidence and Evidence-based Education in Denmark: Contributions and Discussions

By Karen Bjerg Petersen, David Reimer & Ane Qvortrup

Prevalence of the idea of evidence-based education in Denmark

Since the mid-90s, an increased prevalence of the idea of evidence-based education has been witnessed internationally. In Denmark this concept is relatively new within education and educational research compared to other countries, such as the US, the UK and Australia (Ball, 2009; Bhatti, Hansen, & Rieper, 2006; Biesta, 2007, 2010). As in other countries, the idea of evidence-based practice was originally introduced in Denmark in the medical field during the late 1980s and spread to the area of social work in the early 1990s (Hansen & Rieper, 2010). However, it was not until the first decade of the 2000s that the idea was introduced in educational research and practice in Denmark (Moos, Krejsler, Hjort, Laursen, & Braad, 2005).

In 2004, a Danish delegation participated in a conference in Washington entitled "OECD-US Meeting on Evidence-Based Policy Research in Education". The aim was to discuss the possibility of increasing the efficiency of education in OECD countries using evidence-based knowledge. The conference was the first of four organised by the OECD Centre for Educational Research and Innovation

(CERI) as part of the project "Evidence-based Policy Research in Education" (Hansen & Rieper, 2010; OECD, 2007).

At the same time, under the leadership of the British researchers D.H. Hargreaves and Peter Mortimore, the OECD undertook a review of Danish educational research, outlining a limited tradition in Denmark of producing evidence-based measurements of education and educational interventions (Hjort, 2006). It was recommended that Denmark should consider establishing either a "What Works Clearinghouse" (WWC), which was the American model, or follow the British model, the "British Evidence for Policy and Practice Information and Coordination Centre" (EPPI) (OECD 2004a).

Methodologically, the models differ, and the WWC is primarily linked to "Randomized Controlled Test (RCT) designs" (Boruch & Herman, 2007). In many contexts, the randomised controlled trial is referred to as the "Gold Standard" (Biesta, 2007, p. 31). In comparison, the EPPI uses a more pluralistic approach (Gough, 2007), based on an argument that there are many sources of evidence (OECD, 2004b).

In spring 2006 the establishment of the "Danish Clearinghouse" was announced at a conference entitled "An obvious improvement – on better use of evidence-based educational research" (Danmarks Pædagogiske Universitet, Ministeriet for Videnskab, Teknologi & Udvikling & Undervisningsministeriet, 2006²). In a Danish context, the founding of the Danish Clearinghouse for Educational Research can be regarded as the first political step towards institutionalising the objective of developing evidence-based knowledge in education (Dansk Clearinghouse for Uddannelsesforskning, 2006).

The decision to establish the Danish Clearinghouse led to extensive discussions among educational researchers (Moos et al., 2005; Laursen, 2006; Borgnakke, 2006; Hansen & Rieper, 2006). These discussions seem to have affected the self-description of the Danish Clearinghouse, which initially linked up with the American RCT model, but in its present form represents a more pluralistic form.

In 2006 the Danish Clearinghouse hence described its aim as contributing to policy-makers' and practitioners' access to *consistent and reliable* knowledge about education and training to be used in educational practice and for policy decisions. This was referred to as *evidence-based* (Dansk Clearinghouse for Uddannelsesforskning, 2006). In 2014, in contrast, the Danish Clearinghouse describes its aim as "providing an overview of the current best knowledge of good educational practice and disseminating it to practitioners and politicians." The term evidence-based has been changed to *evidence-informed knowledge*³ (Dansk Clearinghouse for Uddannelsesforskning, 2014).

Such changes in concepts and language have also been witnessed internationally. In 2007 the educational researcher Gert Biesta pointed out that

...some proponents of an evidence-based approach in education have begun to talk in a more nuanced way about the link between research, policy, and practice, using notions such as 'evidence-informed,' 'evidence-influenced,' and 'evidence-aware' practice (Biesta, 2007, p. 5).

The debate about the notion of evidence

With the increased and prominent role of the idea of evidence-basing education, significant differences in the perceptions of this idea have emerged both internationally and in Danish educational research, practice and education policy.

On the one hand, in conjunction with the desire to acquire a scientific basis for policy priorities and choices of educational methods and actions by practitioners, the idea of evidence-basing or informing education has been welcomed internationally and in Denmark (Dahler-Larsen, 2014; Hargreaves, 1997; Hattie, 2009; Nissen, 2013; Schwartz & Gurung, 2012). Within the area of teaching and teacher education, in particular the New Zealand/Australian researcher John Hattie's (2009) meta-analyses and books on visible learning have in recent years been influential in Denmark. In 2013, Hattie's book on visible learning for teachers was translated into Danish (Hattie, 2013).

On the other hand, numerous education researchers in Denmark view the same evidence-based methods as a negative consequence of accountability-policy output control, in which efficiency seems to be the main value (see for example Rasmussen, 2008). It is questioned whether evident knowledge can possibly be sufficient to find out what works (Hyldgaard, 2010). At the same time, concerns are expressed that the future of education might end up being merely technical and instrumental (Brinkmann, Tanggaard & Rømer, 2011; Schou, 2006). In this view, the teaching of concepts and methods has one primary practical purpose: to educate students for a globalised competition society (Ball, 2009 Hjort, 2006; Pedersen, 2011). One of the most outspoken critical European educational researchers, Gert Biesta, questions various aspects of evidence-based education (e.g. "Why 'what works' won't work", Biesta, 2007), and his ideas have received considerable attention among Danish education researchers (Biesta, 2011, 2013, 2014).

An introduction to various interpretations and understandings of the concept of evidence may shed light on the ongoing debates.

Interpretations and discussions

The evidence movement and the associated concept of evidence vary in terms of how they are linked to various conceptualisations, methodologies and designs and how they are linked to various traditions in different research sectors and different geographical locations (Dahler-Larsen, 2014; Krogstrup, 2011). Furthermore, when it comes to investigations of how practitioners and professionals implement and transform evidence-based methods in their daily professional lives, a variety of interpretations can be found (Buus, 2012).

Regarding the methodological aspect, systematic reviews, meta-analyses and in particular the randomised controlled trial as a "gold standard" have dominated the American evidence movement, with the Cochrane Collaboration (2014) as a representative of the medical field and the Campbell Collaboration (2014) of the social field (Hansen & Rieper, 2010).

In a European context, however, a similar "unequivocal commitment to the classic design" cannot be found (Krogstrup, 2011, p. 133). Hjort (2006), Dahler-Larsen (2014) and others discuss theoretical and methodological challenges in evidence-basing education, pointing to methodological challenges in meta-analyses, RCT studies and other studies of evidence-based activities. Krogstrup highlights some discussion points with respect to the concept of evidence:

The differences are thus not whether knowledge about the relationship between intervention and outcome is important or not, but rather how evidence can and should be provided, and hence how evidence is constituted (Krogstrup, 2011, p. 134).

Other Danish researchers, in contrast, question the philosophical and epistemological basis of the notion of evidence in opposition to the concept of knowledge (Hjort, 2006; Hyldgaard, 2010, Nepper-Larsen, 2011; Brinkmann, Tanggaard, & Rømer, 2011). Here, the controversies and disagreements about the concept of evidence are rooted in philosophical differences about its nature and reality and epistemological differences about what constitutes knowledge and how it is created.

According to Dahler-Larsen (2014), Krogstrup (2011) and others, various perceptions of evidence can be observed in a continuum, varying from those who recognise the notion of evidence as an "objective" concept, to those who more likely perceive the notion as socially constructed. In parallel to previous heated discussions about quantitative and qualitative research methods, Krogstrup (2011) outlines three tracks in the understanding of the notion of evidence on this continuum.

Three tracks in the understanding of the notion of evidence

The first track is referred to as *the experimental track*. Researchers within this paradigm agree that an experimental design has the highest credibility if it meets the requirements of internal, external and construct validity. According to Dahler-Larsen (2014), Krogstrup and others, researchers and supporters of the experimental track belong to a "post-positivist tradition" and believe "that there is *one* reality that can be studied objectively, even if it might not be possible to comprehend this reality fully and in its entirety" (Krogstrup, 2011, p. 139).

Post-positivists have a strong orientation towards quantitative methods as the predominant methods, and are of the opinion that causality is observable, and that over time deterministic causal explanations can be achieved. They acknowledge that reality is dominated by values and interests, but claim that the experimental research design can be adjusted to allow for this (Dahler-Larsen, 2014; Krogstrup, 2011).

In contrast, *the critical track* is primarily represented by social constructivists in social science, who argue that there is "no one single reality, but many realities that are subjective", which change over time and space in the interaction between individuals and the environment (Krogstrup, 2011, p. 140). Researchers advocating for the critical track argue that the tendency to focus only on maximum output rather than having a societal focus on satisfying effects has a number of "unfortunate consequences and ignores knowledge of the complexity and contextually bound rationality" (ibid., p.140). The fundamental understanding is that "social phenomena cannot be studied independently of their context" (Krogstrup, 2011, p. 140). According to Krogstrup, in the critical track "qualitative methods" such as case studies, field work, qualitative interviews and other methods are considered to be best suited to capture "the subjective reality" (ibid., p. 140.). According to Fischer (1995) and others, the aim of a case study, for instance, is:

...to provide a fine grained picture of the problem, capturing detail and subtleties that slip through the net of the statistician (...) in short they help us to get inside the situation (Fischer, 1995, p. 79 in Krogstrup, 2011, 116).

Finally, the third track is described as *the pragmatic track*. It is characterised by not considering

... objectivity and subjectivity as an either-or, but as two points on a continuum, in which both qualitative and quantitative methods are useful for evaluation and investigation (Krogstrup, 2011, p. 141).

The pragmatists do not believe that there is only one truth about reality. They agree with the constructivists that "there may be many explanations of reality,

while they assume like the post-positivists that it is possible to connect cause and effect" (ibid, p. 141). The decision as to which methods should be applied depends on the research question and on what is logically demanded in the study.

Overall, similarly to what has been observed in international (and in particular, European) educational research, among Danish educational researchers a complex and nuanced picture of various positions with regard to the notion of evidence in Denmark can be traced, ranging from highly critical to more pragmatic. Compared to the international (and in particular, the American) research, there are relatively few education researchers in the experimental tradition in Denmark; and in Danish educational research a predominance of the critical tradition can be observed. A new wave of experimental education research is primarily carried out by researchers from a range of different fields, such as economics and political science (see the new Trygfonden's Centre, 2014). The critical stance among Danish education researchers is partly reflected in this edited volume.

The contributions in this anthology

In extension of the introduction above on disagreements and debates about the notion of evidence, the articles published in this anthology represent the continuum from very critical to more pragmatic approaches to the introduction of evidence-based or evidence-informed education in Denmark.

In the article "The Schism between Evidence-based Practice, Professional Ethics and Managerialism – Exemplified by Social Pedagogy", Niels Rosendal Jensen and Christian Christrup Kjeldsen highlight a range of dilemmas facing professionals within the area of social work: on the one hand, in a Danish historical tradition social workers are mostly encouraged to work with values and professional judgements such as "trust, care and nearness, respect, well-being, dignity and persistence"; while on the other hand, neo-liberal managerialism, market orientation and evidence-based practice in continuation of randomised controlled trial studies are new policy demands within this profession. By highlighting that there is "not one and one only relevant dimension of effect, but several, for instance outcomes, causal mechanisms, contexts and contents of the interventions", the authors suggest that the two logics could possibly meet "in the frame of a third logic: institutions and organizations contributing by organizational and financial means to maintain professional control of the practice".

Based on Gadamer's concept of judgement as application, understanding and interpretation of situations, in her article "Evidence-based methods and conforming judgements" Merete Wiberg discusses whether evidence-based methods, by being assigned a position of authoritative knowledge, lead to an undermining of

the professional judgement of social educators by turning it into a conforming judgement, which follows an authoritarian structure of guidance. Instead, Wiberg suggests an alternative by advocating a critical stance to methods, and an inquiry-based approach, inspired by Dewey, to how judgement is exercised. According to Wiberg, it is important that the term "evidence based" should not be used as a label for authoritative knowledge by administrators and politicians because it prevents professionals and practitioners from conducting their own inquiry and exercising critical and professional judgement.

In their article "Making Sense of Evidence in Teaching", while defending a nuanced view of evidence-based teaching that recognises the value of practice-based evidence, Michael Albrechtsen and Ane Qvortrup call for research that focuses specifically on how Danish teachers can make use of various kinds of evidence or data in their teaching practice. Although the authors acknowledge some of the critics of the evidence-based teaching movement, they argue that by recognising the unique character of the teaching profession, the discourse about evidence can be fruitfully integrated into the daily life of schools. The authors suggest two broad questions to help guide future research into teachers' use of evidence and data in their professional practice. Following Thomas (2004), they suggest that the notion of evidence should be broadened to comprise questions of "relevance, sufficiency and veracity", including taking into account the particular context in which evidence-based knowledge could be used.

The authors David Reimer and Jørn Bjerre describe what evidence is on the basis of what is actually being used as evidence. Rather than debating the pros and cons of evidence in a theoretical way, they attempt to carefully study the material used as evidence in order to explore the empirical basis of the discussion. Reimer and Bjerre therefore analyse three actual reports on the subject of teacher education, which have been produced by three different research institutes and used as evidence within the educational sector. After a critical discussion of the concept of "evidence-based" in their sample of reports, they conclude the paper with reflections on the difference between academic and strategic evidence.

In his article "The Relationship between Education and Evidence", Thomas Aastrup Rømer critically discusses the actual linkage between the concepts of "evidence" and "education", arguing that the term "evidence-based education" is self-contradictory. Rømer argues that the concept of "evidence" first touched upon and then detached itself from education. The concept of "evidence", according to Rømer, has teamed up with a narrow focus on rankings and modern global capitalism in what the author describes using the term "pure" education. By comparing effects and isolating designs, the RCT design being the most extreme example, the concept of evidence detaches itself from the content, cultural context

and educational purpose of education, all core concepts in classical pedagogy. Thus classical pedagogy, being detached and as a consequence described as "impure", is left "wilted and scattered, calling for a new educational theory to pick up the pieces". Instead, Rømer suggests that educational research is not about investigating what works, but about letting "what is going on" reveal itself. According to Rømer, education is not about using techniques to maximise a ranking score, but rather about appearing in an effective and energetic culture in full, vibrant memory.

In the article "Danish Language and Citizenship Tests: Is what is measured what matters?", Karen Bjerg Petersen addresses the demands introduced through the policy of the recent decade for evidence of education and integration efficiency in the area of DSOL (Danish for Speakers of Other Languages) adult education. The introduction of comprehensive performance assessments as a means of achieving education and integration efficiency is questioned as an adequate way of measuring what matters in adult DSOL education. Petersen discusses whether the comprehensive Danish language and citizenship tests introduced in the first decade of the 2000s have promoted memorising skills and teaching aimed at test activities at the expense of establishing possibilities for reflection and activities that increase awareness and profound knowledge about complexity and context dependency with respect to the knowledge of culture and language that is important for developing both "the good life" and "the good society".

Notes

- 1 As highlighted by Claassen (2005), in many non-English speaking countries such as the Netherlands and Denmark (see for example Krogstrup 2011; Nissen 2013), the term "golden standard" is used instead of "gold standard" to describe an "authoritative or recognised exemplar of quality or correctness", and "what some denotes the best standard in the world". Claassen, however, indicates that the use of the concept of a "golden standard" "implies a level of perfection that can never be attained (...), and will provoke criticism" while "in contrast, a gold standard in its true meaning, derived from the monetary gold standard, merely denotes the best tool available at that time to compare different measures" (Claassen 2005).
- 2 Danish University of Education, Ministry of Science, Technology & Development & Ministry of Education.
- 3 Where nothing else is indicated, translations from Danish texts are by Karen Bjerg Petersen.

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Who Knows?

 On the Ongoing Need to ask Critical Questions About the Turn Towards Evidence in Education and Related Fields

By Gert Biesta

The contributions that are brought together in this collection are a welcome addition to the ongoing discussion about the role of evidence in education. The authors raise both principled and pragmatic questions, highlighting problems but also indicating possibilities. A critical engagement with the idea of evidence and the wider idea of evidence-based or evidence-informed education remains important, not least because of the rhetorical power of the idea of evidence. Who, after all, would want to argue that education should *not* be based upon or at least be informed by the best available evidence? But already here lies a major problem, because by framing the discussion in terms of *whether or not* we should want to have evidence, two other really important questions – 'Evidence of what?' and 'Evidence for what?' – easily disappear from sight.

With regard to the first question, which we can also phrase as the question about what *kind* of evidence we are talking about, it is important to see that whereas the notion of 'evidence' has a rather broad, perhaps even inclusive meaning – for example, in the context of court cases, where evidence refers to testimony and presentation of documents, records, objects and other items relating to the existence or non-existence of alleged or disputed facts (see http://www.businessdictionary.com/definition/evidence.html, last accessed 20 November 2014) – the discussion about evidence in education and similar practices such

as social work¹ tends to have a much more precise and specific meaning. In the majority of cases evidence here refers to knowledge about the effectiveness of interventions or, in the often-used lingo, evidence about 'what works.' It is here that we can already find a major problem with regard to the idea of evidence-based or evidence-informed education. This problem is not so much a matter of epistemology – that is, whether such knowledge is possible or not and what its status is – as it is a problem of ontology. It has to do with the way in which the 'working' of education is understood and thus with the way in which education itself, as a practice and as an act or an activity, is understood.²

In my view the main problem with the idea of turning education into an evidence-based or evidence-informed profession is that it relies on what I tend to refer to as a quasi-causal conception of education, one in which the acts of educators are seen as causes that in some way bring about or produce effects on the side of the students – something we can also see reflected in the notion of 'learning outcomes.' The evidence that is being called for in evidence-based or evidenceinformed education is knowledge about the relationships between interventions and outcomes where these are seen as causes and effects, and where the ambition is that such knowledge will be able to indicate which interventions are the most effective in bringing about certain outcomes. There is often also an interest in the question which interventions are the most efficient in doing so, but it is important to see that efficiency and effectiveness are different issues. Efficiency has to do with the amount of energy and resources that are needed to bring about a certain outcome, whereas effectiveness has to do with the question whether a particular 'intervention' is able to bring forth or secure a particular outcome. It is because of this interest that randomised controlled trials are often put forward as the only or at least the ideal way of generating such knowledge, as they are seen as a valid – and for some, the only valid – design for finding out whether a particular intervention is indeed able to cause or produce a certain outcome or effect.

To go straight to the heart of the matter: I do not think that this way of thinking is appropriate for education for the simple reason that the way in which education 'works' – if 'working' is the right metaphor to begin with – is not one of causes and effects, not even if we were to think of it in quasi-causal terms, for example, by acknowledging that the relationships between interventions and outcomes in education are not perfect but nonetheless can be understood in terms of causes and effects. In my own work I have explored a number of arguments for suggesting that the 'logic' of education is not a logic of causes and effects. One makes use of Aristotle's distinction between the domain of the *eternal* – where there are perfect cause-effect relationships and where it is therefore possible to have perfect knowledge of them – and the domain of the *variable* – where we are

always engaging with possible relationships between actions and consequences, not with certain relationships between causes and effects (see Aristotle, 1980; and, for my use of his ideas, for example, Biesta, 2014, chapter 7). Here I have suggested that education, because it is fundamentally an interaction between human beings, is firmly located in the domain of the variable, not the domain of the eternal. Another line I have pursued is through theories of communication – for example, from pragmatist philosophers such as John Dewey and George Herbert Mead – in order to show that education is a process of meaning and interpretation, not of physical push and pull (see, for example, Biesta, 1994; 2004a). But perhaps the most useful and insightful way to make an argument against quasicausal understandings of education comes from insights from systems theory and complexity theory (see particularly Biesta, 2010a) which, in a sense, has allowed me to combine Aristotelian insights with insights from communication theory.

What I find useful about systems theory and complexity theory is that it provides a clear account of the conditions that need to be present for perfect cause-effect relationships to occur (either in the physical or the social world) in that those relationships only occur in closed systems (systems that are not in interaction with their context) that work in a deterministic-mechanistic way. A prime example of such a system is the clockwork, bearing in mind that even perfect causal systems need to have an energy source in order to operate. While there are situations that meet these requirements, they are actually rather rare, also in the physical world. If we use this language to look at practices such as education, we can then say that education differs in three respects from perfect causal systems, in that education is an open system, a semiotic system and a recursive system. This simply means that education is never completely closed off from its environment, that the interactions within education are not interactions of physical push and pull but of interpretation and meaning making, and that the 'course' of the system feeds back into the further 'course' of the system - which has to do with the fact that the 'elements' in the system are reflective agents who can make up their own minds and can act on the basis of their insights, preferences and conclusions.

Looking at education in this way shows why the clockwork metaphor is entirely inappropriate for understanding the dynamics of education – which also means that terms such as 'intervention' and 'outcome' are rather inappropriate as well. Yet what is also does, and this is important too, is that it allows for a much more accurate understanding of the ways in which we can make education 'work,' that is, the ways in which we can steer open, semiotic, recursive systems in desired directions. Whereas at first sight it may look like such systems are so open and unpredictable that one may wonder how they can 'work' at all – and

complexity theory is really helpful in order to get a better sense of the non-linear dynamics of such systems – this particular approach provides a rather elegant way of indicating what needs to be done to make the system work in a more predictable manner. And key to this is reducing the degrees of freedom, we might say, of the dimensions that constitute the system. And this, so I wish to suggest, is what we are doing in education all the time. First, we know that performing education on the street or in the wilderness is really difficult; hence we have created school buildings, classrooms, streaming and setting, curricula and the like in order to reduce the openness of the educational system. Second, while as educators we should be interested in the meaning-making of our students, we know that not all meaning that is made by our students 'makes sense,' and hence we invest energy through feedback and assessment in distinguishing between those meanings that do make sense and those that do not (with different criteria of 'sense making' depending on what our educational endeavours are aimed at, such as, for example, memorising facts, generating understanding or acquiring skills). And third, we try to steer the educational system by influencing the way in which the actors in the system think and reflect upon what they are doing, for example, through programmes of teacher education where we seek to introduce teacher students to particular ways of seeing, understanding, reasoning and judging – ones that 'make sense' within the profession of teaching.

Along these lines we can see that it is possible to move open, semiotic, recursive systems towards more predictable and structured modes of functioning. But – and this is a further advantage of this way of looking at education – there is a critical tipping point where our attempts to reduce the complexity of the system turn into a mode of functioning that we would no longer recognise as education but would rather term indoctrination. This tipping point indicates the situation where we try to stop all interactions with the outside world, where we try to completely control the meaning making of our students, and where we also try to completely control the thinking and reflection of the agents within the system – thus removing their agency altogether.

And this brings me to the second question that is too easily forgotten in the whole discussion about evidence and evidence-based and evidence-informed education, which has to do with the fact that education is not just any kind of interaction between human beings, but is a process which is structured – and some would even say constituted – by a sense of purpose. It is here that another aspect of my work is relevant for the discussion, namely, my critique of the influence of the language of learning on education (see particularly Biesta 2004b, 2006 and 2009). The point is that many discussions about evidence in education make use of a rather vague and general reference to learning, suggesting that the evidence we

need in education is about the most effective strategies for supporting or bringing about students' learning. Yet the point of education, to put it very briefly, is never that students simply learn; the point of education is that students learn something, that they learn it for particular reasons, and that they learn it from someone. My main argument against the language of learning is that it too easily 'forgets' to ask the key educational questions of content, purpose and relationships. This does not mean that in those cases where the language of learning is being used there is no sense of what the learning is 'of' and 'about' but it does mean that what counts as good or desirable learning is taken for granted and not seen as something that needs reflection or justification. And in most cases, particularly in discussions about evidence, there is only one aspect of learning that is considered meaningful, namely, that of achievement in a small set of academic subjects – the very same subjects that tend to be measured in large-scale comparative studies about the 'performance' of education systems (such as PISA).

I have argued in my work that such a definition of what matters in education is far too narrow (see particularly Biesta, 2010b), and that there are not only more subjects that should matter in education than only language, maths and science, but also that in addition to the role education has in the domain of qualification – the transmission and acquisition of knowledge, skills and dispositions – education also plays an important role in the domain of socialisation - the communication of and initiation into cultures, practices and traditions - and in the domain of what I have termed subjectification – which has to do with the formation of the person (for example, orientated towards such qualities as critical thinking, autonomy, morality, compassion or democracy). Thus just looking for evidence that impacts on students' learning is not only a very inaccurate way of thinking about what the 'point' of education is. Because education concerns at least three different domains, there is always also the additional question of how an impact in one of the domains has an impact in the other domains, and here a key issue is the fact that a 'positive' impact in one domain may sometimes (and perhaps even often) have a 'negative' impact in other domains; a possibility which, as far as I can see, is overlooked in most, if not all, work on the effectiveness of education. The biggest problem that is currently arising in this regard, is the way in which the excessive emphasis on achievement in a small set of subjects within the domain of qualification is causing serious problems in the domain of socialisation - where students are being told that actually, the only thing that counts in life is competition – and in the domain of subjectification - where, particularly in societies that combine an emphasis on high performance with a culture of shame, severe psychosocial problems amongst children and young people can result.

These observations indicate some severe limitations of the turn towards evidence, not – to reiterate – because there would be anything wrong with evidence in itself, but because of the particular concept of evidence that is being used in the discussion, namely, evidence about 'what works.' I have made two simple points. First, if we really try to engage with the particular nature of educational processes and practices we can see that the quasi-causal ambitions of the push towards evidence-based education do not make sense, not only because education simply does not 'operate' in a quasi-causal way, but also because in education there is always the question of what the educational processes and practices are supposed to work for. Second, and in relation to this, I have argued that a broad reference to 'learning' is simply not precise enough, whereas an (implicit) emphasis on achievement in a small number of academic subjects is dubious if we believe that education should contribute to the formation of the whole person - which is not only a matter of acquiring knowledge and skills, but also of engaging with traditions and ways of doing, and of the formation of the person in the fullest possible sense.

These arguments – which have to do with the ontology and axiology of education, that is, with our views about how education 'functions' (ontology) and what kind of values should guide the educational endeavour (axiology) – also provide a strong case for the absolutely central role of judgement in education. Judgement is first of all needed because education is an open and evolving domain, where knowledge from the past provides no guarantees for what will happen in the future. Knowledge from the past, even if it is the outcome of randomised controlled trials, can at most indicate what might happen, but not what will happen. In the everyday practice of education we therefore always need judgement to tailor general knowledge about what might be possible in concrete situations here and now. But judgement is also called for with regard to the purposes of our educational activities, that is, the question of what it is we seek to achieve through our educational endeavour - and this, as I have suggested, is a multi-facetted question. This shows why evidence – of whatever sort – can indeed only be one of the sources that informs educational judgement, but can never replace that judgement, and any suggestion that it can seriously distorts the nature of education.

Perhaps the irony of my reflections, particularly with regard to strategies for complexity reduction in education, is that they also give quite precise and practical guidelines for how we can turn education into a machine-like mode of operation. I hope that I have provided sufficiently strong arguments for why, from an educational perspective, such an ambition would ultimately be undesirable as in the shorter or longer term it would turn the 'project' of education into that of indoctrination. To see that this is at stake in the whole discussion about evidence

as well shows why it remains important to highlight the problems that come with a certain turn towards evidence – problems that ultimately have to do with the very possibility of the project of education as something other than a project just aimed at control.

Notes

- 1 I will focus my observations on the role of evidence in education, but I do think that many of my comments are also relevant for other fields of professional human (inter)action.
- 2 I discuss this in more detail in Biesta (in press).

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The Schism Between Evidencebased Practice, Professional Ethics and Managerialism – Exemplified by Social Pedagogy¹

By Niels Rosendal Jensen & Christian Christrup Kjeldsen

Abstract

The education and training of social pedagogues implies a certain value-based and humanitarian-oriented stance. This article begins with a brief overview of the central professional values and beliefs as they are presented in widely used textbooks and continues in the second section to explore how evidence-based practice (EBP) is understood within this field of inquiry. In the third and fourth sections, a discussion of the impact of EBP on researchers and practitioners will be unfolded. Section five is devoted to a debate on the possibility of overcoming the schism between EBP and professional ethics. Finally, section 6 presents conclusions and further perspectives.

Keywords: Social pedagogy, evidence-based practice, EBP, managerialism, research, practice

Introduction – the societal background

In recent years a number of reforms have been implemented within social policy and the labour market in Denmark. In the beginning of 2012 the former Minister of Social Affairs, Karen Hækkerup, presented her point of view on social political reforms. The background of these reforms was, according to the government, the need for in-depth change in social policy. It will be interesting over the next years to assess the impact of the former Minister's initiatives on the practice of social pedagogues given that one of her basic ideas was that "prioritizing shall ensure welfare" (Brandstrup & Kristiansen, 2012, our translation). Furthermore, it is emphasized that "we shall ensure that the welfare state functions" by underlining that "[one] of the most striking interventions will be the showdown with the freedom of choice in teaching methods" and that the goal is "to implement a thorough culture of evidence" aiming at the use "of four concrete methods with a documented effect" supported by "a national action plan collecting the best knowledge" (Brandstrup & Kristiansen, 2012, our translation).

We use this quote to emphasize the political dimension of the idea of an evidence-based policy. Over the last two decades national and international trends have created new external conditions by prioritizing the demands of external stakeholders. This needs not to be taken for granted, and we will argue that the professions have to develop their competence to come out on top or at least to successfully defend their position.

A marriage similar to that between policy making and evidence from research and academia similar was, according to Pawson, also to be found within the political turn in the UK and EU as we moved into the twenty-first century (Pawson, 2006). Pawson remarks that:

Evidence-based policy is much like all trysts, in which hope springs eternal and often outweighs expectancy, and for which the future is uncertain as we wait to know whether the partnership will flower or pass as an infatuation (Pawson, 2006, p. 1).

Hans-Uwe Otto, Andreas Polutta and Holger Ziegler argue that evidence-based practice as a way of replicating interventions that are intended to be effective in other contexts is only possible if one is willing to pay the price of manualizing practice (Otto, Polutta, & Ziegler, 2010, p. 15). Even though great concern about evidence-based practice has been expressed in the academic field of social work and social pedagogy, the recent political attention suggests that it would be unrealistic to expect a deep crisis and eventual abandonment of evidence-based practices as a passing infatuation. The issue of evidence-based practice is very

pertinent to the practice of social welfare professionals, as indicated in the following citation:

Evidence-based practice (EBP) is based on the notion of a linear model of knowledge production and transfer, whereby research findings (knowledge in the knowledge transfer literature) produced in one location are transferred to the context of use through various mechanisms, such as the development of intervention guidelines or treatment protocols (Gray, Joy, Plath, & Webb, 2012, p. 157).

Moreover, a similar impression is found both outside and within the profession in the way pedagogical beliefs and values are fostered through social pedagogical education and training.

I. Pedagogical beliefs and values

We begin our discussion by presenting an impression of the values and beliefs that are embedded in the education and training of practitioners of social pedagogy. We do not intend to present an in-depth analysis; instead we provide a relatively simple overview.

The hard core of social pedagogy is composed of fundamental assumptions, concepts, hypotheses and target group insights (cf. Lakatos, 1999, p. 132 ff.; Madsen, 2005, p. 62). Examining widely used textbooks (Madsen, 2005; Jensen, 2006; Schou & Pedersen, 2008; Olesen & Pedersen, 2007), we can compile the following illustration of these assumptions in relation to values and concepts (Jensen, 2011, pp. 68-70):

Basic assumptions	Values/concepts
A profession doing and being good at relational work	Trust
A profession working with a long time perspective	Time
A profession with an inclusive understanding of human	Distinctness
beings	
A profession working with those given up on by society	Care and closeness
A profession respecting and encouraging diversity	Respect
A profession working for individual well-being	Well-being
A profession understanding exposed children or young	Dignity
people as vulnerable or resourceful	
A profession recognizing social pedagogy as a "trial and	Persistence
error" activity	

The keywords are pedagogical relation, empowerment, reflexivity and support for personal coping (for a similar German interpretation, see Böhnisch, 2008).

In a broader context, social pedagogy and social work are aimed at enhancing autonomous forms of life; for example, a study of professional values finds that "an overwhelming 96% of social workers believed in maximising self-determination" (Congress, 2010, p. 23). The consequence of the assumptions and professional values mentioned is a normative stance, where a society based on professional ethics should be characterized by social justice and equal relations. In addition, social pedagogy has a political dimension, meaning that political and administrative regulations implemented by the state or the municipalities are seen as an evil (Hansen, 2009). The professionals distinguish themselves by emphasizing the above mentioned values and beliefs, and thereby prioritizing their professional judgment over tight regulations. The question, though, is whether this political dimension within the welfare professions has lost its relation to politics; if this is the case, a return to politics would have to be argued for (Gray & Webb, 2009).

Among the hypotheses, we note that social pedagogical practice is created in the encounter or interaction between the professional and the individual child or young person and can therefore not be driven by one single method; instead, professionalization is understood as a repertoire of methods, theories and target group understandings with underlying professional ethics for reflecting practice. Personal and professional development of the social pedagogue thereby becomes two sides of the same coin, and the point of departure of the social pedagogical profession is practice and the individual social pedagogue's habitually developed values. If a habitual inculcation within social pedagogical education and training lasts long enough, then, in the understanding of Bourdieu, it will develop into a professional habitus, orchestrating the practice and values that social pedagogues have in common (Bourdieu 1971, 1973, 1977). Summing up, we have to deal with normative firm convictions that social pedagogy functions in its own right. This raises a problem and perhaps we need a problem shift: Should pedagogical practice be regulated only by normative convictions, rules of thumb or even "gut feelings" that are habitually formed by professional practice in order to handle the same practice, or would it perform better if it were based on knowledge about 'what works'?

II. The Debate on Evidence

Against the backdrop presented above, we will now debate the idea of evidence. Professional work with people is by and large a field characterized by various demands for evidence for the effect of the chosen intervention or method.

Politicians, municipalities and almost everybody else want efforts to be documented, with the aim of establishing a practice that is based on recognized and efficient methods.

Such demands seem to forget a classic insight of social pedagogy, namely, the distinction between "verstehen" (understanding) and "erklären" (explaining). On the basis of this distinction we find a continuous issue in the practical context. Social pedagogy is not necessarily bound to nomothetic laws; in fact, it seems much more in accordance with an ideographic understanding in which each particularity is addressed with a similar particular practice. The scientific benefit of social pedagogical research and practice thus draws on an understanding of user/client, context and goal (Alexander, 1988).

This understanding stems from the open and complex nature of social pedagogy. Nevertheless, it could be argued that this refers to an anachronistic debate. It is obvious that "verstehen" does not play an important role in the methodological protocol of studies that are usually considered to be "golden standards". But we should not reckon without our host, because even the strongest hardliners and protagonists of "the evidential turn" in social pedagogy would not in a plausible way negate the relevance of interpretative understanding. On the other hand, it is just as obvious that the research oriented and reflective practitioner, equipped with a broad scientifically based knowledge of explanation, is of the utmost importance through the whole modern discourse on social pedagogy (cf. Hjort, 2008 and 2012; Jensen, 2006). The point is that the current and valid knowledge of the profession relies on not only instrumental, but also ethical relevance.

In relation to the education and training for the social pedagogical professions there is emphasis on developing the students' awareness of the complexity of ethical concerns, methods and evidence in relation to practice that can be found across the curriculums. The Bachelor of Social Education is offered by seven main University Colleges (with 24 different programmes of study) and has the highest proportion of students of all the professional bachelor programmes in Denmark (Ministry of Science, Innovation and Higher Education, 2012, p. 1). In the local curriculums it is stated that: "The programme develops and disseminates knowledge about the profession's values, objectives, methods and conditions" (University College Nordjylland 2012, p. 8, own translation); "The graduate has a knowledge of: ... ethics, values and humanity in the social pedagogical work" (Diakonhøjskolen/ VIA University College, 2012, p. 4, own translation).

We notice considerable congruence between the aforementioned values in textbooks on the profession and the external curricular aims of the institutions providing education and training within pedagogy. For instance, for the programme on pedagogy it is stated that: "The programme qualifies graduates for educational work with a focus on quality of life [well-being], action and democratic participation" (VIA University College, Greena, 2012, p. 6, own translation). Another example is the emphasis given to "relations" in descriptions of social pedagogy/social educator is a profession performing good relational work. In one curriculum, an overview of the main concepts within the first year of study mentions 1) situation, 2) relation and 3) documentation; at the same time, the main focus in the first year is the professional's role in relations (University College Copenhagen, Frøbel, 2012, p. 6).

Likewise, the evidential turn is found in the curriculums, mainly supported by macro level legislation. Here, we present only a few specific examples. When the students do their third internship (= practical training in institutions), one of the aims is to become able to "explain how theoretical and practical knowledge about a target group can qualify the basis for pedagogical activities in general" (University College Lillebaelt, Odense, 2012, p. 14, own translation). Moreover, it is stated explicitly that the student shall participate in "systematic learning from experiences and reflection [that can be used] for the documentation and development of pedagogical practice" (ibid.). Another example should be added: when evaluating the study, 53 percent of the teaching staff on the programme report that they must have, to a high or very high extent, insight into evidence-based knowledge about pedagogical practices. In addition, 64 percent report that they to a high or very high degree incorporate results of national or international research in their teaching (Ministry of Science, Innovation and Higher Education & Rambøll, 2012, p. 21).

Since social pedagogical interventions typically are public interventions that intervene in the way people conduct their lives and typically do so in a controlling and paternalistic manner (Kirkebæk, 1995), these interventions belong to a certain class of interventions that presuppose ethical legitimacy. Whether and how social pedagogy can be legitimized at all remains contested terrain (Brumlik, 1992). At the same time, there is widespread unanimity about the need for legitimacy because social pedagogy is supposed not to harm its clients. Whether interventions are of use or harm must be determined when investigating the effects of social pedagogical practice. This implies a certain uncertainty about when it seems reasonable to act on the basis of the best existing knowledge. In this respect, Soydan argues that social pedagogical practice that implements types of intervention based on robust empirical research on efficiency is assumed to be "more efficient, harmless, transparent, and ethical" compared to other forms of social pedagogy (Soydan, 2009, p. 111).

Protagonists as well as opponents of evidence-based practice are aware that empirical research does not per se provide practice with a firm base for evidence-based or evidence-informed social pedagogy. In many ways, even the best available studies seem far from reliable when we want to assess the effect of interventions. This explains many kinds of mismatches, for example, between professional beliefs and practical realities, between institutional aims and requirements in the interaction with clients/users and between policies and implementation (Messmer & Hitzler, 2008).

The idea of having a 1:1 implementation of research in practice is in other words misleading and refutable. Here we would further point to the 'tacit dimension' (Polanyi, 1966; Hess & Mullen, 1995; Neuweg, 2004).

So far the article has dealt with some basic discussions. Now we will move to the question of how to understand evidence-based practice.

III. Evidence-based - what does it mean for researchers?

An ambiguous concept - the research side of the coin

Evidence-based Practice (EBP) can be understood against the background of social changes, of developments that can be described as a change from 'trust' to 'accountability', from 'reflexivity' to external control, for example, evaluations, auditing and quality assurance systems, and of organizational developments (cf. Duyvendak, Knijn, & Kremer, 2006; Power, 1997; Sommerfeld & Haller, 2003; Svensson, 2003), Within the sociology of the professions, this theme is discussed under the heading 'managerialism', pointing to the fact that the control of professional action is externalized to non-specialists. Thus the autonomy of professional non-standardized problem-solving is under siege.

This transition from 'trust' to 'accountability' should also be seen as a crisis of the professions and of the research done until now. Therefore, the situation is reminiscent of a late "wake-up-call" to professions as well as research. This should not lead to the conclusion that the efforts to enhance research-based social pedagogical practice should cease. Although standardization and management by measurement lead to important changes in working conditions as well as the socialization of professionals, Hüttemann and Sommerfeld note

if the discipline largely conceives itself as a reflective science, the privilege of the relief from action constraints can be asserted and this approach be refuted theoretically. However, the abstraction from the real provisional contexts of social services increases the probability that future social work practices will take their cue from other disciplines and action models even more than from disciplinary social work (Hüttemann & Sommerfeld, 2008, p. 168-169).

In brief, evidence-based practice does not begin with practice; rather, it begins with research. However, an important point of departure is whether or not EBP is a sanctum, simply to be taken for granted:

There is a tendency for the notion of evidence-based practice to take on the character of an ideology in some quarters. In other words, it is treated as beyond question, so that anyone who raises doubt about it is regarded as either mad or bad: as incapable of recognizing the obvious (who, after all, would want policymaking or practice not to be based on evidence?) or as acting on the basis of ulterior motives (such as 'supply-side-prejudice', which is often treated as a synonym for old-style 'professionalism') (Hammersley, 2009, p. 139).

Hammersley concentrates his further argumentation on what counts as evidence by discussing some assumptions, for example,

that research can provide sound evidence about what should be done that is more reliable than that from any other source; and that, if practice is based on scientific evidence, the outcomes will be dramatically improved (ibid., p. 148).

One point of his analysis should be emphasized here. The "missing link" points to the fact that much research is carried out in the spirit of positivism, and the criticism of that is "an exaggerated respect for quantitative method stemming from a neglect or underplaying, of the methodological problems surrounding it" (ibid., p. 142). In addition, one could mention that readers of such research lack the tacit knowledge that is embodied in the activities of research and reviewing (ibid., p. 145).

Although Hammersley is no enemy of quantitative research, but rather tries to find a balance between methods, other discussants are. The criticism has been grouped as addressing short circuits, one-sidedness, biases, limitations or misperceptions. Mullen, Bellamy & Bledsoe refer to this criticism under the heading "The Evidence Base in EBP" (Mullen, Bellamy & Bledsoe, 2008, p. 134-136). They mention, among other things, a critique on philosophical grounds that

an evidence-based, rational model of decision making does not fit with the realities of individualized, contextualized practice" and express "concern about whether evidence-based policy is feasible when so many competing factors enter into policy-making decisions (ibid., p. 135).

On political grounds Sommerfeld (2005) and Ziegler (2005)

raised important political questions about evidence-based practice... as threatening professional autonomy and potentially undercutting the fundamental integrity of the social work profession (ibid., p. 135)

Mullen et al. find a paradox or contradiction here, since their definition of EBP

is grounded in the idea that practitioners should and can have their interventions on the best available evidence rather than on expert opinion, intuition, authority, tradition or common sense" (ibid., p. 131).

Their article concludes

that because social workers engage in complex and diverse forms of practice it is necessary that a wide range of evidence be considered admissible. Nevertheless, this should not mean that the profession should avoid setting clear standards and criteria regarding what will guide judgments about the quality and strength of various types of evidence" (ibid., p. 150).

To conclude this brief description of the state of the art we draw on an argumentation developed at Bielefeld University. In "Evidence-based Practice – Modernising the Knowledge Base of Social Work?" (2009) Otto et al. note in their introduction that

experimental research may be superior to any other designs in providing empirically robust evidence about whether a specific program "works" in the sense that specific events are attributable to deliberately varying the respective treatment (ibid., p. 12),

and they do not hesitate to recall what authors who support the aim of establishing evidence-based Social Work practice emphasize:

Particular doubt is cast on the idea that Social Work should execute the instructions of manualized guidelines in order to be effective. In this respect, it is also questionable whether a Social Work practice fashioned directly on the basis of evidence gained from experimental research is intrinsically more ethical, more rational, and less authoritarian (ibid., p. 13).

This is a well-known reflection, because issues are ambiguous and demand interpretative spaces, and when interpretative spaces exist, strict measurement cycles do not work because required conditions and assumptions are not met (ibid.). Another problem that is raised by Otto et al. in relation to social work as evidence-based practice is connected with cases in which the intervention is a replicate of a practice that has proven to be effective elsewhere. Replication is only possible at the cost of working according to manuals, due to the logic of the methods and the assumptions about causality (cf. Otto et al., 2010, p. 15).

We will continue by discussing research in social work/social pedagogy. Shaw & Norton (2007) have developed an approach to social research by pointing to

two dimensions: content and perspective. By asking what social research needs to consider, the authors point to five fundamental issues: purpose, contexts, researchers, methods of inquiry and domains. We will not go into further detail about these issues here (cf. Bryderup, 2008, p. 12 ff.), but will focus briefly on content and perspective. By content is understood the primary research focus (target groups, communities (professional and policy) etc.). By perspective is meant the primary issue of research, for example, understanding/explaining risk, vulnerability, abuse, resilience, and other issues. Further, Shaw and Bryderup pinpoint five characteristics of good social research, which should: (1) be methodologically robust, (2) be theoretically robust, (3) add value to practice, (4) represent value to people and (5) have economic value (Bryderup 2008, p. 18). It seems obvious that the authors are responding to a critique of qualitative social research, but are similarly trying to build bridges between quantitative and qualitative research in social work/social pedagogy. In spite of their efforts, there are still tendencies to restart the old war between the methods mentioned.

These tendencies reflect the consequences of modernization which could be summarized with Bauman's term of ambivalence and uncertainty where contradictory knowledge and contradictory approaches have to live together" (ibid., p. 24).

Moreover, they quote Peter Sommerfeld, who states that "we have to face more complexity and learn to cope with it" (Sommerfeld, 2005, p. 18).

Among the complexities, there is a need to define what 'evidence-based' means and why we need to expand the concept of 'evidence' to a broader concept of knowledge that includes research knowledge, professional knowledge and practice knowledge (cf. Rasmussen, Kruse, & Holm, 2007). The question is to what extent does what research measuring outcomes, effectiveness and effects provide what kind of evidence to social pedagogical practice and vice versa: what kind of research is needed to contribute in a broader way to improve the quality of social pedagogy?

IV. Evidence-based – what does it mean for practitioners?

Ambiguity – the profession's side of the coin

As stated earlier in this article, social pedagogues represent values and principles that are difficult to combine with EBP in its 'hard' version, meaning RCT studies, primarily quantitative research and experimental designs (cf. Solomon, Cavanaugh & Draine, 2009).

A one-sided focus on outcome orientation is insufficient. Although the public debate pays attention to interventions that should be effective, the solution is not that simple. There is not one relevant dimension of effect; in fact, there are several, for example, the outcomes, causal mechanisms, contexts and contents of the interventions (Kazi, 2003).

First, we paint a broader picture of developmental trends of the professions. On the basis of Bourdieu's studies (Bourdieu, 1998) we point out that the role of professionals has changed – been reduced – as a consequence of the restructuring of welfare states through marketization, economization and accountability, the redefinition of citizens as consumers, and an increase in client participation. Further, new modes of governance have limited the discretionary space of professionals. The voice of 'consumers' has been augmented at the expense of professionals: consumers, who, according to Bauman, live in a consumer society where their consumption consists of choices. He argues that the

poor, once a 'reserve army of labour', are re-cast as 'flawed consumers'. This leaves them without a useful social function — actual or potential — with far-reaching consequences for the social standing of the poor and their chances of improvement (Bauman, 2005, p. 2).

The question raised is whether clients of social pedagogy interventions, through their role as consumers of welfare within this system, serve a social function as clients. Clients or consumers have gained a voice by means of a critical public discussion on welfare provisions as well as exit options by means of money to choose their preferred services. Generally speaking, this makes it difficult to intervene in people's lives, even when clients may need support. These new trends seem to have changed the motivation and perspective of professionals, their workload and the content of their job (Clarke & Newman, 1997, p. 77). They are led to a new consciousness, "a dispersed managerial consciousness", as Clarke and Newman put it.

This development has also been labelled "de-professionalization". Yet perhaps this is not the right way to frame the issue. Social pedagogues may still be 'heroes of childcare'. Therefore, we plead for new vocabularies to better understand the construction of old and new professionals. We opt for a re-professionalization in a new way. When professionals regain their professional self-confidence by improving their knowledge and skills, then the combination of formal knowledge, professional knowledge and practice-based evidence as well as an upcoming knowledge alliance with key stakeholders (like parents, policymakers, managers, educational and research institutions, etc.) may develop a new professionalism.

In this section we outline a somewhat alarming new tendency: the socialization of professionals, which involves moving from professionalism to managerialism.

To make a long story short: the professions seem to be forced to drop their own criteria of professionalism, first and foremost, their professional assessment of situations of interference with users, in favour of economization, for example, market criteria. Walker states, for example:

...the professionals are described in a new way by emphasizing three basic, but interdependent changes of the modern state. The first is the introduction of a new discourse aiming at both preparing and improving public servants to deal with reorganizations while those are made. Thereby the new discourse becomes governing and manipulating. Second, the driver for changing the discourse originates in the need of modernization, which in turn changes the social relationships between the leaders of the state, citizens and professionals. A modern state aims at governing employees and making them flexible and mobile. The outcome of this process is or will be a loss of status, professional creativity and autonomy. Third, behind the project of modernization lies coercion, originating from the globalization of markets and the processes of accumulation of capital (Walker 2004, p. 87 – our translation).

Walker adds that Ford succeeded in "splitting up working processes in smaller items and organizing them and similarly the social relations in new ways, too". Like Ford, the modern state gets rid of the semi-professions. The outcome is a post-Fordist "flexible accumulation of capital" (ibid., p. 112). Summing up the critique, Walker emphasizes some key words: performance, strategic plans of action, leadership, continuous evaluation, external control of finances, competition and profiling of institutions. Social relations are expressed in terms of teams, supervision, control of quality, wages linked to performance, manuals and modules, internal evaluation, differentiation between the core and the peripheral labour force, differentiation of levels of work, etc. The process transformed socialization within the professions.

Over the same decades, societal values have changed. Jørgensen (2003) mentions four basic values for the public sector:

- 1. the public sector bears the responsibility for society in general;
- there should be public control and supervision;
- 3. protection of the law should be safeguarded;
- 4. autonomous professional standards should be followed.

Jørgensen underlines important changes as the state draws back from earlier responsibilities. Our hypothesis is that points 1 and 4 of the above-mentioned values are under the hardest pressure. Citizens are no longer the focus of state interventions, and we observe how old distinctions between worthy and unworthy

poor or unemployed are re-entering the public debate. The focus is shifted to underpinning private companies' ability to compete. Likewise, one could point to a discourse of bio-political governmentality emphasizing the responsibility of the citizen in all fields (employment, health, education etc.). This individualization of responsibility becomes a decisive value in the public sector, and the population has over the years become used to "full freedom" and "full responsibility" (Beach, 2010, p. 555 – cf. also Beach, 2009 and Beach & Carlson, 2004).

Concerning point 4, the trend seems to be blurring the boundaries between professional standards and political intentions. The outcome is a sharpened demand for identification with the values of the leadership in the institutions and municipalities. One could speak of "the encircled institution" (Pedersen, 2011, p. 246), characterized by a number of governing and controlling systems (accountability etc.). We sum up what we label the discursive formations within this issue, namely, the discourse of performativity, the discourse of accountability, the discourse of standards (or commodification), and the discourse of surveillance and control (cf. Jensen & Walker, 2008, Ch. 10; Jensen & Jensen, 2007; Jensen & Jensen, 2008).

V. Can the schism be bridged?

Having shown one part of the picture, we now turn to the bright side of professional life. We will present three examples that emphasize the potential for regaining a new and stronger professionalism. Yet, a new professionalism does not per se bridge the gap between external and internal forms of evidence. External forms refer to the demands of external stakeholders, while internal forms refer to the knowledge base that a profession disposes of in the daily practice (Krejsler, 2013, p. 27). A new professionalism can rearm the professionals by demonstrating the role of judgment, tacit knowledge, and trial-and-error in professional practice. These cannot be eliminated, and if professionals are not given a room of manouvre, decisions and actions made will not correspond to the needs of the users.

The project on Action Competence of Pedagogues (ACP) may represent one example of a re-professionalization process, aimed at strengthening the professional competencies in day care and residential homes.

The first example

The intervention strategy of the ACP-project has been developed and inspired by research into implementation and working life. This has been translated into the ACP vision of making 'bottom-up' and 'top-down' perspectives meet. Obviously,

many conflicts of interests, poor local conditions or traditions, ideologies and other issues did, in fact, hamper successful intervention. We intended to examine the improvements as well as barriers which has not been explored much in research, by using knowledge about the status of the institutions concerning various factors that are assumed to be of importance for working innovatively (organization, level of education of staff, working conditions, etc.). The interesting point was what the intervention showed. For professionals the most important single factor seemed to be "control over own working situation" (for a detailed description – see Jensen, 2012).

The intervention was based upon a principle of 'soft' evidence-based practice - i.e. innovation based on knowledge from selected research. The approach to evidence-based practice in the ACP project was embedded in theories of science, which assume that practice will change if a user perspective, that is, a perspective involving participants and ownership, becomes central (Sommerfeld, 2005). Furthermore, implementation research (Winter & Nielsen, 2008), theories on culture from a communication perspective and innovation research in working life (e.g. Høyrup & Elkjaer, 2006) have documented that a plethora of other circumstances related to the processes of learning and knowing in work organizations can either restrict or promote an innovation and influence its effectiveness.

The qualification strategy was based on material developed by researchers - a so-called qualification package - that presents evidence-based knowledge about 1) socially endangered children, background variables, the concept of action competence, 2) effects of intervention based on international research and contraindicative effects in relation to exclusion and 3) legislation in the field (educational learning plans and action plans in residential institutions). The evidence-based knowledge from these three areas was merged with a fourth field of knowledge, practitioners' knowledge, consisting partly of explicit and implicit experiences from practice and partly of theoretical knowledge and common knowledge in the institution. These elements interacted with evidence-based "external" knowledge in selected fields of strategy (Schön, 1983). The exchange of these different fields of knowledge was supported by written material (an ACP "portfolio"), by analyses of the gap between pedagogues' experiences of their own competences and children's competences ("gap profiles") and by local support and the facilitation of processes via consultants and courses, arranged and prepared by researchers. The implementation of knowledge converted into a new practice furthermore demands a connection between user and research perspectives. This means that an intervention has to build upon and try to capture the knowledge needs of the professionals, and their need for attaining ownership of their own development processes and interests.

The approach of the project contrasted external forms of evidence in the following way: instead of being controlled by methods solely, the intervention was both governed by theory and goals and had a joint overall aim of encouraging the pedagogues to develop their practice through their own competence analysis and practice analysis. The disadvantage of working on the basis of an open innovation design is that the method is carried out locally and therefore includes variations of the ASP vision, which must be taken into account when assessing the effect of the intervention. Overcoming this dilemma is not an easy task, but by drawing on and using data - in addition to the effect assessment - on the local processes, i.e. institutional conditions, educational processes and the pedagogues' competence development and their descriptions of their knowledge and learning processes, much of that problem was brought 'under control' (cf. Jensen, 2012). On the other hand, the advantage of developing a practice as an open and innovative design is that it to some extent overcomes the critique of replicating evidence-based practice in a manualized way.

The second example

A second example of developing professionalism could be to identify what good practice is, analyse its characteristics and use it as a standard or norm of social pedagogical efforts.

Good practice has become a key concept in evidence- and knowledge-based- activities aimed at changing social work practice. It is linked with the demand for knowledge- and evidence-based approaches, according to Julkunen and Korbonen (2008, p. 117).

The authors provide the reader with a critical and reflective process model consisting of four phases: identification, evaluation, condensation and transfer (ibid., p. 120 ff.). The model is not a novelty (cf. models in Redmond, 2006; White, Fook & Gardner, 2006; Boud et al., 2006; Fook & Gardner, 2007), but it stresses learning as a fundamental issue (e.g. in dissemination) and points to the theoretical framework necessary for good practice by including public policy goals, programme-level goals, generative goals and workplace level goals (Julkunen & Korbunen, 2008, p. 123). This idea is to some extent duplicated by Pawson & Tilley, in particular concerning the nature of programmes (2009, p. 151-156).

The third example

A third example of contributing to a re-professionalization of the work of social pedagogues is linked with cooperative knowledge production (Gredig, 2005;

Hütteman & Sommerfeld, 2008, p. 164-167; Jensen, 2008). An important point here is to understand that the distinction between fundamental and applied research cannot be taken for granted anymore. The distinction has decreased as new forms of mode-2 knowledge have emerged (Nowotny, Scott & Gibbons, 2002). Knowledge processes in science and practice are assumed to have a cyclical structure. Practice is thus not only regarded as a field of applying or consuming scientific knowledge, but as constituting a system of knowledge in itself. The science cycle and the practice cycle are seen as linked with each other for a limited period of time and in the form of common developmental projects. The main link is to deal with a practical problem that requires practitioners to leave their routines and start afresh with innovations. Exactly at this point they need scientific knowledge. Without further elaborating this understanding it seems obvious that professionals and academics may profit considerably from this cooperation (Hüttemann & Sommerfeld, 2008, p. 165; Jensen, 2008, p. 29-31).

We will now sum up our reflections.

VI. Conclusion and further perspectives

We have described the chasm between professionalism and managerialism, of which evidence-based practice is an important part. We will now draw conclusions about the contradictions between the two kinds of logic.

Managerialism can be interpreted as a political and moral programme, rather than a collection of scientifically based administrative techniques. Managerialism can per se be understood as a mixtum compositum of doctrines, orientations and practices (Pollitt, 1993; Clarke, Gerwitz & McLaughlin, 2000). The belief builds upon the performative power of management and upon a – ironically expressed – holy trinity of "managers, markets and measurement" (Ferlie and Steane, 2002, p. 1461). Even if single parts of the management package are seen as technical or neutral tools, the intention is to use them as social technology, for example, morally and politically. The most important issue here is that faith cannot move mountains.

Social pedagogy is similarly based on a number of ethical and moral values related to users, to colleagues and to taking a stand on, for example, societal inequalities. Professionalism is marked by attitudes like offering unconditional help and support for citizens in need – in Merton's terms "institutionalized altruism" (Merton & Gieryn, 1982).

Already at this initial stage of the open controversy ("the ideological level", altruism contra pseudo-altruism to maintain Merton's terms) we can identify serious and basic contradictions.

A less ideological and more pragmatic discussion has been suggested, which should be an important part of the education and training of social pedagogues and will impact it for better or for worse, of course. It may look like a flash in the pan if the education institutions adopt anything without criticism, and demands naturally change over time. In spite of this reasonable objection to giving up one's own identity, we urge researchers and practitioners to take the problem seriously. The actual form may change; however, the basic idea appears to be widely accepted.

To get a closer look at the "meeting place", our point of departure is to understand the two logics in their contexts.

Hanlon advances two useable logics. The first is called society-based professionalism, while the other is labelled commercial professionalism. The tradition of the former is to provide universal services in order to meet people's needs without considering their financial means. The latter departs from managerial and entrepreneurial skills at the expense of professional skills (Hanlon, 1998, p. 45ff.). Changes in the public sector have created a dependency on management and organization. This implies a decrease in society-based professionalism. Freidson (2001) notes that competition and efficiency are prioritized at the expense of the freedom to carry out professional judgments. This further implies a progression of commercial professionalism, including less control on the part of professionals over their work. Freidson's point is, however, another consideration, namely, that having work related control does not exclude markets or managers. The argument is that as long as an organized occupation has the power to determine who is qualified to carry out the defined and agreed upon tasks, to prevent others who are not assessed to be qualified from doing so and to control how performance is evaluated, then professionalism is still present. The critical point is whether or not professionals are able to control their performance as well as their professional territory.

Related to this, it is important to take into consideration that managers are becoming professionals as well. Managers, policy makers and other administrators do not only draw on professional expertise; they develop their own programmes, diplomas and other aspects of education and training. This means that managers are getting much better acquainted with the specific field in which they are working. This is not a zero-sum game; new professionals can certainly cooperate with 'old' professionals for their mutual benefit. This suggests that any simple idea of "management by manualization" is not the answer. Freidson's argumentation is interesting and needs further research because of its apparent naivety. The political implications of his suggestions have to be taken into account. They may displace the contradiction but not overcome it.

With respect to the control of professionals, three scenarios should be mentioned:

- Users in the capacity of consumers would under pure market conditions
 decide what they want, where they want to get these services and for
 which price. This scenario would increase the competition between
 various companies and producers in order to satisfy the demands of the
 consumers.
- The bureaucratic model is a second option. This model is characterized
 by the fact that management decides on the division of labour, that is,
 what kind of work has to be done, by whom and not least, how (methods).
- In case of the professionally controlled work, the professions would decide who has the right to implement the task on the basis of what qualifications. This specialization is decided by using professional judgment.

The last scenario is the only one based on professional work related control, but as Freidson notes, neither management nor market are excluded. The practice controlled by professionals presupposes both management and organization. It could as well include the market, for example, contracts, offers and tenders. This is not the focal point; the focal point is if or when professional control is substituted by economic control.

So, where could the two logics possibly meet? Perhaps in the frame of a third logic: institutions and organizations contributing by organizational and financial means to maintain professional control of the practice.

However, the contradiction remains political by nature. Much depends on the relative strength between policy and practice; politicians seem to advocate for forcing people into particular predefined aims, while professionals in social pedagogy aim at expanding the scopes and scales of people's right to choose. Reflexive policy-makers know from their own experience that good policy cannot be derived from research findings. Policymakers take decisions depending upon the goals, the situations, the positions of key stakeholders, or opposition parties, etc. Policymakers do not follow a rational model. Reflexive professionals are not only concerned with scientific knowledge production or applications of research findings as such. They are primarily concerned with the practical application of professional knowledge and professional capacities. Reflexivity is by and large "a practical and ethical skill that is fundamental for judging what is desirable and appropriate in specific circumstances by applying particular informal heuristics, rules, and values" (Otto et al., 2009, p. 248-249).

The third logic may be what is called a second generation of evidence-based practice (ibid.).

Note

1 This article was completed in January 2013, so it does not relate to recent relevant publications.

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Dansk abstract

Skismaet mellem evidensbaseret praksis, professionel etik og managerialisme - med socialpædagogikken som eksempel

Uddannelse af socialpædagoger medfører en vis værdibaseret og humanistisk orienteret tilgang. Artiklen sætter denne forståelse i første række ved i det indledende afsnit at præsentere et bredt overblik over væsentlige professionelle værdier og holdninger, således som de findes i de mest udbredte lærebøger til pædagoguddannelsen. Derpå undersøges i artiklens andet afsnit, hvordan evidensbaseret praksis (EBP) forstås inden for dette faglige felt. I tredje og fjerde afsnit følger en diskussion af virkningerne af EBP blandt forskere og praktikere. Det pointeres, at der er opstået et skisma mellem professionelle skøn og evidensbaseret praksis, og dette tema udfoldes i artiklens femte afsnit som en diskussion af, hvorvidt det er muligt at bygge bro mellem de to tilgange. Endelig konkluderes og perspektiveres artiklen i sidste afsnit.

Nøgleord: Socialpædagogik, evidensbaseret praksis, EBP, managerialisme, forskning, praksis.

Evidence-based Methods and Conforming Judgement¹

By Merete Wiberg

Abstract

The thesis presented in this paper is that because evidence-based methods have the status of authoritative knowledge, they might undermine the professional judgement of social educators and turn it into conforming judgement that follows an authoritarian structure of guidance. Judgement can, according to Gadamer, be understood as the application, understanding and interpretation of situations. Understanding, interpretation and the use of personal experience in situations might be rationalised and viewed in accordance with the guidelines of the method. An alternative is a critical stance towards methods and an inquiry-based approach, inspired by Dewey, in relation to how judgement is exercised.

Keywords: evidence-based methods, pedagogical work, conforming judgement, professional judgement, inquiry-based approach, Dewey.

Introduction

The reason for implementing evidence-based methods in pedagogical work is to ensure causality between pedagogical methods and outcomes, for example, causality between methods intended to promote social competences and children who behave according to prescribed codes of social competence. The aim of causality between method and outcome may result in professionals trying to make every situation and action conform to a prescribed method by exercising acts of judgement that ensure conformity to the desired outcomes of the evidence-based method.

Nobody in a Danish context wants pedagogical work to be characterised by poor quality due to a lack of effect, but the question is whether evidence-based methods contribute to ensuring a higher standard in Danish daycare centres and schools. Another question is whether evidence-based methods in an educational context actually meet the standards of evidence, or if we are merely referring to what might be 'so-called' evidence-based methods. However, the aim of this paper is not to discuss the possibility of evidence, although an important point is that if a method is termed 'evidence-based', it means that it has an authoritative status. This might mean that the act of judgement of some social educators will turn into judgement that conforms to the method.

Forms of Knowledge and Authoritative Knowledge

The idea of this paper is, from a philosophical and theoretical point of view, to discuss whether evidence-based methods might have an authoritative status that turns judgement into conforming judgement. Therefore, the approach will be to clarify and discuss the concept of judgement and how judgement might be understood on the one hand, as conforming judgement and on the other hand, as reflective judgement, which involves critical analysis and inquiry.

According to Gadamer, it is problematic to make a sharp distinction between determinant (submissive) and reflective judgement because human judgement will always involve submissive as well as reflective judgement (Gadamer, 2013, p. 37). In this paper, judgement will, with reference to Gadamer, be understood as submissive as well as reflective. The aim of introducing the concept of 'conforming judgement' is to conceptualise and understand what happens to judgement when it is influenced by authoritarian knowledge, such as evidence-based knowledge. The idea is to discuss whether evidence-based methods undermine the reflective element of professional judgement and turn it into judgement that conforms to the method.

It will be assumed that it is not possible to distinguish sharply between evidence-based forms of knowledge and various other forms of knowledge when judgement is exercised because evidence-based methods have been incorporated in the repertoire of the knowledge of the educator. How educators become knowing professionals depends on various kinds of knowledge and experience achieved through personal life and education; it would, therefore, be problematic to make a sharp distinction.

In the article, examples of statements from social educators will be cited. A social educator in Denmark holds a three and a half year Bachelor's degree in social education. Social educators work with development and care within a wide range of areas, including: preschool and older children, young people, people with reduced psychological or physical abilities, adults with social problems etc. (Ministry of Science, Innovation and Higher Education, 2014).

The examples come from the research project "When evidence meets pedagogical practice" (Buus et al., 2011, 2012a, 2012b). The research project does not provide sufficient evidence or documentation for the thesis, but it has served as a source of inspiration for the formulation of the thesis and the following discussion (Flyvbjerg, 2007).

In the following, the research project "When evidence meets pedagogical practice" will be presented briefly. Subsequently, the act of judgement will be discussed with respect to what it means to be in a judging situation, applying various kinds of knowledge. John Dewey and H.-G. Gadamer provide the theoretical framework. It will be discussed how the use of methods based on so-called evidence-based knowledge might influence the social educator's understanding of professional judgement in terms of a tendency to conform understanding, interpretation and application of situations to the method.

About the Research Project "When evidence meets pedagogical practice"

The project, which ran for more than two years, dealt with the impact of evidence-based educational knowledge on pedagogical practice in Danish preschool education and care. The project combined several kinds of empirical methods. The part referred to in this article (Buus et al., 2012b) is a qualitative study based on video tapings in institutions where evidence-based methods have been adopted. Subsequently, the video observations were used as a point of departure for a group interview with the social educators. The main focus of the project was to investigate how evidence-based methods influence social educators in their professional practice, in terms of their mode of understanding and judgement of pedagogical situations.

One observation that is particularly relevant for this paper is that during the analysis and interpretation of the transcriptions, the staff quite often told us that they had changed their practice in accordance with the method, while at the same time their actual practice, when using the method, was consistent with what they would have done anyway. According to some of the professionals, the method made their former practice more explicit.

One social educator, for example, said:

... instead of saying that the method determines my practice, it is just the other way round ... I think: Oh, this was the method. Some of my practice just fell into place with the use of the method (Buus et al., 2012b, p. 53, my translation).

The statement is an example of how the evidence-based method may have transformed the professional judgement of the social educator into a 'conform to the method' judgement, and how personal experience 'fell into place' with the method.

Dividing Lines between Evidence-based Methods and Judgement

There are many indications that evidence-based methods reach their limit when they are confronted with practice (Biesta, 2010; Thomas, 2004/2007; Kvernbekk, 2011). It is not a question of whether judgement is exercised, given that applying a method under all circumstances involves evaluating how to apply it in concrete situations. The human condition that we are always confronted with situations in which we need to cope is what necessitates the exercise of judgement. According to Dewey, any situation is characterised by uncertainty (Dewey, 1990), and in order to transform uncertain situations into more determined situations, individuals need to carry out actions that determine and stabilise them. What characterises persons in situations is that they need simultaneously to interpret and cope with the situation. In other words, they are forced to think and act at the same time. The German philosopher Hans-Georg Gadamer used the concept 'hermeneutical situation' (Gadamer, 2013, p. 312. Being in a situation is, according to Gadamer, characterised by being constrained by a horizon of meaning which, at the same time, provides a framework for possible actions. Being able to apply knowledge in a situation might be understood as a combination of understanding, interpretation and application: "... for, on the contrary, we consider application to be just as integral a part of the hermeneutical process as are understanding and interpretation" (Gadamer, 2013, p. 319).

But what is of particular significance when applying so-called evidence-based knowledge and methods? Kvernbekk discusses (Kvernbekk, 2011) whether the discourse of evidence-based methods deals with the certainty or truth of methods or with the support of practice, and concludes that efficiency is more important than truth. "But while effectiveness of practice and truth of hypotheses are different things, the function of evidence is the same; support" (Kvernbekk, 2011, p. 8). If evidence-based methods are used with regard to supporting practice, it is clear

why professional judgement is important in relation to what it means to apply a method. On the other hand, it is problematic if politicians and administrators overestimate what these so-called evidence-based methods have to offer, demanding on that basis that the methods be used as manuals. If the methods are used as manuals, the consequence is that they are used without a critical stance to their inherent premises and assumptions.

Biesta makes an important point concerning the reduction of complexity in the application of evidence-based methods: even though it might be necessary to reduce complexity in most situations, it will always be an exertion of power to do so, and to use evidence-based methods to reduce complexity is to be seen as restraining. Therefore, according to Biesta, complexity reduction should always be seen as political:

While in some cases complexity reduction can be beneficial, in other cases it can be restraining. But since any attempt to reduce the number of available options for action for the 'elements' within a system is about the exertion of power, complexity reduction should therefore be understood as a political act (Biesta, 2010, p. 498).

The important point is that an introduction of evidence-based methods stresses the reduction of complexity, due to the required use of the same method in many institutions and most situations. To use evidence-based methods with loyalty is to reduce the complexity of the way in which professionals reduce complexity.

Statements from some of the social educators exemplify how they understand evidence-based methods as methods that are proven to work and should therefore be adhered to without a critical attitude to how they were developed:

Interviewer: You have mentioned the evidence-based aspect several times. What do you understand by evidence-based?

Social educator: That research has been done that shows that it works. This is what I understand by evidence-based ... I'm faithful to the principles (Buus et al., 2012b, p. 33, my translation).

It appears from this statement as if 'evidence-based' is a guarantee for certain knowledge that works. The overall impression of the research project was that social educators paid little attention to how the method that the politicians expect them to apply had been developed and what kind of research had been conducted in order to design the method.

The Use of Methods

An important theme in Gadamer's book *Truth and Method* is what it means to use methods within the humanities. In order to understand what it means to apply knowledge when dealing with human beings, he points to Aristotle's concept of *phrónesis*, which, although concerning moral situations, is a kind of knowledge closely connected to the forms of knowledge needed within the humanities. Moral knowledge is, according to Gadamer, to be seen as something different from epistemic forms of knowledge. What characterises moral situations is, according to Aristotle, that it is not possible to expect "the same degree of precision in all discussions" (Aristotle, 1979, Book One, p. 65). In moral (or cultural) situations, we cannot expect to find exact knowledge or methods to guide action. On the contrary, a person in a moral situation must be able to judge for herself.

Pedagogy is traditionally related to the humanities, and a situation in a daycare institution might well be viewed as a hermeneutical situation, although epistemic knowledge, such as knowledge concerning hand hygiene, might be part of the situation and therefore also part of the integration of interpretation, understanding and application. Evidence-based knowledge seems to hold a strange position, because it is aimed at achieving the status of epistemic knowledge.

The Concept of Judgement

The concept of judgement originates from Aristotle's *Ethics*, where the concept of *phrónesis* denotes wisdom, prudence or judgement exercised in everyday life. As mentioned above, it is not possible to provide exact prescriptions for what might be characterised as good, virtuous behaviour. Aristotle understood moral virtue as "a mean between two vices" (Aristotle, 1979, Book Two, p. 108). The kind of knowledge needed in everyday situations must, according to Aristotle, be prudence or practical knowledge (*phrónesis*) (Aristotle, 1979, Book Six, p. 209).

Many philosophers have dealt with the concept of judgement. The present paper focuses on Gadamer's concept of the hermeneutical situation and Dewey's concept of intelligent action. Both concepts refer to the concept of judgement.

Intelligent Thinking and Action

Dewey's concept of intelligent action is an attempt to overcome what he perceives as a dualistic understanding of human beings, who have traditionally been split up into separate functions, including the distinction between thinking and action. The concept of intelligence is essential in order to understand human beings as 'always being' in situations. The concept of intelligent action is to be understood

as a reinterpretation of the concept of rationality, viewing rationality as part of action instead of being isolated in the human mind (Dewey, 1990, Biesta & Burbules, 2003). According to Dewey, to be rational is to act intelligently in situations. Furthermore, the concept of intelligence refers to the concept of 'inquiry', which involves the combination of thinking and action in terms of analysis, choice making, deliberation and reflection.

A moral situation is one in which judgment and choice are required antecedently to overt action. The practical meaning of the situation – that is to say the action needed to satisfy it – is not self-evident. It has to be searched for. There are conflicting desires and alternative apparent goods. What is needed is to find the right course of action, the right good. Hence, inquiry is exacted: observation of the detailed makeup of the situation; analysis into its diverse factors; clarification of what is obscure; discounting of the more insistent and vivid traits; tracing the consequences of the various modes of action that suggest themselves; regarding the decision reached as hypothetical and tentative until the anticipated or supposed consequences which led to its adoption have been squared with actual consequences. This inquiry is intelligence (Dewey, 1957, pp. 163-164).

What is described above is parallel to the analysis of thinking that Dewey carried out in *How We Think* (Dewey, 1986). In this book, Dewey provided a description of reflective thinking, which is obviously inspired by methods used in the natural sciences, but for most people constitutes a recognisable approach in situations characterised by uncertainty. In these situations, observing, formulating hypotheses, experimenting and drawing tentative conclusions are typical activities.

Intelligent Inquiry in Uncertain and Hermeneutical Situations

Intelligent inquiry is not an approach limited to moral situations. Inquiry is to be understood as acts of reflection and analysis in a continuum between habitual behaviour and deviation from habits. According to Dewey, the uncertain situation, characterised by restlessness and doubt, is a precondition for the act of inquiry (Dewey, 1986). Being in an 'uncertain situation' might be perceived in an ontological perspective, because the concept refers to fluidity, uncertainty and the dynamics of human life. Because human life is dynamic and characterised by potential, judgement is needed in order to cope with situations. Gadamer's concept of the hermeneutical situation adds an important aspect to the idea of uncertain situations in terms of an understanding of situations being embedded in horizons of meaning.

When discussing whether the use of evidence-based methods has a tendency to transform judgement into conforming judgement, Dewey's concept of inquiry might serve as an alternative to conforming judgements, which tend to rely on an uncritical application of a method. The act of inquiry requires thorough consideration and scrutiny, which should result in nonconformity and rational and reflective thinking, understood in this context as Dewey's concept of intelligent thinking and action. Therefore, it is important not just to expect 'judgement' of social educators and other professionals, but to emphasise the critical approach when judgement is exercised, in order to avoid conforming judgement.

Experience and Judgement

The concept of intelligence is, in Dewey's philosophy, closely connected to the concept of experience, which also plays an important role in Aristotle's ethics. Personal experience is understood as a phenomenon that influences the understanding and interpretation of situations, ways of acting and repertoire (Dewey, 1997).

The connection between experience and judgement was clear in the research project "When evidence meets pedagogical practice"; the social educators said that, to a large extent, they draw on their experience when using evidence-based methods (Buus et al., 2012b). Their explanations of how they draw on their experience support the thesis that judgement might turn into conforming judgement when evidence-based methods are part of how decisions are made and actions are carried out:

What I am doing when I use PALS [the evidence-based method, an abbreviation of 'positive behaviour in learning and interaction'2]... I have always praised [the children] in my own words. Now I put it [praising the children} in a box called PALS and hand out some 'Well Done!' cards in order to emphasise the positive. My own experience is still there, even though I am using PALS. It has just become clearer for the children (Buus et al., 2012b, p. 46, my translation).

If a method is dressed in evidence-based clothing, this clothing might influence the social educator to choose and pick among her own experiences and judge in a certain way. The point is that it is apparently the authority of the evidence-based method that influences how the social educator understands it, and how she tries to adapt the method to previous experience.

What are the implications of the above statement? Does the method influence the judgement of the professional as a kind of confirmation of practice? The method, as something introduced, trained and practised in an institution, seems

to discipline the thinking, judging and use of experience of the social educator (Foucault, 1988). It would be interesting to understand why, if that is the case, professionals allow their use of experience to be governed. Assumptions/suggestions might be: 1) the method is considered an authority because it is perceived as evidence-based and 2) searching for meaningfulness, in terms of striving to fit into ordered unifying structures or wholes, is essential for human beings.

The tendency to search for meaningfulness in terms of wholeness and predictability is what evidence-based methods offer in their capacity for clear learning aims and procedures for how to succeed.

The social educator stated that the evidence-based method corresponded to what she would have done anyway. It seems to be the case that the evidence-based method guides her use of own experience and that the method corresponds to what, during her career as a professional social educator, she has seen as useful and valuable experience.

It might be a matter of rationalisation and can be described as a process through which we associate, and at the same time conform, former incidents and events to statements or theories we have subsequently become acquainted with. But what kind of action is rationalisation in the process of using experience and judgement in relation to evidence-based methods? The phenomenon of recognition is related to the phenomenon of rationalisation. Dewey wrote:

In recognition we fall back, as upon a stereotype, upon some previously formed scheme. Some detail or arrangement of details serves as cue for bare identification (...) Even a dog that barks and wags his tail joyously on seeing his master return is more fully alive in his reception of his friend than is a human being who is content with mere recognition (Dewey, 1980, pp. 52-53).

To recognise might in some cases be described as a process where an individual picks and chooses among former experiences in order to conform to, for example, a recently introduced pedagogical method.

It might be, as mentioned before, that because evidence-based methods are acknowledged as a guarantee for certainty and predictability, they have a certain authority, which influences the way in which the social educator draws on her experience and how she makes judgements as a professional.

Personal Judgement

Judgement is always exercised by an individual; being able to judge is always personal. The ability to judge is formed and learned through personal experience. Individual formation is nurtured by personal history, ways of doing and ways of approaching:

Human civilization differs essentially from nature in that it is not simply a place where capacities and powers work themselves out; man becomes what he is through what he does and how he behaves – i.e., he behaves in a certain way because of what he has become (Gadamer, 2013, p.323).

Dewey had similar considerations concerning the relationship between people and acts: "The self reveals its nature in what it chooses. In consequence a moral judgement upon an act is also a judgement upon the character or selfhood of the one doing the act" (Dewey, 1989, p. 287).

The question remains of what it means to understand judgement in terms of personal ability. What is this 'more', which might be understood as personal? Inspired by Aristotle, Gadamer described it as personal knowledge: "For obviously it is characteristic of the moral phenomenon that the person acting must himself know and decide, and he cannot let anything take this responsibility from him" (Gadamer, 2013, pp. 323-24).

In the quotation above, freedom and autonomy are important characteristics of the act of judgement. Accordingly, Kant's concept of judgement is constituted by the concept of freedom. The moral person is, according to Kant, a product of freedom, which, in a Kantian sense, means that she follows (her) reason, which is at one and the same time personal and universal (Kant, 1974).

Most social educators assume that they are acting independently and autonomously, due to their understanding of themselves as competently exercising the act of judgement in complex situations.

Therefore, we may suspect that evidence-based methods are distracting factors in the self-understanding of social educators. If they are required to use a specific method, they might feel that they are being denied their professional autonomy.

As mentioned earlier, it is impossible for a social educator not to exercise judgement; however, personal judgement might be distracted by an apparent authority, such as an evidence-based method. The consequence can be that the professional judgement is not constituted by freedom and rational thinking, and therefore turns into conforming judgement.

Conforming Judgement and the Need for Critical Thinking

Research within social psychology has shown how personal judgement can be influenced by authorities (Long, 1968). A very famous example is the Milgram experiment (Milgram, 1963). In the experiment, persons with various backgrounds

were persuaded by another person, dressed as an expert, to "administer shock to a victim" (Milgram, 1963, p. 372) in what they were told was a learning experiment.

It might not appear obvious to link evidence-based methods with this extreme experiment, but there are resemblances. Evidence-based methods are seen as authoritative, because they are believed to be based on evidence-based knowledge. In this sense, evidence-based knowledge and methods can be compared to the authoritative function of expert knowledge which, for some persons, might turn judgement into conforming judgement. The problem is not that professionals use a method; the problem arises if they use the method uncritically, as an overall perspective, which influences and unifies their understanding and interpretation of situations and subsequently their act of judgement. This may lead to a 'democratic deficit':

I have particularly highlighted the 'democratic deficit' of the uptake of the idea of evidence-based practice in education, emphasising how a particular use of evidence threatens to replace professional judgement and the wider democratic deliberation about the aims and ends and the conduct of education (Biesta, 2010, pp. 492-493).

For educators who are told by politicians and administrators to use evidence-based methods, the choice is made on their behalf, and it might determine how they choose, pick and judge their own experience. Those who decide to apply the methods run the risk of laziness and conformity, even though they may believe that they are merely following the most recent research. Dewey wrote the following comment in relation to people who merely conform to 'norms of conventional admiration':

The one who is too lazy, idle, or indurated in convention to perform this work will not see or hear. His "appreciation" will be a mixture of scraps of learning with conformity to norms of conventional admiration and with a confused, even if genuine, emotional excitation (Dewey, 1980, p.54).

In Milgram's experiment, not all the test persons were persuaded to administer shock to the victim. Some of the participants refused to follow the suggestions of the expert. Critical thinking is reliant on the ability to resist development of authoritarian personalities (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1966). Obedience to authorities works against the ideas on which a democratic society should be built. Not all social educators follow what appears to be expert knowledge. Even though local authorities have decided that institutions in an area are to apply an evidence-based method in a strict way, they oppose the method and try to exercise professional judgement by using the method in a way that leaves room for other perspectives:

I still think, as it has been said by many of the others ... It is the tool you use. It is not because you say that now we have had 2xPALS [the method, M.W.] and now we only use PALS. It is still common sense that is the reason for decisions; the way children are being spoken to and the actions that are conducted. To a large extent, it is your own common sense, habitus, experience and a lot of other things. And sometimes it is PALS to get a different perspective (Buus et al., 2012b, pp. 53-54, my translation).

The statement above is not about critical thinking, but the social educator is aware of the importance of looking at her practice from different perspectives that might help her avoid conforming judgement.

Although a method is labelled evidence-based, it should not hinder the social educator in using the professional knowledge she has gained through her Bachelor's degree in social education (Ministry of Science, Innovation and Higher Education, 2014). Keeping an open, while at the same time critical, mind in relation to methods offered to the profession should be part of the professional judgement of social educators in Denmark.

According to Gadamer, human beings will always find themselves in a framework of authoritative knowledge in terms of prejudices, tradition and experts (Gadamer, 2013). In order to avoid authoritarian professionals, a critical stance is required, for example, in relation to ready-made evidence-based methods.

Concluding Remark

The point of this article is not that social educators should not consider knowledge based on research; the problem arises if they do not take a critical stance to the type of research on which the knowledge and methods are based. It is important that the label 'evidence-based' not be used to signify authoritative knowledge by administrators and politicians, thus keeping professionals from conducting their own inquiry and exercising critical and professional judgement. Considering their educational background, social educators should, according to the executive order that regulates the programme, be able to "... demonstrate knowledge of scientific theory and method" (Executive Order on the Bachelor in Social Education, 2010, §12, Stk. 2). This means that social educators should be able to discuss the basic premises of the methods they are presented to and be able to exercise professional judgement about when and how to use the methods. In many Danish city councils, methods are introduced by administrators and politicians who might be seduced by the authoritative label 'evidence-based'. A critical stance from the social educators works as a safeguard against conforming judgement in educational institutions.

Notes

- 1 This paper is a revision and extension of an earlier version: Wiberg, M. (2011). "Dømmekraft" (Judgement). In: A.M. Buus et al. chapter 4, p. 63-72.
- 2 PALS is a Norwegian (and Danish) version (Atferdssentret, nd) of the American programme SW_PBIS (School-Wide Positive Behavioral Intervention and Support (PBIS Positive Behavioral Interventions & Supports (nd).

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Dansk abstract

Evidensbaserede metoder og tilpasset dømmekraft

Denne artikel diskuterer dømmekraft, og hvordan professionel dømmekraft ved indførelse af evidensbaserede metoder i danske pædagogiske institutioner risikerer at blive til tilpasset dømmekraft. Tesen er, at fordi evidensbaserede metoder fremstår autoritative og baseret på sikker viden, så har de den indflydelse, at de kan underminere professionel dømmekraft. Dømmekraft udlægges i denne artikel via Gadamer og Dewey, og således forstås dømmekraft i overensstemmelse med Gadamer som anvendelse af viden i en situation, hvor der foregår samtidig fortolkning og forståelse af situationen. Tesen er, at evidensbaserede metoder qua deres status som viden, der virker, fordi den er forskningsbaseret, får den indflydelse på forståelsen og fortolkningen af situationen, at denne tilpasses den evidensbaserede metode. Der er tale om en slags efterrationalisering, som f.eks. får pædagoger til at sige, at deres egen erfaring passer med metoden.

Alternativet er, at professionelle kritisk vurderer de metoder, de præsenteres for, og at de ved en undersøgende tilgang til pædagogiske situationer, inspireret af Deweys begreb om 'inquiry', kan udfordre en tilpasset dømmekraft. Der anvendes eksempler fra et forskningsprojekt, der har undersøgt evidensbaserede metoders indflydelse på pædagogers forståelse af eget arbejde.

Nøgleord: evidensbaserede metoder, pædagogisk arbejde, tilpasset dømmekraft, professionel dømmekraft, undersøgende tilgang, Dewey.

Making Sense of Evidence in Teaching

By Thomas R.S. Albrechtsen & Ane Qvortrup

Abstract

The aim of this article is to call for research that focuses specifically on *how* teachers make use of various kinds of evidence or data in their teaching practice. Although we identify with some of the critics of the evidence-based teaching movement, we argue that, by acknowledging the unique character of the teaching profession, the discourse on evidence can be fruitfully integrated within the daily life of schools. In this article, we suggest two broad questions which can help guide future research into teachers' use of evidence and data in their professional practice.

Key words: evidence-based teaching, teachers, data use, educational research.

Introduction

For a variety of reasons, researchers and policy makers are keen to answer the question of how educational research can become more "useful" for daily practice in schools. One possible answer is provided by the discourse about *evidence-based teaching* (EBT). Approximately 10 years ago, Moos, Krejsler, Hjort, Laursen & Braad (2005) predicted that the term "evidence" would become increasingly important in Danish educational policy. This prediction was correct. They also claimed that evidence was a contested concept or a "fluid signifier" that was

difficult to grasp or define. Despite this, evidence is now a widely used term and is at the centre of a global evidence discourse.

For policy makers, "evidence-based" decisions represent a new way to govern educational institutions. This is connected to the greater principles of New Public Management (Emmerich, 2014). A result of this movement in Denmark was the establishment of *The Danish Clearinghouse of Educational Research* in 2006, which focuses specifically on this issue. It is also worth mentioning the role of the *Danish Evaluation Institute* (EVA), which delivers evaluations and encourages Danish schools to become more evidence-based. However, whether the term "evidence" carries the same importance for teachers in their daily working lives remains uncertain. We doubt that it does. We believe that, if a Danish teacher were asked whether evidence is a commonly used term in his/her current workplace, the teacher would respond in the negative. However, if the same question were asked about the term "reflection", we believe the teacher would respond in the affirmative. We appeal to evidence to support this claim. In a recent report from EVA, we can identify a supposed need for evidence and knowledge about what works in teaching:

In general, the practitioners say that they lack knowledge about what works in many different areas. One teacher underlines, "we walk around and do something, because we believe that this is the best thing to do, or because this is what we usually do, but we actually don't know what effect it has". This experience is supported by the quantitative material. In the teacher surveys, 46% find it difficult or generally difficult to ensure that teaching is based on evidence-based teaching methods. A few more, that is 48%, also answer that it is difficult or generally difficult to achieve a greater insight into evidence-based knowledge about subjects, methods and forms of teaching (EVA, 2013, p. 90 - our translation).

This 2013 report indicates that teachers recognise EBT (and the surrounding discourse as something that concerns them, but something which it is difficult to put into practice. Adopting a more critical standpoint, we could surmise from this report that teachers feel obliged to make their teaching "more evidence-based", not because they perceive a genuine need for it in the classroom, but because it has become a new slogan for policy makers. However, the truth is that we simply do not know how Danish teachers perceive this relatively new trend.

The purpose of this article, therefore, is to call for research that examines the following question in more depth: How do Danish teachers actually use – and make sense of – evidence in their everyday teaching practices? Although we believe that the term "evidence" is not widely used in the everyday lives of teachers, we predict it will become more widespread in the coming years. This

raises a number of questions. For example, let us imagine a teacher who wishes to become a professional practitioner and who only uses "evidence-based" methods. If this teacher seeks guidance from a proponent of and expert in "evidence-based practice", what would this expert suggest the teacher does? Read more relevant books and research journals? Collaborate more with educational researchers or other experts (if this is possible)? Attend different kinds of in-service teacher development courses in order to gain more evidence about certain educational phenomena (if the school can afford it and the school leader allows it)? It remains unclear where the teacher should source evidence, what it is to "have evidence" and how this evidence should inform teaching in the classroom.

The aim of this article is to highlight and outline these questions so that they can form the basis of future research. We will put forward a nuanced view of evidence-based teaching that recognises the value of practice-based evidence.

Types of evidence

In the book *Evidence-based practice in education*, edited by Gary Thomas and Richard Pring (2004), the majority of authors maintain that there are many different types of evidence. Therefore, we think it is justified to ask the question: "what is evidence?" It is important to establish this before we proceed to a discussion of "evidence-based teaching" in schools.

In the introduction to the book, Thomas (2004) describes three interrelated criteria for judging evidence, as shown in Figure 1 below:

Criterion	establishing that the information constitutes information for (or against) some proposition			
1. relevance				
2. sufficiency	corroboration with other instances of the same kind of evidence or other kinds of evidence			
3. veracity	establishing that the process of gathering evidence has been free from distortion and as far as possible uncontaminated by vested interest			

Figure 1: Criteria for judging evidence according to Thomas (2004, p. 5)

The first criterion refers to the *relevance* of the evidence for the particular practice at hand. This means:

something less than established fact – an assertion, a position, an hypothesis – has been put forward and data of some kind is wanted in support of that position (...)

Evidence is thus information supporting (or refuting) an assertion, and must pass the test of relevance if it is to move from informational noise, to potential evidence through to prima facie evidence (Thomas, 2004, p.4).

The second criterion is the *sufficiency* of the pieces of information gathered. As Thomas claims, we have to consider whether there is some *corroborating evidence*. In other words, are there other kinds of evidence to support or challenge the assertion? Connected to the second criterion of judging evidence is the third criterion of *veracity*. In this last case, we have to assess the trustworthiness of the evidence; in other words, to be aware of its possible distortions and social interests that lie behind it.

Thomas continues to discuss the particular *social and interpretive context of the evidence*, which can vary depending on the kind of professionals we are considering. Lawyers, doctors and teachers do not use evidence in the same way, though there may be some similarities. The acceptance and value of evidence "will rest on the judgement of peers" or a "community of assessors" (Thomas, 2004, p. 7). This is a particularly interesting point, since teachers often work alone in the school classroom and perhaps seldom discuss evidence in the staff room or at team meetings. Another aspect to consider is that, in the field of teaching, there is rarely (or perhaps never) conclusive evidence of "what works" in the classroom. As we can see in the passage from the EVA report cited in the introduction to this article, EBT is often associated with the question of "what works". We will return to this problem later in the article.

It is important to remember that EBT is not simply a case of either having evidence or having no evidence for something (eg. Hammersley, 2013, p. 47). EBT is also concerned with the degree of evidence or the difference between weak and strong evidence. According to Thomas (2004), evidence can originate from personal experiences, testimonies, documents or archives, artefacts and observations: "We all find pieces of evidence, make links between them, discover patterns, make generalizations, create explanatory propositions all the time, emerging out of our experience, and this is all 'empirical" (Thomas, 2004, p. 13). From this perspective, there is nothing special about "evidence" as such. However, Thomas identifies a problem for the proponents of EBT; in his view, the evidence used by teachers lacks strength and rigour. He also claims that it is not based on research, especially not on the "gold standard" of research, which, according to Slavin (2002), is well-designed nomothetic research (such as randomised controlled trials). There appears to be a gap between educational research and educational practice that needs to be closed so that teaching can become a research-based profession (Hargreaves, 2007).

In the same book, Michael Eraut (2004) asks some important questions regarding practitioners' sense-making of evidence, with a special focus on medicine. One of the questions he asks is: "What is the awareness of the research evidence among potential users, and how do they interpret it?" (Eraut, 2004, p. 92). This is also a question we address in this article. Eraut differentiates between researchbased evidence, other scientific evidence and practice-based evidence. In all these cases, decision-making is a central concern and, in this respect, evidence becomes a matter of credibility and the legitimate reasons why we decide to do A instead of B. It seems that – at least in Denmark – when we talk of evidence in teaching, this refers to research and researchers; in other words, to experts outside the school. This is what Eraut would call "research-based evidence". The term "evidence" is rarely used by teachers themselves in the sense of "practice-based evidence", understood as evidence "from professional practices recognized by the relevant profession, and performed in accordance with the criteria expected by the relevant experts within that profession" (Eraut, 2004, p. 92). However, it could be suggested that this is also included when some teachers talk about evidence in their professional practice. For example, in a recent journal, a Danish teacher describes EBT in the following way:

To teach evidence-based means that the teaching builds on a combination of the available research, the teaching experience of the teacher, and the teacher's knowledge about the individual student's developmental possibilities. As a teacher, I have to keep up-to-date with the research field and be capable of integrating this knowledge within my pedagogical and didactical work. You can teach evidence-based in all subjects and themes since it is about how you think teaching, not about content or materials (Vesterheden, 2013, p. 11 - our translation).

This teacher then proceeds to appeal to research concerning feedback, conducted by Hattie & Timperley (2007), as an inspirational source for her work in the classroom. In this case, the research-based evidence can function as a kind of corroborating evidence (as mentioned by Thomas) for the practice-based evidence. It is likely that the teacher is already accustomed to providing student feedback and views this as a valuable and effective process. The work of Hattie & Timperley simply offers verification for this and provides her with some new "tools" which can help her begin a conversation about an assignment with her students.

The use of the word "evidence" in teaching can be confusing if it implies that there is no longer any doubt about what is the best practice. As mentioned above, "global evidence" or "conclusive evidence" is a relatively problematic and rare concept in teaching, provided we are talking about the causality between what the teacher teaches and what the students learn (and if, by learning, we understand

the psychological acquisition of knowledge). If such a conceptualisation of evidence is the premise of EBT, we believe it is wrong and easy to argue against. The confusion is understandable if you look in the dictionary to make sense of the word "evidence", because the dictionary lists synonyms such as "clarity", "certainty", "indisputability" and "a form of 'proof' you cannot contradict" (Levinsson, 2013, p. 113). This understanding of evidence is difficult to operate with in teaching. Instead of viewing evidence in this way, we believe it should be viewed as part of an argument. Evidence can form the central element in an *epistemic justification*, and it can also spark disagreement (Feldman, 2009; Feldman & Conee, 1985). As stated by Thomas (2004), when assessing the relevance of the evidence, sufficiency and veracity are important criteria to consider. The distinction between research-based and practice-based evidence is also essential, and we will draw upon this in the following discussion.

In terms of this presentation of different types of evidence, we will conclude that, in all likelihood, teachers are already employing different kinds of evidence in their teaching as part of an on-going process, but with different abilities and levels of reflection (Kowalski & Lasley II, 2009; Pollard, 2008). From an educational research perspective, we are interested in the conditions of teaching; at present, we know too little about *how* the different kinds of evidence play a role in the professional lives of teachers.

Evidence and the Professional Knowledge of Teachers

As mentioned above, evidence is not used in the same way across all professions. For example, despite some similarities, doctors and teachers tend to use evidence differently. The concept of evidence was originally taken from the healthcare system; however, in order to establish how evidence should be understood in teaching, we need to examine not only the different types of evidence (outlined above) but also the unique nature of the teaching profession itself.

We can distinguish between many different competences in the teaching profession (Baumert & Kunter, 2013). One of the central competences in teaching is what the American educational researcher Lee S. Shulman termed *pedagogical content knowledge* (PCK). This term describes how the teacher is able to connect his or her subject matter knowledge with knowledge about how it can be disseminated or communicated to the particular students in the classroom. It is described as knowledge about

the ways of representing and formulating the subject that make it comprehensible to others. [...It] also includes an understanding of what makes the learning of specific concepts easy or difficult (Shulman, 1986, p. 9).

This is a location- and situation-dependent type of knowledge. Another important distinction is between experiential or practice knowledge in teaching, professional knowledge and research or scientific knowledge (Rasmussen, Kruse, & Holm, 2007). Each individual teacher, each teaching team, each educational institution, as well as the teaching profession as a whole, possesses a body of practices and knowledge about teaching based on experiences from different situations. It is precisely this body of knowledge we refer to when we talk about the experiential knowledge of teachers (Hoban, 2002; Luhmann, 2006, p. 171ff.; Putnam & Borko, 2000). This type of knowledge is closely linked to the context in which it is produced. Experiential knowledge is partly a result of a teacher's own teaching practice, partly a result of social conventions and norms within the professional contexts outside the classroom (colleagues, teams, institutions and the professional tradition), but it is also partly a result of the experiences they had as a student (Britzman, 2003; Lortie, 1975). This knowledge both influences and is relevant and important for decisions made in teaching, since it refers to what usually works in concrete settings.

On the other hand, the performance of different pedagogies or didactics is systematic descriptions and reflections that teachers can use to guide their decisions when planning, conducting and evaluating teaching. Pedagogy and didactics are not characterised by consensus about what good teaching is. Quite the reverse; they are characterised by significant internal diversity and disagreement. Different pedagogical positions reflect and present teaching in different ways and, accordingly, they offer different stories about what teaching is or should be (Qvortrup & Wiberg, 2013). This range of perspectives is particularly useful and desirable if, for any reason, teaching has to change direction; for example, when experience and tradition no longer fulfil new ideas or conditions. The risk of basing teaching solely upon experience is that this type of knowledge often remains unquestioned (Hoban, 2002; Lortie, 1975). One reason is that it is both a product of and confirmed by experiences. Another reason is that, to a large extent, this type of knowledge is produced through informal and unintended learning situations and, therefore, is only partly accessible to reflection (Bateson, 2000 [1972], p. 292ff.). Over time, experiential knowledge creates its own self-evident and self-supporting pedagogy or didactic position (Keiding & Qvortrup 2015a, b).

Therefore, it is important that experiential knowledge enters into dialogue with both didactics and empirical educational research. The multiplicity of didactics is valuable for teaching when support, new ideas and concepts for reflection are required, but it is also its Achilles heel when supporting a teacher's didactic choices. As we have argued, this variety offers a broad and colourful palette of perspectives and opportunities for reflection. However, the theories offer little

empirical evidence for their recommendations and, hence, they leave the teacher to judge whether the guidelines and objectives are reliable and, ultimately, whether the theory keeps its promises. However, in recent years, by monitoring how various teaching methods influence student participation and learning, empirical teaching research has contributed significantly to our knowledge about what does and does not appear to work. The three types of knowledge concern the same topic: pedagogical practice and pedagogical knowledge in the broadest sense. They differ in the code used to distinguish between knowledge belonging and not belonging to the domain. The inner side of the code indicates the connective value for new knowledge; namely, useful, guiding, and true, respectively. None of these types of knowledge offers unequivocal answers to selection and reasoning; however, each of them offers arguments for decision making in teaching (ibid.).

The Swiss educational researcher Walter Herzog (2011) criticises the EBT discourse. One of his main points of this critique is that, in his opinion, EBT does not include the network of professional knowledge of teachers described above. Instead, EBT appears to mask a political agenda in which policy-makers implement policies with reference to "educational research", assuming that this "real" and "rigorous" knowledge can be directly implemented in practice. Herzog argues that, within this discourse, the word *treatment* is sometimes used as a bracket between research and practice. Again, we are referring to the slogan of "what works". According to Herzog, this is a renewed "technological education fantasy" that has been heard before in the history of education. In his opinion, the "evidence movement" fails to recognise the particularities of teaching practice and signifies a lack of trust in teacher professionalism:

To the power programme of evidence-based education belongs not only the revival of a technological understanding of school and teaching, but also a degradation of teachers to executing organs of educational policies. Professionals rely on trust to be able to perform their work competently (...). This trust must not be blind or undermined by a misguided external control. However, this is exactly what evidence-based education seems to be striving for. Through the interlocking of policy, research and practice, it deprives teachers of the trust that their professional work relies on. Through the replacement of profession by administration, evidence-based education undermines the professional basis of teaching and contributes to its de-professionalisation. (Herzog, 2011, p. 141 - our translation).

Some of the same arguments against EBT are put forward by the educational philosopher Gert Biesta (Biesta, 2010, 2014), who also argues against the "technological model of professional action", which he believes lies behind EBT. It is important to consider this objection. We believe that, if EBT is viewed simply as

part of a "what works" ideology, then, as Biesta claims, it probably "won't work". However, we would like to defend a more nuanced view of EBT that is aware of the professional knowledge of teachers.

In the following section, we will discuss two central questions related to this view. The first question is: *Is there enough evidence?* This question relates to uncertainty regarding what kind of evidence "counts" and how much evidence is required to make the right decisions. The second question is: *Is evidence enough?* This question relates to the idea that, in some cases, it is not only evidence that justifies a particular practice. With this in mind, we also investigate "the other side" of evidence; namely, the quality of "non-evidence" and how this can form a basis for informed decision-making in teaching.

Is There Enough Evidence?

Let us return breifly to the EVA report mentioned in the introduction to this article. In this report, a teacher claims: "we walk around and do something, because we believe that this is the best thing to do, or because this is what we usually do, but we actually don't know what effect it has" (EVA, 2013, p.90). We can interpret this account in the following way. Teachers *have* to continually act and make decisions in their classroom and, at the same time, they also think and reflect on their actions as a reflection-in-action (Schön, 1983). Teachers act – like all professionals – in what they believe to be the best way in any given situation. This action is a judgement because it results from a comparison between other possible ways of acting. It is "the best" thing to do at that particular moment. This reflects the uncertainties of the teaching practice. Sometimes teaching is based on routine and a type of "tacit knowledge" of "this is what we are used to doing". However, sometimes teaching is presented with unprecedented and unexpected situations. From this perspective, we could claim that the teacher is responsible for making the best choice at any given moment.

In recent educational debate, particularly in America, there has been a focus on what is called *data-driven decision making* (Kaufman, Graham, Picciano, Popham, & Wiley, 2014; Kowalski & Lasley II, 2009; Schildkamp, Lai, & Earl, 2013). This debate is closely connected to the debate about evidence-based teaching, since both engage with the same topics. In practice, it perhaps makes more sense for a Danish teacher to talk about "data use" than "evidence use". After all, one does not have to be a researcher – in the strict occupational sense – to collect and use data. However, even if we talk about "data use", we still encounter unanswered questions. For example, if a teacher concludes that a student has performed poorly in class, what kind of data has he/she used to reach this decision?

Intuitively, data sounds more uncertain and disputable than evidence. We can collect a lot of data and arrange it into some kind of *database*, but data cannot speak for itself. It needs to be interpreted and put into context. It has to be relevant (Gutiérrez & Penuel, 2014). The same can be said for evidence. The interesting issue is how teachers *use* the data they have gathered or that are available to them. Coburn & Turner (2011) have developed a framework to analyse the practices of data use, as illustrated in Table 2 below:

Interventions to promote data use

- tools
- · comprehensive data initiatives
- accountability policy

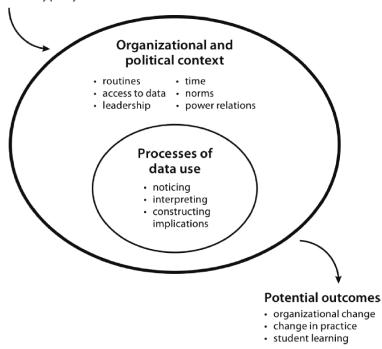


Figure 2: A framework for data use (Coburn & Turner, 2011, p. 176)

As we can see, data use is not always simple. It is not merely a question of how much data – or evidence – is available to make a reasonable decision in the classroom. There are many other aspects involved.

If we look in the centre of the Coburn & Turner model, it is clear that, in the processes of data use, one of the first things the teacher does is *notice* something in the collected data that is relevant for the situation or problem at hand. Noticing is itself a professional act that requires expertise to be carried out well (Mason, 2002). As well as this, there are the processes of interpretation – the *making sense* of the data – and the construction of implications based on this interpretation. But

this whole process is not performed in a vacuum, since there are organisational and political conditions – such as time, norms and power relations – that can help or hinder the teacher's use of data. Besides this, we have to consider the policies that provide resources to collect data in schools (such as computer hardware and software) and the potential outcomes of the teacher's use of data. One of these outcomes is student learning. Is it getting better or worse? To answer this question, the teacher has to select data. But it is possible to drown in too much data. The same can be said about evidence. Some researchers provide systematic meta-analyses in an attempt to organise evidence from educational research and communicate the results to teachers. However, as Thomas identifies, even if a teacher is in possession of relevant evidence or data, this might not be enough or sufficient to make a decision. The teacher may need to appeal to corroborating evidence in order to validate his/her initial decision.

Is Evidence Enough?

If we continue to examine the debate about data-driven decision-making, we may ask ourselves the following questions: So what? Why is this important? What is it meant to replace and why? One answer to these questions – provided by a proponent of data-driven decision-making – proceeds as follows:

Data-driven decision making (DDDM) pertains to the systematic collection, analysis, examination, and interpretation of data to inform practice and policy in educational settings. It is a generic process that can be applied in classrooms to improve instruction as well as in administrative and policy settings. (...) It is no longer acceptable to simply use anecdotes, gut feelings, or opinions as the basis for decisions (Mandinach, 2012, p. 71).

Mandinach claims that anecdotes, gut feelings and opinions are "no longer acceptable". On the one hand, we can agree with this, since it seems a little unprofessional to base one's decisions solely on these aspects. However, on the other hand, is it acceptable to make decisions based merely on "data" or "evidence"? For some educationalists, an aspect such as "intuition" is an important part of teaching (Noddings & Shore, 1984). From this perspective, the decisions made are more "care-driven" than "data-driven". Which do we prefer (for example, as parents)?

Biesta (2010) identifies various limitations in the literature about evidence-based education and, as an alternative, he proposes a *value-based* approach. Although we recognise the merits of such an approach, we do not believe that we should exclude notions of evidence and effectiveness from the discussion. Teaching can be understood as having both a scientific *and* an artistic basis (Gage, 1978).

It can be both effective and responsible (Oser, Dick, & Patry, 1992). In Thomas' scheme (Figure 1), the question at the centre of this section may be answered with reference to the *veracity* of the evidence presented. Not only can evidence be distorted, but it can also emerge as a result of hidden agendas and interests. Therefore, the professional teacher must remain critical in his/her use of evidence and exercise value judgements. At this point, it is also worth mentioning that spontaneity, creativity, and innovation are all recognised values of the teaching profession. It is doubtful whether such values could be replaced by an idea of teaching based solely on "evidence".

Conclusion

The above discussion suggests that we require more field research in order to understand *how* EBT discourse is playing a role in (Danish) teachers' professional lives in schools. As the American educational researcher Judith Warren Little argues, we still know very little about "what teachers and others actually do under the broad banner of 'data use' or 'evidence-based decision making'" (Little, 2012, p. 143). We need to "zoom in" on the micro-processes of teaching practice. We have argued that some of the research questions should focus on how teachers perceive evidence as being relevant and sufficient for them to make reasonable decisions in their classroom. This also includes identifying which kinds of evidence and data teachers typically use in their everyday practice, and how they interpret them.

However, it is also important to analyse the ways in which teachers believe evidence is sufficient for them to make pedagogical decisions, or whether they consider other aspects – such as certain values – as providing better guidance in particular teaching situations. The question about EBT is not just a matter of how educational research is implemented into educational practice. It also involves the autonomy of the professionals caught in the middle of this dichotomy, for it is these professionals who often have to balance conflicting interests and perspectives in order to make the "right" decision in any given situation.

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Dansk abstract

Evidens i undervisning

Formålet med artiklen er at lægge op til forskning, der specifikt fokuserer på, hvordan lærere gør og kan gøre brug af forskellige slags evidens eller data i deres undervisningspraksis. Artiklen argumenterer for, at det med udgangspunkt i en anerkendelse af undervisningsprofessionens unikke karakter vil være muligt at integrere evidensdiskursen på frugtbare måder i skolernes hverdag. I artiklen foreslås to brede spørgsmål, som kan hjælpe med at guide fremtidig forskning i læreres brug af evidens og data i deres professionelle praksis: Er der evidens nok til at kunne træffe gode beslutninger i undervisningen? Er evidens nok, som et grundlag for at kunne træffe gode beslutninger i undervisningen?

Nøgleord: evidensbaseret undervisning, lærere, databrug, uddannelsesforskning.

The Strategic use of Evidence on Teacher Education: Investigating the Research Report Genre

By Jørn Bjerre & David Reimer¹

Abstract

In this paper we analyse three selected reports on the subject of teacher training programmes which have been produced by three different research institutes in Denmark and used as evidence within the educational sector. In our analysis we try to identify critical methodological and conceptual issues related to the production of the research reports, and we relate these to the debate on evidence in education. We conclude the paper with reflections on the difference between academic and strategic evidence.

Keywords: evidence, teacher education, research reports, mixed methods, epistemology

Introduction

The concept of evidence has a variety of different meanings, all of which are related to the foundation for judgements, actions and claims. In this article, evidence is defined as the actual use of empirical research studies in relation to the justification of action, policy, and planning in the education sector. Rather than debating the pros and cons of the use of evidence in education on a theoretical level, we

analyse studies that are considered as evidence in order to provide an empirical starting point for debating evidence. Taking the facts as our point of departure, we begin with reports that are being used as evidence in the context of Danish education policy and research, selecting a sample of three reports, produced by three different research institutes, all used as evidence within the education sector. We intend to clarify how these particular types of evidence are produced, by whom, and with what results. The structure of the article is as follows. First (1) we introduce the research report genre, as well as the research institutes producing them; then (2) we present our analysis of the reports sampled, before subsequently (3) entering into a critical debate on the concept of evidence used in the reports, and (4) concluding the paper by defining the difference between academic and strategic evidence.

Research reports & research institutes

Looking at the general shift in the policy field towards evaluation and evidence-based practice, it is noteworthy that we are dealing not only with internal change within existing academic institutions, but also with the emergence of new specialised research institutes. These institutes publish reports that evaluate, assess, measure, and monitor the achievements of educational institutions, as well as the effect of policy and reforms. As we shall see, the definition of knowledge and evidence used by these institutions often differs from that of the academic institutions, and part of our analysis explores these differences. In order to create a focus for this exploration, we conducted our study on reports concerning the education of teachers in Denmark, an area that has been the topic of controversial debates and frequent reforms, the latest in 2013 (Regeringen, 2013).

The 2013 reform was informed by evidence-based reports which evaluated the effect of previous reforms, explored central problems – such as the low prestige of the teaching profession, declining student numbers, and a high dropout rate – and provided recommendations for policy-makers. The reports covering these areas were typically commissioned by the Ministry of Higher Education and Science, the Ministry of Education, or other national or local government agencies. On the basis of the identified problems, the role of the research institutes is thus to provide the evidence base for political action concerning what needs to be done. A central question is how teacher training should be reformed in order to meet the expectations of the future employers: the municipalities (local governments, *kommuner* in Danish).²

In this article, our argument is that we need to distinguish between different types of evidence: reports that directly measure the results achieved by welfare state institutions, as part of the policy development process, should be clearly distinguished from the type of academic evidence that is based on critical, systematic and theoretical debates on evidence. The research institutes have established their own system of peer review and quality check (KORA, 2012), and thus the reports move directly from the research institutes into the political, administrative, and public process, without the intermediation of a scientific community of critical readers and the general peer review system which is the baseline of any publication claiming to be based on evidence.

A bifurcation of the social sciences

The new research institutes have created their own sphere of professional, strategic evidence, providing the basis for assessing the results achieved by actors in the public sector, as well as for creating policy. The fact that these institutes collaborate with universities in a number of ways might change the approach in years to come. However, the form of knowledge produced by university researchers, who are funded together with the research institutes, appears to be of a strikingly different kind than the strategic evidence reports: what we encounter here is what Tobias Garde Hagen (2006) has termed "a bifurcation" in the social organisation of the social sciences. On the one hand, he argues, we have "a hypercritical" academic knowledge, produced by a type of researcher who "never or only seldom produces empirical research on the social reality" (or, at least, not evidence-based and quantitative research); on the other hand, we have "empirical social research... characterised by placing method, not methodology, at its core and by its purposeful, applicable and instrumentalisable modus operandi" (Hagen, 2006, p. 228). This latter form, Hagen writes, "is particularly found as an integrated part of central administrations in welfare states, and it participates as a means in political decision-making and deliberation" (Hagen, 2006, p. 229).

The distinctions between method and methodology, and between critical and theoretical versus empirical and integrated into preconceptions of policy, encapsulate quite well our investigation here. Our attempt is to initiate a dialogue about what evidence is, from our side of the fence, looking towards what is produced on the other side. We attempt to identify the strategic factors and determinants producing the evidence that is conducted as part of the reproductive processes of the welfare state, in order to begin debating in detail what evidence is, how it is produced, and how research is related to political actions and ideas.

Professional journals as mediators

In the professional debate on the reforms of teacher training, researchers from the research institutes become important voices; along with politicians, leaders of teacher-training colleges, and political representations of teacher students, they provide and promote ideas about what should be addressed in future education reforms.

Thus the professional journals become important actors. Not only do they report what evidence has been found; they become mediators in the sense used by Bruno Latour, transforming evidence into professional knowledge (e.g. Latour, 2005). Based on interviews with the authors of the reports, or by referring to the overall results of the reports, these journals transform evidence into headlines and debates that can sometimes be quite far removed from the actual knowledge produced. We have therefore chosen to focus on how our sampled reports have been received in the Danish journal for teachers, *Folkeskolen.dk* (The Public School), and the journals for the union of pre-school teachers, *bupl.dk* and *socialpaedagogen.dk*.

Where you stand in the debate on evidence depends on where you sit

Interestingly, as we shall see, the main idea that emerges from these actor-network transformations of evidence is the claim that teacher-training colleges should be reformed in order to move closer to practice, instead of being "too academic." Lecturers at the pre-school and primary-school teacher-training colleges should not be academics, but practical professionals who have completed further education. On the other side are the philosophers, arguing that the teacher-training college should be based on *Bildung*, and social scientists like ourselves, arguing that while we do indeed need evidence-based knowledge, we also need academic standards of evidence in the debate, as well as in the education system. This demonstrates that where you stand in the debate on evidence depends on where you sit.

To sum up: The question of the use of evidence in education and in the assessment of educational achievement should not be debated as a matter of being for or against evidence; it should be based on the debate about how evidence is produced and communicated. What are the different types of evidence to which power is ascribed, how are they produced, and how are they used?

Analysis

The research institutes

The following three research institutes have become important actors in the educational research and policy arena in Denmark: EVA, KORA, and Epinion. Commissioned by local and regional administrations, these three agencies have continued to provide evidence in the domain of education that has influenced the latest reforms of teacher-training programmes. Roughly speaking, the selected institutes represent three different sectors: the governmental (EVA), the regional/municipal (KORA), and the private (Epinion).³

Within the Danish context, the Danish Evaluation Institute, EVA, is one of the central government research institutes. EVA was established in 1999, as successor to the Danish Centre for Evaluation of Higher Education. EVA's aim is to evaluate the education sector from the level of primary and secondary education all the way up to higher education. EVA reports have arguably been important factors in the recent 2006 and 2013 reforms of the teacher education. The Danish public school, the Folkeskole (the first ten school years), is funded locally through the regional administrations, which are therefore the future employers of the teacher-training graduates. The agency KORA (called AKF before 2012) represents the regional administrations, even though it is mainly funded by the Ministry of Economic Affairs and the Interior (Økonomi- og Indenrigsministeriet). KORA is an acronym of Det Nationale Institut for Kommuners og Regioners Analyse og Forskning (the National Institute of Municipality and Regional Analysis and Research).

Finally, both public and regional sectors also use private research agencies, such as Epinion, which was founded in 1999 with the aim of delivering market research based on quantitative and qualitative methods. Epinion's clients are mainly private companies, but also government organisations such as the Ministry of Education. In their presentation of themselves they state the following:

Epinion is a quality market research company. We measure ourselves by the toughest standards in our industry... We are grateful for the opportunities our clients give us to add value to their businesses, and we remain deeply committed to holding ourselves to the highest standards of integrity and professionalism in our industry (Epinion, 2014).

We have chosen three relatively recent reports, each written by one of the three institutes. For the sake of relative comparability, the chosen reports all focus on teacher training. In the following section we present our analyses of the three reports. While multiple strategies can be employed to analyse texts such

as research reports, ranging from content to discourse analysis, our analytical strategy has been to explore the reports based on the identification of five themes that operationalise the overall question concerning evidence: 1) the use of "mixed methods"; 2) the attitude to causality; 3) the possible "fabrication" of evidence, and finally, 4) the reception of report results in the public sphere. After providing a brief summary of each of the selected reports, we present each of the core issues identified and provide selected text examples that illustrate these problems.

Summary of the sampled reports

In the following section we provide a brief summary of each of the three reports (listed in Table 1).

Title	Author	Funding
Deciding for or against teacher, pedagogue, nursing or social work education (2007)	Epinion	The Danish Ministry of Education
Students' assessment of linkage between theory and practice in the professional education programs (2010)	KORA/formerly known as AKF	The Danish Council for Independent Research (part of the former Danish Ministry of Science, Innovation and Higher Education)
Dropout from teacher education programs: an investigation of the causes of dropout (2013)	EVA	The Danish Ministry of Education

Table 1: Three reports on teacher education programs

Summary 1: Epinion: Choice for or against teacher, pedagogue, nursing or social work education (2007)

This report was commissioned by the Danish Ministry of Education because enrolments for professional education programmes have stagnated or even decreased over recent years, while student completion in these fields has generally been dropping. The goal of the report is to explore motivations and other reflections related to the choice of professional education programmes. The report is based on two analytical sections: one section consists of a review of the existing literature, coupled with analyses of registration data from Statistics Denmark, and the second employs multiple surveys and qualitative interview data. For the qualitative part, both individual and focus group interviews were conducted. The report presents a multitude of findings related to students' selection process, and shows, among other results, that the perceived unfavourable working conditions of professional education graduates (nursing professionals, teachers) are a potential deterrent for potential students choosing professional education programmes.

Summary 2: KORA: Students' assessment of linkage between theory and practice in the professional education programmes (2010)

This report is the second published report in the project "Bridge-building between theory and practice in professional education programmes." The bridge-building report addresses the high dropout rate in professional bachelor education. More specifically, the study explores whether this is related to an inadequate linkage between theory and practice in the professional bachelor education programmes. The study is based on a survey study of teacher, nurse, social work, and engineering programmes. In the study, only students who have undergone practical training (1062 observations) are analysed. The central method in this report is to measure the students' own perception of the linkage between theory and practice, and relate this to a number of other factors and outcomes. Since part of the data analysed in this study was published in a 2008 report (see KORA, 2010, p. 22), we include this report in our study of the 2010 report. The study concludes that the perception of an inadequate link between theory and practice might be one factor related to students dropping out. Furthermore, the study shows that certain other factors - choosing the programme as first priority, good health, good high school grades, being female, and various factors related to the education environment lead to a more positive perception of the theory-practice linkage.

Summary 3: EVA: Dropout from teacher education: an investigation of the causes of dropout (2013)

This report addresses two findings: that only 60% of teacher-training students for the years 2007 and 2008 completed their education, and that, additionally, applications have been decreasing. The analyses presented in the report are based on the cohort of students who entered a teacher-training programme in August 2009. In the study, several different sources of data are used: first, a survey of all students conducted shortly after they enrolled in teacher training, linked to data from Statistics Denmark to estimate a statistical model that identifies factors

predicting the dropout rate in the first two years. Second, an additional survey of students who have dropped out is employed to explore the reasons given by students for leaving teacher training. Finally, based on data from Statistics Denmark, a comparison of the 2009 student cohort with the 2006 student cohort is provided. The results of the statistical analyses show that various factors seem to be associated with termination of studies: background characteristics such as gender, age, ethnicity, or health status, but also previous school grades as well as factors associated with the choice of teacher training, e.g. whether students had considered other types of programmes. Finally, local social network, study programme type, study hours per week, attitude to group work, and plans for the future seem to affect whether students drop out of programmes.

Use of mixed methods

One of our first observations after reading the selected reports was that multiple sources of data, e.g. some kind of triangulation, were used. Triangulation seems mostly to have been carried out by including a quantitative survey study as well as a qualitative focus group and/or individual interviews. This is the case in both the EVA and the Epinion report. When the goal is to learn about a phenomenon, this type of approach appears appropriate, since the use of a multitude of sources will be the best way to ensure a rich account. However, combining representative data gathered from a random probability sample with a number of selected qualitative interviews is inherently difficult (Bryman, 2007) and raises questions concerning how, for example, the different types of data should be weighted. Should the generalisable, quantitative data be given more weight, or is it better to adapt a perspective of "methodological pluralism" (Payne, Williams & Chamberlain, 2004), considering qualitative and quantitative "evidence" on an equal footing?

The idea of overcoming the quantitative-qualitative distinction, and the seemingly unproductive split between "positivist and interpretivist epistemologies" (Howe, 1988), have been central issues for a long time; however, the problem associated with mixed method is how to balance the two approaches and, among other things, how to avoid what may be called a positivistic use of qualitative enquiry, the point being that qualitative enquiry relies on a different idea of research and validity (Tracy, 2010). Sale, Lohfeld, & Brazil (2002, p. 43) even state that "the two paradigms do not study the same phenomena;" therefore, "quantitative and qualitative methods cannot be combined for cross-validation or triangulation purposes": "they can be combined for complementary purposes." This is certainly an extreme position, but questions concerning mixed methods are generally

complex, and in order to produce evidence, a careful distinction between the different research paradigms is necessary. However, except for the EVA study, reflection on how the two methodical paradigms are integrated is largely absent. To illustrate this, we refer to the Epinion report, where each chapter starts with a very informative "main conclusion" section based on all empirical material. At no point is it made clear what data sources these conclusions are based on, whether multiple sources are employed, or to what degree qualitative and quantitative material played a role in the wording of these conclusions.

In the EVA report, which also uses qualitative and quantitative methods to uncover various aspects of why students drop out, methodological choices are given more attention. However, two very different types of causes are uncovered: in the quantitative part, background factors are studied, including high school (Danish gymnasium) grade point average, gender, ethnic background, age and health, experience from prior part-time job in the school, a feeling of motivation, and social network, just to mention some. In the qualitative investigation of the explanations given by the students themselves, factors related to the organisation of teacher training are highlighted, including whether the education is perceived to be relevant, the teachers competent, and the education related to the practice in schools.

What the report finds by triangulation is the fact that the causes of dropout vary with the method. In the quantitative analyses, it is the general background factors related to the student that seem to influence students' reasons and motivations; in the qualitative study, it is factors related to the training programme that cause the students to drop out. Even if the report does question the validity of the research method, it treats these conflicting results as different aspects of the same case.

Causality

It is part of the report genre to use disclaimers, stating that they do not present generalisable findings or uncover causal relationships. This forms part of an argument aimed at causal findings on which ministries may found policy. Thus none of the reports seeks causality in any scientific sense of the term,⁵ but rather as systematisation of the reasons or opinions of a given population. The reports may use the word "cause," as is frequently the case in the EVA (2013) report. The word "cause" is used 106 times: rather than causal explanation, however, it is used as a synonym for words such as "factors" and "conditions," considerations that (might) influence the decision to stop (EVA, 2013, p. 7) and explanations given by the students for dropping out. We are not dealing here with an investigation of

the scientific causes of student dropout, but rather a systematisation of the background factors that influence that choice and the reasons given by the students when they are asked to reflect on why they dropped out.

Another of our reports (KORA, 2010) explicitly mentions that the study does not aim to uncover causal relations (see KORA, 2010, pp. 8-13, 21). However, the use of disclaimers is one thing, but another is the fact that the same reports present different kinds of quasi-causality in the form of conclusions such as:

The study found that students who found it difficult to link theory and practice on their professional education programmes have a greater risk of dropping out of their programmes than those that experience linkage between the theoretical instruction at the educational institution and the practice they primarily encounter when out on trainee placement (KORA, 2010, p. 49, own translation).

This of course is not a causal argument, but rather a correlation between two factors. The fact that the reasons for this correlation are not discussed means that it is up to the reader to draw his/her own conclusion.

One way to become more specific about the issue of causality is to outline three problems related to the causality issue that we encountered in all the sampled reports: the issue of the population studied, the wording of survey questions, and potentials and limitations of statistical analyses based on cross-sectional data.

The population studied

The logic of most quantitative studies based on a sample is to make inferences applicable to the larger target population. A sample of, for example, 1,000 teachertraining students can be used to make inferences about the entire population of students beginning teacher training in Denmark, if the sample is a true random sample and thus representative. However, many survey studies – as we saw in relation to the EVA report – must deal with the problem of non-response, i.e. the problem that a significant proportion of the individuals targeted for interview choose not to participate in the survey. The issue of non-response becomes a problem as soon as the realised sample is not representative, or is systematically different from the entire population; in that case, we would talk about the so-called non-response bias. If, for instance, only very motivated students participated in the survey, we are dealing with a non-response bias. Any claims based on this sample (of only very motivated) students could not be generalised to the entire population of teacher-training students. However, while non-response as such does not necessarily to lead to a non-response bias, it is a fact that the higher the non-response rates, the higher the chance of a non-response bias (Groves, 2006).

In our three sampled reports, the response rates for the survey part of the study were KORA: 45%, EVA: 67% (enrolled teacher-training student sample) and 36% (students who dropped out of teacher training). The Epinion report lacks sufficient information about response rates, accounting only for the number of institutions participating rather than the response rate of the actual participants.⁶ Whenever only half, or even about a third, of the contacted respondents participate in the survey, a non-response bias is very likely. Consequently, the authors of the KORA report acknowledge that

...experience based on similar studies indicates that many of those who are less academically prepared to experience a good relationship between theory and practical application are underrepresented in the survey study on which the analyses are based (KORA, 2010, pp. 22-23, own translation).

Similarly, in the EVA report it is noted in relation to the low response rate in the survey of teacher-training students who dropped out (36%) that "the results of this part of the study cannot necessarily be generalised and seen as representative of the entire population of students who dropped out" (EVA, 2013, p. 8, own translation). Any analysis and result based on samples with low response rates needs to be approached very carefully, considering the potential presence of a non-response bias.

Wording of questions

In addition to the non-response issue, another debatable aspect of the three sampled reports is related to whether the studied individuals are in a position to answer the researchers' questions in a meaningful way. It is doubtful whether, for example, new teacher-training students (KORA, 2008, 2010) can evaluate whether they are taught too much or too little theory. Researchers have written about tensions between academic generalist and applied practical teaching in higher education for years - without coming to any clear-cut conclusions (see, for example, Hartung, Nuthmann, & Teichler, 1981; Shavit & Müller, 1998). It is doubtful whether we can expect valid answers from students when they answer survey questions like the following from the KORA report: "There is too much focus on theoretical teaching at the expense of practical application," or "[m]y education is too theoretical in relation to what is needed in the labour market" (see KORA, 2010 p. 52, own translation). Do the students' answers to these questions tell us anything beyond their satisfaction with the study programme? Furthermore, how should answers to these questions be interpreted? Similar problems arise in the survey that is part of the EVA report, where students who dropped out of teacher training were asked about the reasons for not continuing: "There was too little practice in teacher education"; "[a]ll or one of the teachers were not academically competent in their field" (EVA, 2013, p. 35, own translation).

As the report itself argues, it is highly doubtful whether students are capable of really answering these questions, or rather provide rationalisations for why they stopped (EVA, 2013, p. 9).⁷ When asking students about their motivations for choosing a study programme, as is done in the Epinion report, we are investigating rationalised reasons for action, in which case this problem becomes less important.

Cross-sectional data

Finally, we address the last issue related to the causality question: the estimation of causal effects with cross-sectional survey data. All three reports studied present statistical analyses where a dependent variable, for example the valuation of the theory-practice linkage (KORA, 2008, 2010) or dropout rate (EVA, 2013) is "explained by" a number of independent variables (such as gender, age, grades, or "evaluation of the theory-practice linkage"). This is a standard practice in empirical social research, and the use of statistical regression models enables the researcher to maintain a constant number of factors (such as demographic and contextual factors) while evaluating the influence of other theoretically noticeable variables. These techniques yield regression coefficients which can also be labelled partial or robust associations. These partial associations can be very informative, and countless journal articles across all social science disciplines have published these coefficients. Nevertheless, since the outcome variable and explanatory variable are usually measured at the same time, causality can hardly be established based on these statistical models. This is especially relevant in relation to measuring the effect of attitudes or aspirations on other outcomes. Does, for example, the preference for a more theoretically oriented higher education curriculum lead students to choose a university education, or is it the other way around – attending university leads to a preference for more theoretical content?

Another problem that makes it difficult to draw causal conclusions based on cross-sectional survey data is the so-called omitted variable bias (e.g. Clarke, 2005). Even if many explanatory factors are taken into account in a cross-sectional model, there is always a possibility that one relevant factor (such as unobserved aspirations or motivations) is unaccounted for; this might bias the estimates in the presented model and lead to erroneous conclusions.

In all three sampled reports, several different types of regression models are presented to relate the theoretically relevant factors to the respective outcomes studied in the reports. In the KORA report, for example, the authors construct an index based on questions such as those highlighted in the previous section to measure the students' individual experience of the theory-practice relationship in the study programme. The authors use this score as a dependent variable, and look at a number of factors in order to explain variation on this index (factor score), such as the students' evaluation of their internship experience or the institutional support they received during or before the internship. The authors find that there is a link between positive evaluation of support received by the students and the theory-practice score, even if individual-level factors such as gender, age, and health are held constant (see KORA, 2010, pp. 37-39). While the discovery of this link is informative, there is no possibility to infer, based on this analysis, whether the experience of a positive practical training period leads to a positive evaluation of the association between theory and practice, or the other way around: a positive experience of the theory-practice relationship in the study programme leads to a positive evaluation of the practical training period. In most cases, the authors are well aware of this and similar limitations, and point them out to the reader (see, for example, KORA, 2010, p. 8 and p. 27; EVA, 2013, p. 13). Nevertheless, the typical statistical jargon that is used to describe the presented models might mislead less statistically proficient readers of the reports to assume that causal relations had been uncovered after all. A quote from the KORA report will illustrate this point:

...as can be seen in Table 2.4, from a statistical perspective, the formulation of clear goals during the practice period has an effect on how the students experience the linkage between theory and practice (KORA, 2010, p. 35, own translation).

This section is a good example of how the language of causality might creep into the interpretation of models that do not show any causal effects. Similarly, in the EVA report, a statistical model (logistic regression) is used to evaluate whether a number of factors such as social environment, academic level, etc., affect dropout (see EVA, 2013, p. 29). In the description and interpretation of the results of the chosen model, the authors are careful not to use the words "effect" or "causality," instead writing about the "influence" and "risk" the independent variable exerts on the outcome variable, e.g. dropout rates. For example,

...students who have a very limited social network in the city where they are studying face a higher risk of dropping out, compared to students who have a less limited or large social network (EVA, 2013, p. 22, own translation).

Again, the less statistically inclined reader might not be able to interpret this wording correctly and might assume that the found statistically significant

association between local social network and dropout should be understood as a causal relationship.

"Fabrication" of evidence?

While dealing with causality in the context of reports can be quite tricky, we encountered another debatable issue related to the very production of empirical facts in the reports on the basis of current policy debates and the increased motivation to generate "practical and usable" knowledge.

The difference between research question and interview question

The first issue we identified was that in the reports studied there is often no real indication of an epistemological distinction between the more general research question and the interview question(s) used in both qualitative and quantitative sections. This issue is most obvious in the KORA report, which focuses on the theory-practice linkage. The report sets out to study "how students value the link between theory and practice," and the students are asked to what extent they agree with the following statement: "There is a poor connection between the theory we learn in school and the practice we meet outside of school" (KORA, 2008, p. 13, own translation).⁸ As the next step in this report (and others), the proportion of students agreeing to this (or similar) statements is reported without distinguishing between the research terminology and question, and the interview questions. If a large percentage of the students agree to a claim, the result is taken at face value.

The problem is that the idea of theory and practice reproduced in the research circle between interviewer and interviewee presupposes a mutual idea of what theory is. As argued, the

...report seeks to uncover to what degree the students use the theory they have learned in the educational setting in the practice they conduct in practical training and vice versa (KORA, 2008, p. 99, own translation).

The implicit theoretical idea is that theory can guide action and that the aim of the teacher training is to pass on usable theory which may guide the action of the students. This idea is one position in the ongoing debate about teacher training; it is not a fact that this is feasible or even preferable. Paradoxically, this position demonstrates an inherent lack of theoretical reflection, as well as an uncritical belief in common-sense ideas about education resulting from the measurement of student opinions. The implication of this in relation to learning theory is an

extreme idea of deduction which is not only unfounded, but unpractical. Theoretical learning and practical learning are very different activities – the former aims at building conceptual frameworks for reflecting and understanding, the latter aims at achieving experiences that may be reflected upon. Teacher training is not a question of using theory in practice; it is a matter of establishing two different learning processes that fertilise each other.

Selective reading of "evidence"

The Epinion report (from 2007) conveys a rather different picture of the relationship between theory and practice: the students "are very happy about the practical aspect of their education, and appreciate the interaction between the theoretical and practical field" (p. 66, own translation). Although the Epinion (2007) report is widely cited in the 2008 KORA report, which raises the question concerning the missing link between theory and practice, this conclusion is not mentioned. Surprisingly, the 2010 KORA report cites the Epinion report (p. 15, own translation):

Previous research has shown that the inadequate linkage between the theory students learn at their teacher education college and the practice they encounter at their internship institution can be one of the causes of the decrease in enrolment as well as increase in professional higher education programmes.

This argument is also cited in the EVA report.

However, if we look at the 2008 KORA report, we not only find data supporting the theory of an inadequate link between theory and practice, but also data that should at least present a competing theory proposed in the Epinion report: 85% of students found that theory had made it possible to reflect on practice (p. 14); 8 out of 10 students stated that experience from their practice has been integrated into teaching (p. 100); and more than 85% argued that they could use knowledge and experience from the practical training in theoretical teaching (KORA, 2008 p. 101).

Moreover, when asked if "[t]here is too much theory in the teacher education," 85% of respondents answered that this had no influence on their considerations as to dropping out; and to the statement "[t]here is too little theory in the teacher education," 66% answered that this had no influence. In fact, too little theory seems to have had more influence on student decisions to drop out than too much (see Table 2 below).

	No influence	Small influence	Medium influence	Sig- nificant influence	Highly signficant influence
There is too much theory in teacher education	85	7	5	2	1
There is too little theory in teacher education	66	10	13	7	5

Table 2: Example survey questions (Source: Kora 2008)

It is noteworthy that the students, when they begin their education, do not consider the link between theory and practice as being of importance to their choice of education (Epinion, 2007, pp. 49-50; cf. KORA, 2008, p. 60). It may therefore by hypothesised that we are dealing with an appetite for the missing link that is acquired within the first years of education, and that when some of the students drop out later, they may justify their decision by referring to this absence. Thus given that half the students who drop out mention this reason (EVA, 2013), we are left with the question whether it is actual reasons that are measured, or reasons "fabricated" in the interplay between the cultural context and the research reports.

Examples of reception of reports in the professional public sphere

In the last part of our analysis, we explore some examples of how the reports studied are received and mediated in the professional public sphere. More specifically, we look at how professional journals, teachers and pre-school teachers communicate central report findings. We can see that often, many of the disclaimers and methodological limitations of the reports disappear once the professional journals recycle results and findings.

The first example, regarding the EVA report on the association between theory and practice, can be found in the professional journal *Folkeskolen.dk*. Here a headline states that "Lack of practice linkage results in large dropout rates from teacher training [Manglende praksiskobling giver stort frafald i læreruddannelsen]" (Aisinger, March 22, 2013). This claim, as already mentioned, is based on a report which argues that results cannot be generalised due to the low response rate of 36%, in addition to being troubled by other problems such as retrospective

rationalisation, i.e. the risk that students come up with explanations for dropping out after it happened. Also, what is actually meant by "practice linkage" is unclear; it is a notion used by politicians, leaders of educational institutions, and students, and the reports as well as the magazine use it without a clear definition.

From question 38 to headline

In the regular column "Research" in the professional journal for pre-school teachers, Pædagoger (pedagogues),9 we find an article entitled "Large-scale education increases dropout [Stordriftspædagogik øger frafaldet] published in 2011, in which one of the authors of the KORA reports is interviewed (Weirsøe & Holm-Pedersen, 2011). In the interview, the author of the report argues that the main problem in Danish pre-school education is that training of pre-school teachers has "no footing in practice." None of the claims suggested above points in this direction, although the evidence for this claim is research question number 38 in the previous 2008 report, where students are asked: "How likely are you to agree with the following statement: it is important that the teachers in the school have experience from practice and use it in their teaching" (KORA, 2008, p. 16). The fact that 96% either agree or strongly agree is less spectacular than the authors of the report imply; in fact, it is more surprising that 60% only agree, while only 36% strongly agree (KORA, 2008, p. 102). Viewed from the perspective of a teacher-training student, this question is loaded: the student cannot be expected to disagree with the common-sense implication as to whether the student prefers a competent or an incompetent teacher. However, explicitly referring to this "result," the KORA author argues that the problem with the professional education programmes is that:

...[t]he education is too far removed from practice [...] often, it is academics who are teaching: sociologists, psychologists and philosophers transmitting their knowledge to the students. But why should a pre-school teacher learn Bourdieu's theories, if they are not related to concrete practice? There is a danger that it becomes too academic when people without a relevant professional education and no footing in practice are teaching. We need to acknowledge work life as a learning arena. We need more practical cases in the teaching, supplemented with guest teachers from the profession (Weirsøe & Holm-Pedersen, 2011, p. 7).

However, none of the KORA reports attempts to investigate whether the education is too far removed from practice, and the Epinion report, which did investigate this, reached a rather different conclusion, namely that teacher-training students are satisfied with the education and that the teacher-training programme

is well-structured, with a good connection between theory and practice. Adding to this the argument of the EVA report – that academic skill is a prerequisite for seeing the link between theory and practice – the above-cited claims do not constitute evidence.

The point is that, based on the reports, we do not know if the problem is that the teaching is too academic. Whether or not there is a co-variation between the academic background of the teachers and the fact that the teaching is far removed from practice, this does not demonstrate that cases are under-used in the teaching, that it would be an important improvement if more cases were used, or even that guest professors from the Danish primary and secondary school would improve the quality of the teaching. These claims are not based on evidence, since the author did not investigate them.

Expert in something else

The tendency we can detect to "recycle" evidence by professional journals could be termed "expert in something else": an expert who wrote a report about A is interviewed about B. The same KORA author is cited in *Folkeskolen.dk* under the headline, "Teacher training needs closer link to school [Læreruddannelsen skal tættere på folkeskolen]" (Nørby, 2012):

According to a new report by AKF/KORA, the gap between the university colleges and the practical reality which students encounter in schools is too wide. The teacher students' representative agrees with the critique. 10

However, this new report by AKF/KORA is not about this gap, but a description of how the professional training programmes have developed their ability to function as knowledge centres. It is an investigation commissioned by a union, focusing on the financial, organisational, managerial, and professional barriers and possibilities of the university colleges. The report makes no attempt at being representative, but, as the authors write, "we hope it can be an inspirational input" (KORA, 2012, p. 3).

Conclusion: Strategic evidence versus academic evidence

The reports we have sampled were chosen for their political relevance (all three have been used as foundation for policy), public appeal (all three were presented in the media), and quality as professional work (all three were written by leading agencies within the field). However, we can conclude that even though the sampled reports make heavy use of both qualitative and quantitative methods, they do not provide evidence according to the established academic standards

according to which concepts are defined, claims are based on critical investigation, arguments are theoretically scrutinised, and knowledge is considered to be a contribution to common understanding only after it has passed through a peer review process.

Thus we need to distinguish between academic and strategic evidence. The latter is evidence that employs scientific methods and language, but does so in order to provide answers to political agendas; furthermore, the very production of evidence should be interpreted as the outcome of a network of actors, including politicians and administrators in need of evidence to back up policy, research institutes providing ways of acquiring this evidence, and professional media.

In connection with this point, the methodological issues communicated to the scientific reader, e.g. the use of disclaimers and mentioned biases, function to make the evidence valid. However, these methodological issues remain unrelated to the critical parts of the reports communicated to the political reader, and when the reports are cited in professional media, they address the professional reader. The experts contribute to the confusion, allowing themselves to be cited as experts in something they have not actually studied.

Notes

- 1 We would like to thank Jane Due for valuable research assistance.
- 2 In turn, the municipalities need to deliver the results that the Ministry of Education expects from them, and the achievements of the national government are measured against the results of other countries in PISA and TIMMS.
- 3 There are a number of other research institutes, most notably the Danish National Centre for Social Research (SFI), which also produce relevant reports. We chose to concentrate on the three institutes that, in our opinion, most often deliver reports on topics related to education.
- 4 Cohen, Manion, & Morrison (2000, pp. 254), for example, define triangulation as "an attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint."
- 5 Defining, or even discussing, the issue of causality in more depth is beyond the scope of this paper (but see, for example, Winship and Morgan, 1999; Gangl, 2010; Pearl, 2009).
- 6 Institutional response rates for the sampled university colleges (90%) and high schools (92%) are reported. However, the possibly more important response rates for the realised college student sample (N=1189) or high school student sample (N=1926) are not reported (see Epinion pp. 14). This constitutes a critical omission of essential information about these surveys.
- 7 As pointed out by many survey specialists, great care is needed in the wording of survey questions (Schnell, 2012) – and just because respondents are willing and able to answer a question it does not mean that the answer can be used to address the original research question of a report.
- 8 Each question is worded so that the respondent has to decide if they agree (or strongly agree), disagree (or strongly disagree), or do not know or find it irrelevant.
- 9 While many of the pedagogues will find a job in the pre-school sector, their education also qualifies them to work in other pedagogical contexts with older children or even adults.
- 10 http://www.folkeskolen.dk/515186/laereruddannelsen-skal-taettere-paa-folkeskolen (10.10.14).

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Dansk abstract

Den strategiske brug af evidens i læreruddannelse: en undersøgelse af forskningsrapportgenren

Denne artikel analyserer tre forskellige rapporter. Alle rapporter omhandler læreruddannelse, er produceret af forskellige analyseinstitutter i Danmark og er brugt som evidens indenfor uddannelsessektoren. Analysen identificerer kritiske metodologiske og konceptuelle forhold, der er relateret til produktionen af forskningsrapporter, og relaterer disse til debatten om evidens i uddannelser. Artiklen afsluttes med refleksioner over forskelle mellem akademisk og strategisk evidens.

Nøgleord: evidens, læreruddannelse, forskningsrapporter, mixed methods, epistemologi.

The Relationship Between Education and Evidence

By Thomas Aastrup Rømer

Abstract

This article explores whether the term "evidence" may be used in conjunction with the word "education." I argue that the term "evidence-based education" is contradictory, because one word, "evidence," contradicts the other, "education." It is argued that the concept of "evidence" first touched upon, then detached itself from, education. Instead, it has joined forces with a narrow focus on rankings, and ultimately with modern global capitalism, in what I call "pure" education. Thus classical pedagogy, the vocabulary of "impure" education or education as such, is left alone in the wake of the onslaught, wilted and scattered, calling for a new educational theory to pick up the pieces.

Keywords: evidence, learning, educational theory, globalisation, tradition.

Introduction

Given how closely the concept of evidence has been linked to both educational research and practice, at least since 2005, it is interesting to see how little reflection exists on the relationship between evidence and education as such; that is, not only reflection on "education" or "evidence" as isolated concepts, but on the actual linkage between the two. Certainly, one may find a critical analysis of the utility, usability, and conceptual dimensions of evidence, but the relationship

between evidence and education as such is, with few exceptions, accepted as an unproblematic, textual event; an acceptance that often leads to a basic, practical sovereignty for "evidence" when it comes to the question of what educational knowledge is, leaving "education" to philosophy and educational theory.

It is as if the term "evidence" lacks a philosophy, a lack that is reconfigured as an ambivalence concerning the meaning of connecting concepts such as evidence "-based," evidence "-informed," and so forth. This essay is an exploration of whether the term "evidence" may even be used in conjunction with the term "education." I think not. I want to argue that the term "evidence-based education" is an impossible expression, because one word, "evidence," is now used in a sense that conflicts with the other word, that is, "education." If this is true, we must stop using this combination of words in educational research. How we should instead relate to the relationship between knowledge and pedagogy is discussed briefly at the end of this essay.

Theoretical movements associated with the relationship between education and evidence

In a famous article, David Hargreaves argues that while educational research should learn from medicine to become more relevant to practical concerns, medicine itself is an art, in line with the practical epistemology of Donald Schön, who in turn is heavily influenced by the thoughts of John Dewey and Ludwig Wittgenstein (Hargreaves, 1997; Schön, 1981). Even though this "art" aspect was partly misunderstood by some of his critics, Hargreaves's text is a typical paper of the 1990s, when the frontiers in the evidence-based debate had not yet been drawn very sharply. It was still possible to mention art, Donald Schön, and evidence in the very same sentence. The concept of evidence seemed to be just a small, theoretically unimportant but practical supplement to the general educational research.

Uffe Juul Jensen (2007) also discusses evidence-based methodology in line with the thoughts of Wittgenstein, but in another way. He tries to prove that Archie Cochrane, one of the pioneers of evidence-based studies in medicine, is not claiming "evidence" to be statements of natural and universal data, but that Cochrane is working within a political and context-bound scheme: in other words, that evidence-based methodology is basically a political and cultural concept.

In a special 2008 issue of the *Journal of Philosophy of Education* on evidence-based education, I simply cannot find any fundamental discussions of the relationship between education and evidence (Bridges, Smeyers, & Smith, 2008). This was certainly surprising to me, considering the philosophical outlook of

the journal. A few years later, the Norwegian philosopher of education, Tone Kvernbekk, wrote in *Educational Theory* that the concept of evidence is a kind of battlefield without content – a battle of constructions (Kvernbekk, 2011, 2013). Her response to this lack of foundation was to discuss the concept as a part of the philosophy of science, which in my view is a venerable activity in every respect, not least because the proponents of "evidence" often refer to what they call "modern science," by which they mean, at least in a Danish context, either the sociology of Niklas Luhmann, who is sceptical about normativity and wishes to treat educational problems as a matter of technology, or they are referring to a very simple scientific methodology uncritically imported from the natural sciences. And neither approach relates to the theoretical tradition of applying the philosophy of science that has evolved since the appearance of the works of Thomas Kuhn and Karl Popper.

Other researchers have criticised the concept of "evidence" as being too quantitatively oriented, and it is certainly true that sources of knowledge such as qualitative studies and practitioner evaluations are usually given low priority in the epistemological hierarchy of the evidence movement (Moos, Kreisler, Hjort, Laursen & Braad 2005). However, at least in Denmark, the proponents of evidence-based practice actually seem quite happy with such an objection, because it enables them to reduce the whole field of criticism to an epistemological problem, that is, to a question of the relationship between quantitative or qualitative methods, leaving questions of educational goals and content to one side.

Kvernbekk thinks that it is possible to speak of evidence, if you keep in mind a number of reservations. She asks not only whether qualitative or quantitative methods may provide evidence, but whether evidence as a concept makes any epistemological sense. She argues that evidence "supports" instead of "bases" a practice, because a given pedagogical method is always "underdetermined" by evidence, as she describes it. Kvernbekk bases her argument on the philosophy of Stephen Toulmin, and in so doing she comes closer to the linguistic turn in modern philosophy, taking her close to the approach of Hargreaves, mentioned above.

Leaving aside the question of the linguistic turn, by evoking this shift we end up talking less about teaching being *based* on evidence; instead, we might say that education may be evidence-*informed*. However, Kvernbekk does not question the fundamental relationship between education and evidence. She just wants to give a better epistemological justification for one of the concepts. In that sense, her research is an example of an approach that does not really deal with the questions raised here. I will return to the topics raised by Hargreaves, Jensen, and Kvernbekk at the end of this paper.

Apparently, the idea that evidence cannot "base" a practice, but can only "support" or "inform" educational communication, leads to a less instrumental practice. This takes us to a position held by Per Fibæk Laursen, who believes that research should inform the professional practitioners with some general characteristics of the good teacher which may be taken into account in complex situations (Laursen, 2006). He talks about evidence-informed practices that relate not to specific methods, but to a more general set of pedagogical guidelines. Laursen uses this correction to raise issues of the teacher's personality as the key component of an evidence-informed practice. A similar evidence-informed approach may be found in much recent evaluation research. John Hattie and Andreas Helmke also mention an evidence-informed practice, that is, they indicate not particular methods, but rather, general approaches to teaching: for example, that teaching must be based on feedback and on clear goals (Hattie, 2009; Helmke, 2012).

In this article, I want to take the investigation of the relationship between evidence and education a step further – towards an exploration of whether the term "evidence" may be used together with the word "education" at all. I argue that the term "evidence-based education" has become a contradictory expression, because one word, "evidence," conflicts with the other, "education." If this is correct, the conclusion should be that the more evidence-based are teaching methods, and the more evidence-informed the abstract principles of teaching, the less chance there is for education to take place. To my knowledge, the only person who makes similar claims which are also based on a conceptual analysis is the Dutch educational theorist, Gert Biesta, to whose work I will also refer in my analysis.

In what follows, I describe how evidence first arrives from another place, how it fertilises education, and how it then squeezes itself out and isolates itself from proper educational thought. In this process of isolation, it is delivered to the "inbox" of another dominion, the system of performativity. From this new location, it ungratefully attacks the original parent of knowledge and educational thinking. What was in the beginning only a small, everyday word that could function in minor, practical situations leaves both educational theory and practice in a scattered and atomised state. Instead, "evidence" encounters researchers, consultants, and commercial interests, and municipalities and postmodern policy, finally entering upon a marriage with global technocratic interests that instrumentalise all normative and ontological aspects of education, looking purely for evidence of what is economically feasible in society. In this process, educational practice as such is forgotten. Finally, we even see increasingly many examples of the word "evidence," along with its new vocabulary, attacking education itself. Once that happens, evidence has established itself in new company, in a new discourse or a

new language game, which I call "pure" education. And unfortunately, this new company is what Kvernbekk, Fibæk Laursen and many others forget to look for.

Evidence and educational theory

Actually, it is striking that in this special issue we are producing an entire anthology on the subject of evidence. The concept has hardly any place in educational theory, where the proper question is, "What is meant by educational practice and its foundation in discussions of knowledge, values, and culture?" Some people think such a foundation should be sought in reason, others in politics or in tradition, and all these approaches have long and glorious roots, roots that are still at work in all our societal institutions. Reason, morality and justice are ideals which have been promoted by education from 2500 B.C. to the present day. For example, read Peter Kemp's book on world citizenship, or Martha Nussbaum's book, *Not for Profit*, which are drops in an ocean of educational thought (Kemp, 2010; Nussbaum, 2010). In both books, education emerges from the relationship between educational purpose and practice and the concept of evidence plays no role at all. Thus "evidence" is philosophically thin, and has no contact with the educational tradition.

Twenty years ago, no one spoke of evidence in educational contexts. One might perhaps find the word here and there. But it was just a "helping word" that meant nothing in particular, had only the practical function of making it possible to avoid always having to refer to philosophically "thick" words such as "knowledge," "experience," and "reason," whose involvement in the daily life of teaching may too easily complicate everyday educational practice. Even if you look at pedagogical approaches since the 1950s with a rationalistic bent, you will find no systematic use of the word (Tyler, 1949; Bloom, Engelhart, Furst, Hill & Krathwohl, 1956). Thus "evidence" is not even associated with rationalist pedagogy. If the idea of evidence must be linked to a philosophical tradition, it would be British empiricism, but although it is mentioned here and there, I have not been able to find any thorough discussion of such a line of influence (Kelly, 2008; DiFate, 2007).

In short: the concept of evidence, as it currently works, has no tradition, no anchoring, and no sound philosophy. It is not much more than twenty years old, and has a very limited connection to broader theoretical discussions.

The voyage across the Atlantic

If the concept of evidence has no significant roots in the history of ideas, where

does it come from? I remember the first time I heard the word in a professional context. It was in 2005. A local neo-structuralist researcher, John Krejsler, visited the university college where I was employed at the time in order to talk about his new book, *Evidence in Education* (Moos, 2005). He warned us how a wave of "evidence" would come whizzing in from US health research directly into Danish educational research and practice in the years to come. I must admit that I did not believe him. In 1995-2005 we were all talking about social constructivism and situated learning, and what Krejsler told us was the exact opposite. But at this very moment, by this announcement of the age of evidence to an audience of educators, the word "evidence" changed from being a non-theoretical word with specific functions in practical knowledge to becoming an academic and much more powerful concept.

Since there was no pre-existing theory surrounding the concept, "evidence" gained meaning solely through the academic and methodological baggage that it brought with it across the Atlantic. This baggage consisted of a scientific-methodological and an organisational component. The scientific-methodological part specifies a data collection hierarchy in which the blind, controlled experiment has the highest status, qualitative approaches are in the middle region, and the pieces of knowledge with the lowest ranking are personal evaluations by users and professionals (Moos et al., 2005). Thus the further away knowledge is from practice and the more quantifiable it is, the more objective it is. The evidence movement in Scandinavia tries to soften this hierarchy, rating qualitative methods a little higher, but the whole framing of knowledge and the whole language game are taken from the transatlantic passage of medical research.

The second piece of baggage, the organisational component, is the creation of the so-called "clearing houses." In Denmark, a clearing house for educational research was established in 2006 at the former Danish University of Education, where evidence-based research in various fields was collected and assessed on the basis of the quality of its data. These investigations were organised as reports with rather general recommendations. Consequently, the transatlantic baggage has a built-in demand for centralised consensus. Knowledge tends to become an organisational construction.

The problems – a tilted hierarchy, the loss of content

In a way, this is all quite innocent. And the very idea of a clearing house, namely to conduct comprehensive reviews of research on the usefulness of particular methods and procedures, is fine. With a properly gentle touch, it is a fine idea. The damage results only at the moment when "evidence" detaches itself from

the situated structure of educational knowledge and connects instead to a new system of policy goals that are not related to pedagogy and learning theory at all, resulting in a proliferation of the inherent weaknesses of the concept. From being a part of the well-defined and small area of research, evidence becomes a tool for a way of thinking that excludes education itself.

There are three interrelated reflections that describe this process. First, we should be sceptical about the unreflective methodological hierarchy of data collection methods that I have just described, especially as the European and Danish traditions would indicate that both the experiences of teachers and students and also the involvement of more traditional cultural research are crucial to producing substantive knowledge of education. However, the evidence-based approach is relegating these experiences to the bottom of the hierarchy. The decentralised theories of learning that were popular in the 1990s, for example, those of Donald Schön, cannot do much about this relegation, because to some extent those theories, too, are based on various forms of confrontation with the educational tradition itself.

Thus one might look at the evidence movement as a kind of radicalisation of certain intrinsic problems in the structures of argumentation that are found in theories of learning, even though on the surface "evidence" and "learning" are very different concepts. Installed on the new throne we find, instead, an idea of research that is without philosophical foundation, reminiscent of a naive realism at best. Hargreaves's paper, which I mentioned at the beginning, is actually an example of this 1990s mix of decentralised learning and the concept of evidence. The main question in evidence-based research is, "What works?" rather than the classic scientific question, "What is going on?" In this way educational sciences are marginalised.

Another point is that already the early stages of the evidence movement displayed a scientific optimism that was professionally indefensible. For example, Svend Erik Nordenbo, the former clearing-house leader in Denmark, talks about how the evidence movement is even a new paradigm, a kind of avant-garde in the educational sciences (Nordenbo, 2008). Very easily, such optimism leads to a kind of replacement practice in which the "new paradigm" takes over from existing concepts of research.

Finally, and most importantly in this context, there is the inevitability with which an evidence-based method or guideline separates method from educational content and purpose.

First, there is the separation from the subject matter: in order for a method to be evidence-based, it must be tested in a variety of situations. For this to be done, the method must be described as independently of context as possible. In this way the method is pushed out of practice, so that it may later be examined, refined, tested, sold, implemented, and supervised. A method cannot be evidence-based unless it is first conceptually isolated from practice; the method must be made fit for travel, so to speak, and in this process, the content must be bracketed, or simplified, through different kinds of manuals. The connection to a broad, historical and cultural dialogue, and to the origin of the subject matter, cannot be maintained.

But "evidence" not only separates method and content; it also has a built-in tendency to push away cultural purposes, the goals and aims of education. Such aims have to be reduced to operative targets that must be separated and quantified, because otherwise, the method's effect cannot be measured properly.³ Such an operative target could be PISA rankings or completion rates. This reduction from cultural purpose to operative aim is equivalent to what happens if you want to examine the effect of a drug: you will first have to decide on an independent and operative definition of the cultural expression "health" – for example, "life expectancy" – which may be identified independently of any medical treatment. To be investigated, the treatment, no matter whether we are talking about an educational method or a medical treatment, must be detached from the objectives and the content that are embedded in practical life. This point is very similar to Uffe Juul Jensen's argument, which I presented in my introduction.

Through the disconnection just described, the method used has to reduce practical life and educational practice to an operative target. Therefore, in a certain sense, the evidence-based method is left alone. After the "forgetting" or "destruction" of practice, it needs to find new parents. Currently, the parents of this "lonely evidence" are to be found in the international rankings. Below is an example of this, from a publication that has been very influential in Denmark. On the first page it states:

"What works" has become the issue par excellence for educational research. In particular, politicians ask this question. They do this because they think that there must be certain teaching methods that are more effective than others – regardless of age, subject matter, or institutional context – namely the methods that work... Politicians are eager to identify promising methods of teaching, which are based on convincing evidence that they might lead to learning progress. Not least, the poor performances in the PISA surveys have driven this interest forward. (Rasmussen, Kruse & Holm, 2007, p. 13, my translation)

The authors themselves are happy to participate in this project. Admittedly, they state that practice may be a little troubling – too bound by morals and subjective attitudes for teaching to be a purely causal activity – but, inspired by Niklas

Luhmann, they perceive the system of science as the only place where truth is established. And as a pedagogical practice must be based on knowledge, it must therefore find its knowledge in such strangely detached versions of science. In this logical process, practice is emptied of truth and emptied of content and evidence, and knowledge is connected to a narrow conception of research ("What works?" rather than "What is going on?") in which practice and values are underrated.

Thus the hierarchy that prioritises research over practice is reinforced, and is then radically tilted compared to the decentralised and socially oriented relationship between theories of learning and educational research that characterised the 1990s and even earlier. In the light of the concept of evidence, educational practices are not a matter of culture, virtue, or politics.

Suddenly, educational practice is submissive to evidence-based research. This kind of research is completely different from educational practice itself, and actually also something other than science understood as an activity dealing with questions of "What is going on?" Thereby, practice is reduced to the simple application of evidence-based rules, or as structural passages for enhancing test scores; and educational research becomes a neutral, second-order theory, quite different to science proper.

In order to base a practice in evidence, you have to detach the method from the content, from context, and from the educational purpose of education. Otherwise you cannot isolate the method and compare the effect in different contexts. However, taking "method" out of the conceptual, cultural, and historical contexts in which it must function and has been developed is equivalent to taking it out of education itself. In this way, the lonely "evidence" finds itself joined in marriage to a very narrow understanding of research that was inspired by American health research and by distinctions based in systems theory. Thus fertilised, the evidence-based method may return to all the "impure," swampy, and complex reality where, as a kind of hostile foreigner, it may spread, seemingly as a neutral object and as an independent cell that is capable of changing cultural processes, and atomising educational tradition itself.

The search for new purpose in a "pure" education

However, an evidence-based method cannot detach itself from purpose and content, merely to establish itself as a neutral, second-order theory. If its proponents wish to succeed in education, it must also attach itself to a purpose of some kind, a new purpose. Sometimes, "evidence" draws a bit on the original educational goals. For example, we could ask: "How can we stimulate the pupil to engage with literature in depth?" But at some point, evidence was captured by other

systems of purpose: that is, by national and global ranking systems, the interests of global corporations, and the energetic demands of global capitalism.

Of course, from a philosophical point of view, almost everybody would argue that, in educational contexts, the relationship between content, method and goals is a mutually constitutive relationship. But such an internal and swampy connectedness among method, subject matter, aims and culture cannot work within the context of evidence-based methodology, as I have just shown. For, in the same way as the method necessarily must be separated from the subject matter, the method is also detached from the qualitative and philosophical purposes of education. Otherwise it will be impossible to determine how much one method or another contributes to the achievement of any given policy target. So the young system, the small and lonely system of "evidence and its application," must attend a social dating site, to find a new educational aim. And what does this young system find? Who has aims and goals that "the method and its application" can help to achieve?

The method and its application must act in relation to something measurable, otherwise the evidence – the relationship between method and effect – cannot be established, and in these years, this "something" is the national and global rankings (but in ten years' time, it may be something else). Thus evidence is enrolled in a brand new system of aims that works removed from our cultural, historical, or political memory. The concept of evidence becomes a part of an international hegemony in which rankings are supposed to provide information to the global marketplace, helping big business to decide how to move in its strategic operations. Thus evidence becomes a member of a family of concepts surrounding and aiding the processes of global capitalism. It is not about giving schools a knowledge base, and it is not about preparation for life, or for businesses and crafts, for that matter. It is about serving the global economy. That is why Ove Kaj Pedersen, in his book *The Competition State*, says the following about the educational ideal of the new school laws in Denmark:

For the first time in more than 160 years of school history, the school does not have as its primary task the formation of the individual as a citizen or a member of a democracy, but instead, the instruction of the pupil as a "soldier" in the competition among nations. The school must now primarily promote a notion of individual competition, and is only secondarily based on the ideals of a more democratic society. (Pedersen, 2011, p. 172, my translation)

Thus evidence has taken the final step from being a little word that can be used in the daily grind, to taking its place in a technocratic hegemony that is subject to the constant fluctuations of new global markets. I have summarised the whole system of aims, and the roles of research and education within it, in the table below, under the heading "pure" education, which may be defined as the idea that learning, method, aim, and culture may be identified in isolation from one another, and afterwards can be reconnected with various structures of causality (Rømer, Tanggaard & Brinkmann, 2011).

On the other hand, "impure" education is the vocabulary of educational thought proper, which searches for the essence and interrelatedness of educational concepts and practice. I do not have the space to explain all these elements. I hope that, in the light of what I have just said, the overall meaning is clear.

System of educational	"Pure" education	"Impure" education
aims		
Institutional level		
Global policy	Global business, using rankings strategically	World citizenship, multiculturalism
Global education	International rankings (PISA)	Critique, enlightenment, and politics
National policy/education	System of operative targets and evaluations; systems of contracts and benchmarking. National rankings	Democracy, solidarity, and scientific knowledge
University	Constructing evidence – 'what works?'	Investigating the structure of reality – 'what is going on?'
University College	Communication and training Concerning evidence based methodsreflection.	Teacher education based on philosophies of civil society
Schools	The learning expert implements the evidence-based method	Traditions, character, virtue, Bildung, knowledge

By virtue of being a part of this divide, our normal educational vocabulary is rejected as a kind of "impurity"; it must fight for survival in small niches, trying

to pick up elements lost from various syntheses that are left scattered by the visit of "evidence," leaving education as an "impure" education. In its place, we get a language of "pure" education that often forgets, or outright excludes, the concepts of "impure" education. Sometimes the concepts mentioned under the heading "impure" education are used as strategic passages for the system of "pure" education. This happens, for example, when a high score on a "democracy ranking" is used to promote national competitiveness. Such instrumentalisation of "democracy" means, of course, that democracy will only last as long as it is effective for the system of "pure" education.

Evidence and invisibility

A further problem concerns a tendency to focus on what is visible: that is, what we happen to discuss and look for at any given time. In 1943, people in Germany talked about how they could most effectively eliminate dissidents; method and evidence were put to the service of the fascist regime. Twenty years later, politicians and social theorists discussed the importance of democracy. Now, as I just remarked, each country speaks of completion rates and PISA rankings for the sake of economic growth. In the 1990s, our educational policy-makers had their eyes focused on New Zealand, later on Singapore, and now they focus on Ontario, Canada. The educational philosopher Lars-Henrik Schmidt once said that the most important thing is not "to watch what we argue about, but to look for what we do not argue about... Which discussions are not really present" (Schmidt, 1987, p. 119, my translation).

The use of "evidence" makes what is invisible even more invisible, because it cannot find things that no one talks about or look after – it is as though only the visible actually exists, a solipsism that, unsurprisingly, also accompanies both rather loose philosophical roots of "evidence", that is, logical positivism (for instance that of Moritz Schlick) and the sociology of Niklas Luhmann. Thus the concept of evidence has a tendency to amplify a very narrow horizon. This certainly should not be admissible in an enlightened concept of educational practice.

Conclusion – evidence and educational theory

The last short point I want to make has to do with the different concepts of educational theory into the service of which evidence could be enrolled. Here it becomes clear that either evidence is an important concept *without* educational relevance, or it is a subordinate concept *with* educational relevance.

I suggest three ways in which evidence can be linked to educational thought. One is through instrumentalism, the implementation of teaching methods in order to meet external targets such as social or economic figures with no intrinsic value. "Pure" education, as mentioned above, is an example of this. Instrumentalism assigns a place of honour to "evidence." However, the price for this honour is that evidence becomes detached from the theory and practice of education, because the purpose and content of education are excluded by the very process of "evidence" "establishing" itself as a concept.

Another way in which evidence can be linked to educational thought is through rationalism, in a broad sense, which refers to a set of desirable states of affairs that the method is developed to promote. For example, "citizenship" or "being able to sing beautifully" could be such desirables, and methods could be designed accordingly so as to promote the realisation of such aims. In this way, rationalism assigns a place for evidence, but it is not as central as in instrumentalism. Within a rationalist paradigm, evidence is always subordinate to the desired goal, and the question is, "Is the concept of evidence even necessary?" Words such as "reasoning," "knowledge," "judgement," and "deliberation" are closer to the rationalist intellectual baggage. In my opinion, the classic German didactic tradition lives here, as well.

The third way to link evidence to educational thought is through pragmatism, also in a broad sense. In pragmatism, "evidence," if you still need to use the word, must find its place within much more comprehensive concepts of nature and experiential philosophy, concepts that are deeply linked to community practice and common habits. Thus in pragmatism the concept of evidence is completely subsumed under the domain of education, and is restored only as an everyday concept, as it was about twenty years ago.

Instead, concepts with much deeper roots in our cultural heritage should dominate educational theory and practice.⁵ Biesta's previously mentioned criticism is an example of a critique of the concept of evidence from such a pragmatic point of view. There are also other options, but, in my view, they share the same conclusion: namely, that the concept of evidence disappears from the field the closer you get to education as such.

Finally, I want briefly to return to the points made by Kvernbekk, Hargreaves and Jensen, as presented in the introduction. Kvernbekk's position is, I think, a mixture of rationalism and pragmatism. She situates the whole discussion as a matter of argumentation and epistemological pragmatics, in line with the Wittgensteinian and Deweyan influences on the philosophy of Stephen Toulmin. Therefore one is left with the impression that the word "evidence" is not really necessary, and that it is part of a much more comprehensive totality called

"educational knowledge." Hargreaves's position oscillates among all three levels. The actual 1997 paper is very much embedded within pragmatic and rationalist discourse. There are no signs of the sheer instrumentalisation that sets in later on. Evidence is still just a minor practical concept which, along with other kinds of argument and reasoning, may improve the art of teaching. Finally, Jensen's approach is in line with my argument, because his point is that evidence-based medicine is situated in a political and ideological context, that is, in social and educational theory proper, an insight ignored by the instrumentalist proponents of "pure" education.

Now, it may sound as if I am advocating the possibility, or even the desirability, of a simple return to earlier forms of educational theory: for example, traditional didactics or a communitarian pragmatism. I am not. This is because the concept of evidence has left an exploded and scattered field in its wake where the concepts of education are no longer linked to one another in a natural way. In a sense this is an advantage, because the "things" of education are now freed from the taming discourse of neo-structuralism and critical theory, for instance.⁶ Therefore, in my view, we must return to very basic studies of each individual element and its possible connections with one or the other piece of philosophy. In the words of Walter Benjamin, we should dig into the ocean of language, dive for pearls, and polish them for a renewed attention (Gordon, 2001).

Thus after the bombardment by evidence there is the opportunity, even the necessity, to apply a little philosophical activity to "things" that have become detached from the main pedagogical narratives: to take a look at them, flip and rotate them, and examine what happens if you place them in new, even strange, contexts. The raid of evidence has, in a sense, suspended the force of our language games. Evidence has given us the opportunity to return to a Greek idea of schooling, where things are investigated, and appear without any economic or social pre-structuring. It is as if the objects have been set free once more, freed from the moderating and taming influences of social constructivism. It is as if "things" are philosophically released.

But surely, this will only happen if we abandon the taming influence of "evidence" as well, and begin to experiment with some other words again. If we do, we will be whirled into a great abyss of interactions that will sustain us and give us both a home and an attentive energy. Here, science is not about investigating what works, but about letting "What is going on" reveal itself; and schools are not instruments for global capitalism, but free "Greek" time for attention to things that come forth (Masschelein & Simon, 2013). And here, education is not about using techniques to maximise a ranking score, but rather about appearing in an effective and energetic culture in full, vibrant memory (Rømer, 2013).

Notes

- 1 The Danish Clearing house for Educational Research is partly an example of such a shift in vocabulary.
- 2 This is not quite correct. Actually, "evidence" is important in the French rationalist tradition of Descartes, but this plays no role in recent educational uses of the word.
- 3 This is a similar analysis to Biesta's (2010, p. 45-46). Biesta focuses on how means and ends are separated in ways unacceptable to the concept of education as such. He claims that, in education, means and ends are internally related to one another.
- 4 In fact, the title of John Hattie's book is Visible Learning.
- 5 See Rømer (2013) for a discussion of John Dewey's concept of "method."
- 6 I use the word "things" in accordance with the philosophy of Graham Harman (2005) and Martin Heidegger (2001).

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Dansk abstract

Forholdet mellem pædagogik og evidens

I denne artikel undersøges, hvad der sker, når begrebet "evidens" kommer i kontakt med pædagogisk teori. Der argumenteres for, at denne kontakt har problematiske følger for pædagogikken, som splintres og atomiseres. Først gennemgår jeg en række nyere drøftelser af forholdet mellem evidens og pædagogik. Derpå beskrives i kort form den historie, der ligger til grund for kontakten mellem evidens og pædagogik. Dernæst argumenterer jeg for, at evidensbegrebet splintrer pædagogikken i små stykker, så formål, indhold og metode mister deres indre

forbundethed, og jeg viser, hvordan "evidens" efterfølgende forbinder sig med en omfattende pædagogisk instrumentalisme, der sætter pædagogikken i den globale kapitalismes tjeneste. Denne nye instrumentalisme kalder jeg for Ren Pædagogik, der er en kritisk betegnelse for en situation, hvor pædagogikkens momenter, altså formål, læring, undervisning og metode, opfattes som adskilte dele. I modsætning hertil sættes en Uren Pædagogik, der er et forsøg på at genvinde pædagogikkens grundbestanddele efter det evidensbaserede uvejr. Endelig drøftes andre måder, hvorpå begreber som evidens, forskning og begrundelse kan indgå i pædagogisk teori.

Nøgleord: evidens, læring, uddannelsesteori, globalisering, tradition.

Danish Language and Citizenship Tests: Is What is Measured What Matters?

By Karen Bjerg Petersen

Abstract

This article addresses the demands, introduced by policy during the recent decade, for evidence of education and integration efficiency in the area of DSOL (Danish for Speakers of Other Languages) adult education. It is questioned whether the introduction of comprehensive performance assessments as a means of achieving education and integration efficiency is adequate in terms of measuring what matters in adult DSOL education. The consequences of new, comprehensive language and citizenship tests are discussed: are rote learning and teaching to the test being promoted at the expense of opportunities for reflection? The impact on activities aimed at increasing awareness and understanding of the complexity and context dependency of Danish language and culture among non-native speakers is considered; an understanding which is important for developing 'the good life' and maintaining 'the good society'.

Keywords: Education and integration efficiency, evidence-based learning, performance assessment, second language teaching efficiency, high-stakes testing, citizenship tests, culture education, concepts of culture.

Introduction

In 2003, with the introduction of new laws and curriculum reforms, adopted by the former liberal-conservative government in Denmark, a significant increase in the use of language and culture tests, and new reimbursement models linked to the number of passed language tests, was implemented in DSOL education (Danish for Speakers of Other Languages). According to the government, the introduction of curriculum reforms in DSOL education was aimed at achieving an "efficient Danish education more focused on employment" (Regeringen, 2002, p. 10).

While a former law from 1998 operated with only three final exams corresponding with three different branches of language and culture education tailored to the differing educational backgrounds of participants, this number was increased to a total of eighteen language tests in 2003. Six language tests in each branch were to be passed during a period of eighteen month. (Petersen, 2011b, 2013b, 2013d). The eighteen language tests were particularly developed, operationalized, and standardized Danish language tests based on the European Framework of Modern Languages (Common European Framework [CEF], 1998; Gyldendal 2013)¹.

Furthermore, since 2006, foreign nationals living in Denmark who want to obtain Danish citizenship must meet several requirements with respect to evidencing integration and language skills (Cirkulæreskrivelse [CIS], 2006; Justitsministeriet, 2013; NyiDanmark, 2014). As highlighted by Krogstrup (2011, p. 63²), "a number of performance assessments and associated indicators of conditions an individual must satisfy in order to obtain Danish citizenship" have been defined, including "education, Danish language skills, community work, a Danish culture and history citizenship test, and other requirements" (ibid., p. 63).

In June 2014, the newest version of the obligatory citizenship test was launched on the official website of the Danish Ministry of Education (Undervisningsministeriet, 2014b). Three months before, in March 2014, web-based learning materials developed for preparation to the citizenship test, entitled "Parliamentarism and everyday life in Denmark3", were published on the same website (Undervisningsministeriet, 2014a).

The citizenship test from 2014 is a multiple choice test consisting of 30 questions, addressing facts about Danish politics, government, and society. 22 of 30 questions must be answered correctly in order to pass the test. Foreign nationals may either prepare for the test individually, for example by using the website of the Ministry or other websites developed for this purpose, or they may attend courses in language schools in combination with Danish language lessons (see, for example, Studieskolen, 2014).

During spring 2014, the following recommendations for foreign nationals wanting to obtain Danish citizenship could be found on one of the websites developed for individual use:

It is difficult to pass the test simply by acquiring a general knowledge about Denmark by living and working here. The questions are very specific and deal with specific episodes or facts. Even many Danes will not be able to answer lots of the questions. Foreign nationals must, however, study hard to pass the test. It does not matter how long you have lived in Denmark. What matters is that you know the questions and the possible answers. There is no requirement that you should know more or anything beyond what is described in the syllabus/questions. The test is simple in the sense that you must simply know it in order to pass. Most people who pass the test have studied for a long time and have more or less memorized the questions (...). You do not need to remember all the possible answers; just practice a technique to remember which correct answer belongs to which question. This means that you might obviously not fully understand what issues the questions really deal with; as this is not demanded, it is, hence, not a requirement for passing the test (...). The simplest and least time-consuming way to pass the test is to practice all the answers in advance (Statsborgerskabstest.dk, 2014).

In terms of educational approaches, the design of the citizenship test as a multiple choice test, and the learning methods suggested by the authors of the website, leads to merely behaviorist learning styles in the form of memorization. Those taking the test are assured that such memorization techniques, without really knowing or conceptualizing the context surrounding the questions, is not cheating:

However, it is by no means a question of cheating. The design of the citizenship test simply does not take into account the ways to pass it. This is not the responsibility of the candidate [foreigner], but of those who have designed the test (Statsborgerskabstest.dk, 2014).

Although the above quotations may seem excessive, and even exaggerated, international and Danish education researchers have expressed concerns about the introduction of increased testing in education.

In section 1 of this article, I will address the demands for evidence of education and integration efficiency by introducing performance assessments. I will briefly introduce some of the concerns raised with respect to negative implications of increased assessment in education. In section 2, I will introduce the development of DSOL language and culture education, as well as concepts of culture education, and discuss the Danish citizenship tests in respect to this. In section 3,

in continuation of the introduction of the comprehensive language performance assessment from 2003, I will introduce studies and research on the implications of increased language and culture testing within the area of DSOL adult education. Finally, I will briefly discuss what matters in measurement and DSOL education.

1. Evidence of Education and Integration Efficiency through Assessments and Tests

Internationally, tests have been used as a tool to implement evidence-based education in many Western European countries. In a recently published report about assessment from 2013, it is outlined that

there is a documented global rise in the number of countries undertaking national learning assessments (...). Much of this increase, especially in national learning assessments, has occurred in economically developed countries (Best, Knight, Lietz, Lockwood, Nugroho, & Tobin, 2013, p. 1).

The reason for this rise is explained as a result of "the concept of evidence-based policy-making, and the different uses of assessment to serve as evidence" (ibid.). According to the report,

this particular focus on policies regarding resources and teaching and learning practices stemmed from an observation that, particularly in economically developed countries, analyses of data from such assessments are used to make policy recommendations in those areas (Best et al., 2013, p.1).

In recent years, in many developed countries, the UK and US being 'pioneers', economic resource allocation has been combined and connected with educational outcome in the form of assessments and tests (Amrein & Berliner, 2002; Ball, 2006, 2009, 2012).

Similar to Best et al. (2013), the Danish researcher Krogstrup outlines that "the concept of an evidence-based society is closely connected to assessment" (Krogstrup, 2011, p. 35). Krogstrup emphasizes, however, that there have been, and continue to be, discursive disputes about the usage and understanding of the terms "assessment" and "evidence" (ibid., p. 35).

In a review of assessment as a globalized concept, Krogstrup lists four assessment waves: 1) the classical assessment wave in the 1960s; 2) the responsive assessment wave in the 1970s; 3) the monitoring assessment wave connected to the introduction of New Public Management in the 1980s; and 4) the evidence-based assessment wave as the fourth and – for now – final wave (Krogstrup, 2011, p. 23 ff.). Krogstrup, among others, identifies a form of hybrid intertwining of

the concepts of, respectively, assessment and evidence with the introduction of performance management and a New Public Management philosophy supporting evidence-based policy, the focal points of which are "identification of effects" and "measurements of performance in the public management chain from top to bottom" (ibid., p. 54).

Accordingly, the possibility to identify and subsequently operationalize and measure effects, including educational and integration effects, are important new public management tools in most developed countries, with education and integration policy regarding adult foreign nationals in Denmark being no exception.

In addition to theoretical and methodological challenges, the operationalization of effects and identification of efficacy variables are, however according to Krogstrup, quite difficult to handle. Firstly, it is often not possible to identify one single, unique efficacy variable that is decisive. Secondly, it is often unclear which variables should be used as a basis for measurement and assessment. Thirdly, a further concern not mentioned by Krogstrup is how to determine the importance and weight of the various efficacy variables. A fourth concern, addressed in section 2 of this article, is which specific content is selected, for example for the Danish citizenship test.

The operationalization of efficacy variables may lead to uncertainty with respect not only to the test content and design of performance assessments, but also to questions about whether additional or alternative variables and content could have been used as efficacy variables. Furthermore, it highlights the fact that variables chosen for measuring, for example, integration efficiency of adult foreign nationals are constructed and, to a certain degree, politically determined – a fact that has been discussed in the Danish public discourse for several decades (Petersen, 2013c).

Another central concern in constructing, for example, a citizenship test is the emphasis placed on the specific content to be tested in favor of other possible content choices. It is widely acknowledged in the literature about testing that what is tested will often turn out to be what matters for the persons involved (Nordenbo et al., 2009). Krogstrup warns against attempts to predict effects due to the above mentioned difficulties in handling and choosing efficacy variables in performance assessments, stating that "performance assessments as quantitative measurements of processes and effects cannot predict anything about the effects (or outcome)" (Krogstrup 2011, p. 63).

As mentioned in the introduction to this article, one of the policy areas that have been exposed to comprehensive operationalization of effects and subsequent massive assessments is the DSOL language education and integration policy concerning adult immigrants living in Denmark. New, stricter requirements for

acquiring citizenship have been introduced from 2006 onwards. Krogstrup, however, points to a number of uncertainties associated with the process of measuring the efficiency of, for example, the integration of foreign nationals in Denmark:

The integration of particular immigrants can vary greatly from person to person depending on prior schooling, past life events, parental support, which communities they live in, what services the council makes available, etc. Moreover, it is difficult to accurately operationalize the goal of integration. In the absence of possible operationalized efficiency, some variables – often a number of performance assessments and associated indicators of what an individual must meet in order to obtain Danish citizenship – are defined (education, Danish language skills, community work, (...) citizen test, and other requirements). There is, hence, an implicit assumption that an immigrant is considered integrated if he or she can meet the assessment requirements (that is: the expected effect is achieved) (ibid., p. 63).

Performance assessments introduced in lack of possible operationalized efficiency variables, including the previously mentioned citizenship test from June 2014 that mainly concentrates on factual knowledge, in conjunction with test takers being forced to focus on memorizing strategies rather than on context-based knowledge, may stand in the way of other, more in-depth indicators of integration.

Krogstrup emphasizes performance assessments as one way of implementing evidence-based policy, whilst other researchers have linked, in particular, school efficiency efforts in England in the 1980s and 1990s to the introduction of evidence-based education policy (Buus, 2011; Moos, Krejsler, Hjort, Laursen, & Braad, 2005; Krejsler, 2006). In education policy in Denmark, adult DSOL education being no exception, the process of introducing evidence-based policy was primarily implemented as a top-down process, often described as external evidencebased assessment (Krejsler, 2006). Krejsler suggests that external evidence-based assessment will inevitably influence both teaching and learning content, as the learning content "has to be aligned to the demands of the assessments" (Krejsler, 2006, p. 8). This may, on the one hand, have "a positive effect in terms of students being able to understand the relatively well-defined requirements" (ibid., p. 8). On the other hand, however, Krejsler (2006) and other researchers emphasize that external evidence-based assessment may have a considerable negative impact on both teaching, content knowledge, and students' interaction with the cultural tradition:

It can, however, also result in an instrumentalization of teachers' and students' interaction with the cultural tradition to such an extent that they first and foremost deal with the contents in order to get good grades or simply to pass the test. The result is that cultural knowledge and tradition loses its character of something

with an intrinsic value with respect to developing both 'the good life' and 'the good society' (Krejsler, 2006, p. 9).

While somewhat exaggerated, the descriptions and conceptualizations on the website, quoted in the introduction to this article, of passing the Danish citizenship test as a question of primarily memorization technique seem to be depressing examples of how too "well-defined assessment requirements" (ibid., p. 9), in combination with multiple choice assessment tools and providers' simplistic interpretations, indicate a loss of intrinsic value with respect to foreign nationals developing cultural awareness and knowledge about Danish culture and society. I will return to discussions about the content of the citizenship tests in section 2.

International Research and Critique: Negative Implications of Evidence-based Policy and Increased Assessment in Education

While Danish researchers, including Krogstrup, Krejsler and others, have only recently addressed the implications of changed education and integration policy in Denmark, a number of international educational researchers have discussed the implications of evidence-based education policy since the 1980s. The British educational researcher Stephen Ball (2006, 2009) outlines the shift in the relationship between politics, governments, and education that has taken place since the 1980s and 1990s in the UK. According to Ball, national economic issues have in recent decades been closely tied to education. The assumption behind what Ball describes as a neo-liberal - in the US often mentioned as a neo-conservative education policy is that national economies will be improved by "tightening a connection between schooling, employment, productivity and trade" (Ball, 2006, p. 70). This is achieved by "attaining more direct control over curriculum content and assessment" (ibid., p. 70). One of the worrying consequences of the demand for efficiency and effective education is, according to Ball (2006), a changed understanding of teaching, from a cognitive, intellectual process towards a purely technical process.

Another prominent educational researcher, Gert Biesta (2007, 2010, 2011), agrees that the increased focus on measurement and accountability in neo-liberal/neo-conservative education policy has affected teachers and educational systems. Biesta is critical of the idea of evidence-based education. The assumption behind the concept of evidence-based education is

that education can be understood as a causal process—a process of production—and that the knowledge needed is about the causal connections between inputs and outcomes (Biesta, 2011, p. 541).

Education should not be understood as a process of production; nor, "even worse, should [it] be modelled as such a process" (ibid., p. 541). If education is understood as a process of production, then "the complexity of the educational process" is radically reduced because it "requires that we control all the factors that potentially influence the connection between educational inputs and educational outcomes" (ibid., p. 541). According to Biesta, evidence-based education, and accountability,

limits the opportunities for educational professionals to exert their judgment about what is educationally desirable in particular situations. This is one instance in which the democratic deficit in evidence-based education becomes visible (Biesta, 2007, p. 22).

An implication of neo-conservative education policy, especially documented by American educational researchers, is that the introduction of performance assessments and, in particular, high-stakes testing, in combination with accountability, has significantly influenced education, teacher approaches, and school politics. American researchers have had the opportunity to study implications of high-stakes testing for several years. The majority of research indicates that high-stakes testing has had many negative consequences, one of which is a widespread tendency to change all teaching into 'teaching to the test'-activities. Furthermore, a range of other negative consequences – even cases of teachers and schools cheating – have been listed and documented (see e.g. Amrein & Berliner, 2002; Nichols & Berliner, 2007; Nordenbo, 2008; Schou, 2010).

In various reports on and investigations into the introduction of high-stakes testing in DSOL language and culture education in Denmark, concerns similar to those mentioned above by the American researchers have been raised (Lund, 2012; Hansen & Aggerholm Sørensen, 2014; Rambøll, 2007; Petersen, 2011b, 2013b, 2013d). In the following section, a historical introduction to DSOL education, and in particular to concepts of culture and culture education, will be presented.

2. Danish Language and Culture Education for Foreign Nationals

The historical development of education of adult immigrants in Denmark – Danish for Speakers of Other Languages (DSOL) – is closely connected with the migration to Denmark in recent decades. Since the late 1970s, an increasing number of adult residents from both developed and, especially, developing countries have come to Denmark, either to work or as political and/or humanitarian refugees. While immigrants constituted approximately 0.7% of the total population in the

late 1970s, this number had increased to 10.7% in 2013 (Danmarks Statistik, 2013; Petersen 2010a).

According to official statistics from 2010, 49,602 adult learners attended DSOL education, with citizens from Poland, Germany, the Philippines, Turkey, and China being the five most represented nationalities. Learners from non-Western countries represented 49.8% of all DSOL learners in the year 2010 (Ministeriet for Børn og Undervisning, 2012).

Unlike other European governments, the Danish government has been aware of the importance of adult education, and the majority of adult immigrants coming to Denmark since the 1970s have participated in this education (Andersen, 1990). In a ministerial report from 1971, it was suggested that adult immigrants in Denmark should be offered free language and culture education, and that they could freely choose and organize language schools. The language education was seen as an important precondition for adult immigrants to cope with Danish society (Betænkning, 1971).

From the 1970s onwards, education of adult immigrants was provided within the framework of the Danish welfare state and the associated approach to education. The set-up of adult immigrant education, including DSOL education, was based on an education policy framework introduced for the entire Danish public education project and implemented according to the 'Civic' and 'Leisure' laws (Andersen, 1990; Korsgaard, 1997; Lov nr. 233 af 6. juni 1968).

Since the 1970s, the understanding in laws and curriculum documents with respect to education of adult immigrants has been based on conceptions of education as democracy-building. Historically, the aim of adult DSOL education, until the first decade of the 2000s, has been to develop adult immigrants' language skills as well as their personal, cultural, and individual educational skills, including their democratic involvement in society. Promoting participatory and awareness-raising activities has been a core approach in adult immigrant education (Andersen, 1990; Korsgaard, 1997; Petersen, 2010a).

In 2001, one of the first actions of the newly elected liberal-conservative government was to announce profound changes and reforms concerning adult DSOL education and integration policy (Regeringen, 2002). In 2003, as mentioned in the introduction to this article, the high-profile policy demands for efficiency through the introduction of comprehensive performance assessments resulted in considerable curriculum reforms of adult DSOL education. The introduction of increased use of language testing, in combination with new reimbursement models linked to the number of passed language tests, was one of the results.

Another result was the introduction of new culture tests and a return to essentialist concepts of culture education at the expense of former relational concepts

of culture, cultural awareness, and culture education (Petersen, 2011a, 2013c). A brief introduction to the notion of culture may shed light on these different understandings of culture education.

Concepts of Culture and Understandings of Culture Education

Several researchers in the fields of anthropology and cultural studies stress the complexity of the term 'culture' and outline various understandings of the concept (Kroeber & Kluchhohn, 1952; Geertz, 1973; Hall, 1980, 1992; Tylor, 1873). Often, culture concepts are divided into two main categories of definitions or understandings, referred to as *essentialist* and *relational* culture concepts.

Essentialist Culture Concepts

Essentialist or positivist culture definitions understand cultures and nations as fixed empirical categories or "substancy systems" (Hastrup, 1989), often coupled with mainly mono-cultural perceptions and understandings of cultures and nations existing within "marked borders" (Hylland Eriksen, 1994). This understanding can be traced back to 18th century European concepts and the understanding of the German philosopher Herder, who describes language, religion, thought, art, science, politics, law, customs, norms, tools, weapons, and transport equipment as parts of the culture of a nation (as cited in Fink, 1988). In continuation of this tradition, Tylor (1873) defined the concept of culture in the following way:

Culture or civilization ... is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society (as quoted in Geertz, 1973, p. 47).

About one hundred years later, the British social scientist Hall (1992), within the essentialist tradition, defined the concept of a nation following the concept of culture in emphasizing "... origins, continuity, tradition and an idea of a 'pure, original people or 'folk'" (Hall, 1992, p. 292).

Relational Understanding of Culture

Unlike the essentialist and rather fixed understanding of cultures and nations, the American anthropologist Geertz (1973) introduced a hermeneutic and constructivism-inspired understanding of the concepts of culture and nation. In opposition to the traditional view in anthropology represented by Tylor and others, Geertz introduced his idea of cultural patterns and culture as "historically created systems of meaning in terms of which we give form, order, point and

direction to our lives" (Geertz, 1973, p. 52). Geertz is famously known for the following statement: "Culture is the fabric of meaning in terms of which human beings interpret their experience and guide their action" (Geertz, 1973, p. 52).

The Danish anthropologist Hastrup (1989, 2003), following Geertz, emphasizes the reverse relation between humans and culture when she writes, "not only is [wo/man] a product of her/his culture, but she/he is also constantly co-author of reality" (Hastrup, 1989, p. 21). Consequently, the concept of a nation as 'pure, original people' or 'folk' has changed and been replaced by an understanding of a nation as a structure of cultural power. Hall (1992) emphasizes that "a national culture has never been simply a point of allegiance, bonding and symbolic identification; it is also a structure of cultural power" (p. 296). As a result of seeing culture and nation as relational and interactional rather than fixed, essentialist categories, the understanding of culture education has changed.

Teaching Culture Education

When teaching within the essentialist, positivist paradigm, culture education is approached as a means to adapt to the specific culture (ways of living) of the nation-states in which foreign nationals are settling. In contrast, within the relational and constructivist concept of culture, culture education focuses more on concepts of cultural awareness and on developing cultural sensitivity. This difference in perspective has had a huge impact on the understanding of goals and purposes of culture education at the end of the 20th and the beginning of the 21st centuries. The British researcher and teacher educator Michael Byram (1989, 1995, 1997), has developed the notion of intercultural competence and intercultural communicative competence as the aims of culture education. Tomalin and Stempleski's (1993) work on cultural awareness has had international impact on understandings of culture and culture education as means to develop cultural sensitivity.

Similarly, the American researcher Claire Kramsch (1996, 1998) has developed ideas of culture education within teaching English as a Second or Foreign Language in the United States, focusing on concepts of polyphony and change of perspective. In Denmark, researchers have introduced similar concepts of ethnographic fieldwork in culture education, based on theories and methods in anthropology (Andersen, Lund, & Risager, 2006; Petersen, 2010a, 2011a, 2013c; Byram et al., 2009).

Culture Concepts in the Danish Citizenship Tests from 2006 Onwards

As mentioned in the introduction to this article, the Danish citizenship tests were first adopted in 2006 (CIS, 2006), and a first publication, introducing the total of 200 possible questions, with corresponding answers, which foreign nationals might be confronted with, was published by the Ministry of Integration in 2007 (Ministeriet for Flygtninge, Indvandrere og Integration, 2007). The design of the citizenship test was at that time – as in the 2014 test – a multiple choice test. Unlike the 2014 test, however, in the first citizenship tests 32 out of 40 questions, rather than 22 out of 30, had to be answered correctly (ibid.).

In the publication from 2007, the 200 questions are listed under eleven different items, for example A) "Royal family, flag, the Danish Realm, Iceland"; D) "Culture and traditions"; E) "Danish geography and population"; F) "Danish history and culture"; etc. (ibid.). Questions like "What is the name of the Danish Flag?" with three options are characteristic of all 200 questions (ibid., p. 6). The degree of difficulty may vary; for example, question 32 is about the content of the book *Gesta Danorum*, written by the Danish historian Saxo at the end of the 1100s (ibid., p. 14).

The listing of specific items, supposedly connected to specifically designated knowledge about Danish culture, history, and language, indicates an understanding of the concept of culture described above as primarily essentialist. The introduction and identification of fixed, apparently 'objective' variables for this performance assessment (Krogstrup, 2011) is possible because the chosen concept of culture in the citizenship tests is based on "substancy systems" (Hastrup, 1989) rather than on an understanding of culture as a "fabric of meaning" (Geertz, 1973).

As mentioned above, the essentialist concept of culture is very often coupled with mainly mono-cultural perceptions of cultures and nations (Hylland Eriksen, 1994). In the citizenship tests from 2006 to 2013, all questions were connected to Danish history and culture, but no questions indicated that Danish society is multicultural (Ministeriet for Flygtninge, Indvandrere og Integration, 2007; Petersen, 2013c).

The social democratic and liberal-led government that came to power in 2011 announced changes with respect to obtaining residency and citizenship. In 2012, the linking of Danish culture and history tests to residency was replaced by an obligation for foreign nationals to sign a so-called "Declaration on integration and active citizenship in Danish society" before obtaining residency in Denmark (see declaration, on www.NyiDanmark.dk, 2014). In 2013, furthermore, the new act on naturalization was adopted (Justitsministeriet, 2013), indicating that parts of the content of the 2006 Danish culture and history citizenship test would be replaced by new contents, even though the test itself would be maintained.

As a result, the new citizenship test from 2014, introduced at the beginning of this article, which primarily focuses on knowledge about contemporary Danish policy, government, and society, rather than knowledge about Danish culture and history, was compiled (Justitsministeriet, 2013). Compared to the previous government's policy, this indicated a change of focus towards modern society. The requirements for Danish language skills were lowered. As has been discussed in this article, the focus on *factual* knowledge has however been maintained at the expense of opportunities to develop reflective skills, cultural awareness, and sensitivity-promoting activities.

The assessment form used since 2006 is also maintained in the 2014 citizenship test. The multiple choice format is setting standards of statements which can be empirically determined as true or false, hereby supporting and canonizing essentialist perceptions of culture and society (Bachman & Palmer, 1996; Kreipke, 2001). As such, although the questions in the 2014 test have been changed compared to earlier citizenship tests, the test format itself contributes to maintaining a rather essentialist view on society and culture.

In addition, theories on assessment formats indicate that learning styles based on memorization are often used and seen as appropriate in multiple choice assessments (Bachman & Palmer, 1996; Kreipke, 2001). As mentioned in the introduction of this article, it is precisely this method that is suggested as the best way to pass the Danish citizenship tests: "just practice a technique to remember which correct answer belongs to which question" (Statsborgerskabstest.dk, 2014).

The recommendation, although exaggerated, that adult learners should not strive to "understand what issues the questions really deal with" (ibid.) might be the result of combining specifically designated variables based on essentialist understandings with performance assessment formats like multiple choice testing. Despite the content being changed due to changes in government, behavioristic, memorization learning styles nevertheless still seem to be appropriate for achieving the best scores in the citizenship test from June 2014.

With respect to these particular citizenship tests and the format chosen, Krogstrup's prediction seems to hold true:

performance assessments as quantitative measurements of processes and effects cannot predict anything about the effects (or outcome) (Krogstrup, 2011, p. 63).

Following this argument, the new citizenship tests from 2014, with changed content but maintaining the format, will not necessarily be able to predict anything more about adult foreign nationals' knowledge of Danish society, culture, and history than the earlier tests.

While the citizenship tests first developed in 2006 subsequently appear to have set the stage for behaviorist learning styles, the question is what has happened with the language tests since they were introduced in 2003? Some implications of the increased language testing in the area of DSOL education have been studied and reported since 2003. In the following section, a brief overview is presented.

3. Reports and Research on the Implications of Language Tests

In an evaluation report on the DSOL education of adult immigrants in Denmark, it has been found that the intended efficiency of language teaching through the introduction of high-stakes testing has been achieved only to the extent that the *quantity* of passed language tests has increased since 2003 (Rambøll, 2007). It is outlined in the report that this is the result of the new reimbursement models introduced in 2003. The report furthermore stressed that the focus of language schools in Denmark since 2003 has been "primarily on tests and assessments, which means deselecting tasks not required for passing the next test" (Rambøll, 2007, p. 10).

The report, hence, outlines some unintended consequences of the assessment system developed in 2003. Apart from the above mentioned selection of tasks specifically aimed at the next test, it was emphasized in the report that this priority of test-specific tasks results in providers ignoring other aspects of the curriculum changes from 2003, such as "company visits, work-place introductions and other employment related activities" (Rambøll, 2007, p. 8). In addition, the report highlights another unfortunate consequence; namely that adult immigrants "do not achieve the depth of linguistic capacity required in the education system" (ibid., p. 10). Interviews with teachers, learners, and headmasters indicate great concern among teachers about language and culture "teaching being reduced to test-training without in-depth knowledge" (ibid., p. 10).

In 2009, a further report based on four different evaluations of DSOL language education, initiated by the responsible Ministry of Integration, supported these findings. Apart from highlighting that many learners pass the language tests, the report emphasizes the call for "strengthened Danish skills" among adult immigrants and foreign nationals in both educational and workplace settings (Ministeriet for Flygtninge, Indvandrere og Integration, 2009, p. 46).

Findings from studies by Petersen (2011b) confirm the findings in the reports from the Ministry (2009) and Rambøll (2007). 32 surveyed teachers outlined that the apparent primary discourse in DSOL language and culture education since

2003 is the passing of high-stakes language and culture tests, further indicating that the introduction of high-stakes tests has had significant impact on teaching and learning (Petersen, 2011b, 2013d).

Teachers' Reflections on the Influence of Increased Assessment and High-Stakes Testing

Despite their understanding of assessment as applicable in DSOL language education, emphasizing diagnostic functions of assessments as useful for both students and teachers, the DSOL teachers accentuated the problematic correlation between implementation of language tests and school economics on the one hand, and the rote learning approach to both language and citizenship tests on the other. The teachers emphasized that the opportunities to work with awareness-raising and intellectually developing teaching methods, such as project work, were either reduced or completely replaced by test training.

While one teacher suggested that "tests create problems in relation to long-term educational approaches and tasks, such as project work", another teacher expressed that the adult immigrants' vocabulary and general linguistic capacity have "deteriorated due to the test-training focus" (Petersen, 2011b, p. 22).

The teachers found that the interest in adult learners' intrinsic language and culture acquisition and knowledge has been replaced by a focus on mere test training, and ostensibly efficient implementation of the required assessments. The teachers emphasized that test training takes up far too much classroom time at the expense of other necessary language and culture-developing approaches. Despite their desire, as professionals, to employ various pedagogical methods, the teachers indicated that their teaching was primarily focused on the test, because this is the most important discourse, while at the same time admitting that they find their own teaching "dull" and "uninteresting" (ibid., p. 23).

A recent, small-scale, qualitative longitudinal study of DSOL language classes and teachers indicates that the impact of DSOL language testing on curriculum content and DSOL teachers' choice of activities can still be evidenced. (Hansen and Aggerholm Sørensen (2014, p. 2) characterize their data as demonstrating "indications of [test] impact on curriculum". In two classrooms, each observed over a period of five weeks, and in which language testing took place in week three, an increased use of "test preparing assignments in their teaching" (ibid., p. 2) was registered. Furthermore, the classroom observations indicated that the intensity, level of anxiety, and teacher behavior during the week where language testing took place changed significantly towards more teacher-centered approaches, controlled focus on test activities, and much more individual learner work, compared to the weeks in which no testing took place (ibid., p. 57 onwards).

Hence, the research conducted within DSOL education since 2003 indicates that a range of changes have resulted from the introduction of comprehensive performance assessments and curriculum reforms in 2003: including a narrowing of curriculum content, changes in teacher behavior, and increased focus on test training activities.

Concluding Remarks: Is What is Measured What Matters?

According to the above mentioned investigations, reports, and research, the introduction of increased testing, and in particular the increased high-stakes language testing activities in DSOL culture and language education, has had several negative implications. As evidenced in British and American studies, the increased assessments and tests, in combination with the power of economic reimbursement and Danish citizenship tests, has led schools, school leaders, teachers, and trainers in adult DSOL education in Denmark to focus solely on test training activities (see e.g. Amrein & Berliner, 2002; Nichols & Berliner, 2007; Rambøll, 2007).

One consequence, evidenced in the 2007 Ministry publication about the Danish citizenship test, as well as the e-learning and test materials developed for the June 2014 citizenship test, is that the requirements for passing the Danish citizenship tests are based on mostly factual, essentialist concepts of culture and society. Furthermore, as was the case with the previous citizenship test, as developed and used since 2006, the format of the 2014 citizenship test promotes behaviorist learning styles, such as memorization techniques.

By excluding possibilities for reflection, awareness-raising activities, and indepth knowledge about complexity and context dependency, the citizenship tests evidence how cultural and societal knowledge and tradition no longer reflect a view of learning as something that has intrinsic value with respect to developing both *the good life* and *the good society*; a tendency emphasized by Krejsler (2006) and Krogstrup (2011), among others. A consequence of the introduction of this particular performance assessment, ostensibly one variable in measuring the efficiency of integration of adult foreign nationals, is that, instead, memorization skills are seemingly the sole requirement for adult foreign nationals in order to learn and become citizens in Denmark.

Another paradox revealed in the findings from the evaluation reports and research in the 2000s is that adult immigrants, despite the increased focus on language testing activities, "do not achieve the depth of linguistic capacity required in the education system" (Rambøll, 2007, p. 8).

The implementation of high-stakes testing in the DSOL culture and language education of adult immigrants in Denmark has apparently limited the teaching

content to either test-related or test-teaching activities. This has, furthermore, led to in-depth educational activities being deselected in both language and culture DSOL teaching.

The understanding of Danish teachers' role, and of the culture and language knowledge required by adult foreign nationals has apparently changed in the wake of the neo-liberal/neo-conservative education policy over the past decade, whereby comprehensive performance assessments have been introduced in order to achieve education and integration efficiency. Although the teachers reflect upon their teaching, they admit to having changed their teaching approaches in favor of test training, even if they find this kind of teaching inadequate. Adult learners, on the other hand, seem primarily occupied with memorizing factual knowledge in preparation for the tests, indicating, to a certain degree, that memorization has replaced awareness and cognition-raising activities. The quotation from the website providing training for the citizenship test, quoted in the introduction of this chapter provides a rather depressing indication of this development.

Apparently, as highlighted in a corresponding study of the English public care system (Bevan & Hood, 2006), increased performance assessments as quantitative measurements of effects, combined with the demands for efficiency and the introduction of control over curriculum and assessment in Danish culture and language education for immigrants, contributed to a change in the understanding of teaching and learning content in which what is measured is what matters.

The desire to measure specifically designated knowledge has the opposite effect and results in what arguably constitutes non-appropriate learning styles for modern societies that are dependent on the in-depth knowledge, reflective capacity, and skills of all citizens, including immigrants and adult foreign nationals.

Teachers, trainers, and adult foreign nationals and immigrants are forced to meet the efficiency variables and standards established by the culture and language performance assessments, instead of engaging in relevant and meaningful activities connected to in-depth cultural, societal, and language knowledge and development. Overall, the findings indicate that the pressure on the individual teacher has increased significantly and that the daily role of the teacher in the classroom has changed, while the learning styles and demands with respect to adult foreign nationals' knowledge have, to a certain degree, been transformed into superficial memorization techniques.

There is clearly a call for further discussion concerning what matters in DSOL language and culture education in Denmark in 2014 and onwards.

Notes

- 1 This article does not discuss the course 'Danish for the Labour Market', invented by 2014 (see Danish Ministry of Education, 2014).
- 2 Where nothing else is indicated, translations from Danish texts by Karen Bjerg Petersen.
- 3 The Danish title is: "Folkestyre og hverdagsliv i Danmark"

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Dansk abstract

Sprogundervisning og medborgerskabstest: er dét, der måles, dét, der virker?

Denne artikel diskuterer uddannelsespolitiske tiltag i form af præstations- og resultatmålinger, der i det forløbne årti er blevet indført i forbindelse med omfattende læreplans- og lovændringer i undervisningen i dansk som andetsprog (DsA) for voksne udlændinge. Formålet med disse præstations- og resultatmålinger har

fra politisk side været at skabe effektivitet i uddannelses- og integrationsindsatsen over for voksne udlændinge i Danmark. Et omfattende sprogtestsystem indført i 2003 - i kombination med introduktionen i 2006 af multiple choice-prøver i kultur- og samfundsforhold som betingelse for opnåelse af statsborgerskab - har medført væsentlige forandringer i tilgangen til undervisning af voksne udlændinge. I artiklen diskuteres konsekvenserne heraf for indhold og gennemførelse af undervisning. Det problematiseres, hvorvidt det sidste årtis indførelse af test og prøver med henblik på at øge uddannelses- og integrationseffektiviteten har fremmet behavioristisk inspireret indlæring på bekostning af aktiviteter, der øger voksne udlændinges indsigt i og kendskab til kompleksiteten i det danske samfund og sprog; et kendskab, det forekommer nødvendigt at besidde både for at leve "det gode liv" og opretholde "det gode samfund".

Nøgleord: effektivitet i uddannelsesindsatsen og integrationsindsatsen, voksne udlændinge, præstationsmåling og resultatmåling, dansk som andetsprog for voksne, statsborgerskabsprøve, kulturundervisning, kulturforståelse.

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