The action competence approach and the 'new' discourses of education for sustainable development, competence and quality criteria

Finn Mogensen; Karsten Schnack

a University College West, 6705 Esbjerg, Denmark  
b Danish School of Education, DK-2400 Copenhagen NV, Denmark

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The action competence approach and the ‘new’ discourses of education for sustainable development, competence and quality criteria

Finn Mogensen\textsuperscript{a*} and Karsten Schnack\textsuperscript{b}

\textsuperscript{a}University College West, Skolebakken 171, 6705 Esbjerg, Denmark; \textsuperscript{b}Danish School of Education, Tuborgvej 164, DK-2400 Copenhagen NV, Denmark

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Action competence has been a key concept in educational circles in Denmark since the 1980s. This paper explores the relationship between the action competence approach and recent discourses of education for sustainable development (ESD), competence and quality criteria. First we argue that action competence is an educational ideal, referring to the German notion of ‘\textit{Bildung}’ and that the very essence of action competence can be derived from the notion of ‘action’. Second we emphasise that a particular focus must be put on education, when ESD is seen through the lens of the action competence approach. Next we suggest that the interpretation of ‘competence’ differs substantially in this approach from those connected to individualistic-oriented Human Resource Management theory, while some similarities and differences can be found in relation to subject-oriented notions of competence and the Organization for Economic Cooperation and Development-promoted DeSeCo (Definition and Selection of Competencies) perspective. Finally, we argue that quality criteria that are in concert with the action competence approach should: focus on enhancement of teaching and learning; reflect the democratic values that ESD seeks to promote; be co-elaborated by the relevant stakeholders; and foment institutional as well as individual learning and, thereby, instantiate the \textit{Bildung} perspective embedded throughout this approach.

\textbf{Keywords:} action competence; education for sustainable development; competence; indicators; quality criteria; environmental education; \textit{Bildung}

\section*{Introduction}

In this paper, we examine the relationship between the action competence approach and some of the relatively new discourses that have dominated the educational agenda in Denmark in the past decade. In the first section we will argue that action competence should be seen as an educational ideal, and that a philosophical view on the action component of the notion reveals certain central characteristics of its interpretation in an educational context. We also explore the action competence approach in relation to education for sustainable development (ESD), focusing on the competence dimension of action competence. The language of competence has very rapidly become widespread and it would appear to be more than a fad. Prompted by this, we deal with questions regarding consistency, added value or pitfalls that can be identified, when

\textsuperscript{*}Corresponding author. Email: fmo@ucvest.dk
different notions of competence are explored from the perspective of an action competence approach. In the final part of the paper, we apply this discussion to the increasing interest in evaluation of ESD. Much energy has been mobilised in the realm of quality criteria and indicators for ‘green schools’ and successful teaching and learning in ESD. Consequently, in line with the basic ideas of the action competence approach, we conclude our paper with a discussion of the central characteristics connected to a quality criteria set, as proposed by examples drawn from our involvement in the Environment and School Initiatives (ENSI) network.

The action competence approach and the ‘new’ interest in ESD
Since the 1980s and 1990s, ‘action competence’ has been a key concept in research and curriculum development in relation to environmental and health education at the Research Programme for Environmental and Health Education at the Danish School of Education in Denmark.\(^1\)

In a broad sense, the notion refers to an educational approach that:

- is critical of moralistic tendencies in environmental education and health education;
- emphasises the educational aims of environmental education and health education, instead of reducing education to a technical means to solve certain political problems;
- works with democratic and participatory ideas in relation to teaching–learning;
- conceives of environmental education and health education as problem-oriented and cross-curricular, even holistic, without losing interest in academic knowledge and fundamental concepts;
- regards environmental problems as societal issues that involve conflicting interests;
- works with a positive and broad conception of health, including not only lifestyle, but also living conditions;
- looks for relationships between environmental education and health education.

More specifically, ‘action competence’ refers to an educational ideal. As such it is not a goal that can be reached, and even if it is a competence, it is not a specific competence among many others. As an educational ideal it is situated in a non-place, a utopia, where it maintains good company with such concepts as liberal education, democracy, human rights, sustainable development and equal (herrschaftsfrei) communication. All of these concepts live for, and indeed off, the fight against violence and oppression (Schnack 2000). In this perspective, action competence is closely linked to democratic, political education and to a radical version of the notion of ‘Bildung’.

The concept of Bildung, roughly translated as the formation of the personality through education and approximating to what is carried in the notion of ‘being an educated man’, can be traced back to German philosophers like Immanuel Kant, Wilhelm von Humbolt and the whole neo-humanist project of the early nineteenth century. Different approaches to a contemporary use of the concept have since then been identified (Giesecke 1978), but one of the most influential interpreters of the modern ideal of Bildung is the German scholar, Wolfgang Klafki (1991). Via his interpretation and responses to it, the concept and the ideas behind Bildung have had an
enormous impact and influence on educational theory and thinking not only in Germany, but also in Scandinavian countries where the concept has been closely related to critical theory. Thus, Bildung cannot be reduced to mere education in the sense of cultivation, normalisation, or traditional socialisation. On the contrary and in concert with the utopian dimension of critical theory, it has as its aim the fulfillment of humanity: full development of the capacities and powers of each human individual to question preconceived opinions, prejudices, and ‘given facts’, and intentioned participation in the shaping of one’s own and joint living conditions. Following this line, the Norwegian philosopher Jon Hellesnes (1976) characterises Bildung as a kind of socialisation that is different from pure adaptation to existing conditions, but instead ‘…emancipates people to become political subjects – and not just the objects of control and guidance exercised by other people’ (Hellesnes 1976, 18).

Seen from a philosophical point of view, the main point of action competence is the idea of action. Inspired by analytic philosophy concerning explanation and understanding (Taylor 1966; von Wright 1971) and philosophical psychology (Kenny 1963; Peters 1958; White 1968) as well as pragmatist analyses (Bernstein 1971) and critical theory (Habermas 1968), the point can be made that human action differs from, or is a special kind of, mere behaviour and activity. Not only are actions intentional, the intentions, motives and reasons all have an intrinsic relation to the actions. So it will be a different action if the intention turns out to be different (Schnack 1977).

In this sense, it is our forte as human beings to be able to act, given the links to associated humanistic concepts such as personhood, experience, responsibility, democracy, and education – insofar as we take education to be more than schooling, training or manipulation.

In relation to problem-oriented environmental and health education, the notion of action is qualified by the criterion that actions should be addressed to solutions of the problem and should not just be activities as a counterweight to academic tuition. Not that activity is a bad thing or not good enough in certain situations, but the action competence approach emphasises the epistemological point that action-oriented teaching–learning has specific, important learning potentials. In this way, the notion of action in action competence is heavily loaded, philosophically and educationally. Actions are a special kind of behaviour: (a) qualified by the intentions of the agent, and in principle, not by someone else (which again challenges current discussions of participation in education discussed elsewhere in this collection; see Læsøe this issue); (b) qualified by being conscious and purposive, seen from the point of view of the agent, which also challenges the discussion of success criteria in education (see later). This latter perspective on the notion of action also means that the action must be addressed to solving the problem or changing the conditions or circumstances that created the problem in the first place. In adding this aspect to the action concept, this can be qualified in relation to the concept of activity. Hence, actions can be seen as specific activity.

The status of action competence as an educational ideal and its utopian goals means that it will never be possible to say: ‘now it is not possible to be more action competent’. In this sense there is a parallel to the notion of sustainable development in that an objective reachable stage does not exist. In relation to sustainable development it is evident that you cannot satisfy the needs of people who live now without radically changing the conditions for the people to come for a number of reasons, not least that the satisfaction of human needs in specific (cultural) ways develops and changes the needs themselves. In the same way is it not possible to become the
ultimate action competent individual because human actions will always produce intended and unintended changes and conditions that give rise to a quest for new capabilities. In this sense, the striving for qualifying one’s action competence is a never-ending process.

The action competence approach seen in this Bildung perspective will be discussed further in a later section. However, a central element of the approach is to be critical of moralistic tendencies, preconceived ideas and hidden agendas when working with environmental education, health education, ESD or other teaching–learning sequences that deal with societal issues involving conflicting interests. Rather, the action competence approach points to democratic, participatory and action-oriented teaching–learning that can help students develop their ability, motivation and desire to play an active role in finding democratic solutions to problems and issues connected to sustainable development that may even consist of the aforementioned tendencies, ideas and agendas.

From the very beginning, the action competence approach has been critical towards any reductionistic tendency in what has been called the first generation of environmental education (Breiting 1993), where the goal of many of its campaigns and programmes is to change people’s, including pupils’, behaviour (Jensen and Schnack 1997). But the newcomer to the international agenda, ‘education for sustainable development’, must also be critically discussed when seen from the philosophical perspective of the action competence approach.

The notion of sustainable development, as introduced in the Brundtland Report, ‘Our Common Future’ (World Commission on Environment and Development 1987), and in ESD in particular, does not solve any questions. On the contrary, it leads to a lot of dilemmas. As the dilemmas are sound, this is a good thing, though you need to be on your guard: the more politically correct the rhetoric around sustainable development becomes, the more we may see a tendency to (mis)use ESD as a means to spread specific (political) viewpoints and interests. The point is then that in democratic education, as in taking an action competence approach, this should be analysed as part of the ideological criticism that continuously runs through the teaching–learning process.

Thus, we can start by observing that the whole idea behind ESD seems to be very much in line with the action competence approach. To treat environmental issues and health issues as not only interrelated, but also fundamentally connected to economic, social, cultural and political aspects (as happens in ESD) is in full harmony with the action competence approach, and aligns well with its broader insistence of understanding environmental problems as societal issues constituted by conflicting interests. At the same time, ESD without a democratic action competence perspective very easily becomes dogmatic and moralistic.

How, then, does the action competence approach developed within the field of environmental education fit into the pedagogy of ESD? This, of course, depends on the interpretation of the two concepts and the relationship between them. The research literature advocates highly different perspectives regarding the relationship between ESD and environmental education. Some claim that ESD is a different discipline to environmental education (Hopkins and McKeown 2003), some argue that ESD is replacing environmental education (Tilbury and Cooke 2005; Fien 2001), while others that ESD is considered a new paradigm on education (Sterling 2001). The different conceptualisations are in some situations, perhaps, used interchangeably to describe similar work, while in other situations they are expressions of more profound differences in focus and approach. Some commentators find this
not only acceptable but actually stimulating (Scott and Oulton; in Summer, Corney, and Childs 2004) – and of course it is, even if it does complicate complex matters further.

In some studies in Sweden, for example, a democratic approach to environmental education is sometimes called ‘pluralistic environmental education’ and sometimes simply ‘education for sustainable development’ (Sandell, Öhman, and Östman 2004; Öhman 2004). This may, of course, be a terminological problem in some respects, but at the same time it illustrates, redolent of with Arjen Wals’ (2006) arguments, among others, that the central point in the action competence approach is that it is the ‘education’ that matters the most. Environmental education, health education, and ESD are not the same, as they differ in their main substantive foci. More important, though, is the distinction between dogmatic, manipulative, and moralistic forms of these ‘educations’ on the one hand, and critical, open-ended, pluralistic and democratic forms on the other.

As mentioned previously, the action component is the most important part of the conception of action competence. However, not least because of the increasing international use of the word ‘competence’ in the past decade, the competence component of the notion has a new controversial status that must be explored in connection to the action competence approach.

The ‘new’ interest in competences

As stipulated earlier, the word competence was originally used to demonstrate that we were not only talking about action as different from behaviour, habit, activity and movement, but the educational ambition was, in a democratic perspective, enlightened and qualified action (Schnack 1994, 2003).

In this section we will explore different recent conceptualisations of ‘competence’ in order to discuss the added value that can be derived from them, and we will suggest dimensions of the notion that we can identify as not in concert with the original concept of competence in this approach.

The word competence was not overused at the time that ‘action competence’ was introduced, and it served the purpose of pointing to the need for relevant knowledge, will, skills and not least critical reflection, including values clarification. However, from the 1970s onwards, the notion of qualifications was dominant in official educational texts, and it was the keyword in studies of educational economics. ‘Qualifications’ referred most often to knowledge and skills necessary for the workplaces and/or were asked for in industrial development. You need ‘qualifications’ to do a good job, and both trade and industry, and society need people with specific qualifications. The educational system has a role to play here. This is, however, not the primary perspective for a democratic environmental and health education.

Talking about general education in the light of emancipation and democratic participation, a broader, softer and heavier concept was required. ‘Competence’ was usable, in part because it is a dispositional word, which can counterbalance the sometimes too here-and-now, violent, activity associations to ‘action’. Action competence is, after all, located more between the ears than in the fists.

From the late 1990s, the competence discourse suddenly engulfed the international educational rhetoric. As with so many other buzzwords it comes up with several overlapping, and often very unspecific, meanings and connotations. Stefan Hermann, a Danish educationalist, stated in a jocular manner that:
...if you are waiting for a stable and simple definition of the concept, you are waiting on the wrong platform for a train that never comes. To get a good grip of the concept of competence seems to be like putting an armlock on a piece of toilet soap. (Hermann 2005)

A Human Resource Management-related use of ‘competence’

From the beginning though, competence has also been intensely used in management cultures, especially in so-called Human Resource Management theory. Here, the focus on knowledge and skills has almost vanished without a trace in favour of an emphasis on personal virtues like creativity, flexibility, adaptability, and so on, treated in a rather technical and individualistic manner with effectiveness as the main value. Transfer to education has been heavily criticised and is of course problematic, not least because theories and concepts from academic disciplines are highly situated and primarily qualify the discipline’s students’ often naive and uncritical experiential kinds of knowledge; but also because general education at least should have higher ambitions than promoting efficiency or effectiveness. There are, however, uses of the notion that are more interesting from an educational point of view.

Parallel developments to – or perhaps better, as a consequence of – the emergence of postmodern ideas and ways of understanding societal conditions and characters of individuals have repositioned and recast our understandings of competence. As argued by theorists such as Anthony Giddens, Thomas Ziehe and Niklas Luhmann, in this paradigm focus is on individualisation and reflexivity in relation to individuals, who are embedded in a reality characterised by complexity, uncertainty and risk. In this context, individualisation refers to the transition from collective and social-cultural determinants of behaviour and identity towards more diversified understandings and choices of preferred lifestyles. Within such postmodern perspectives, the individual is called upon to be ‘project manager’ of their own life, to facilitate self-development and realise themselves in a society which they consider to be preference-regulated rather than norm-regulated (notes made by the author on a presentation by Ziehe on 14 March 2006). Criteria for choice of actions among postmodern individuals are first and foremost derived from and connected to the personal life world (Ziehe 2001).

The action competence approach is somewhat different from an individualistic perspective like this. Of course, the approach is focused on qualifying the virtues of individuals; competence is always linked to the individual. However, the notion of competence in the action competence approach is different from the aforementioned approach owing to the strong emphasis on scrutinising and developing criteria for action that are jointly communicated, discussed and accepted when dealing with issues that go beyond the immediate sphere of the individual person – for instance, sustainability issues. The rationale for the selection of criteria for action is thus not an intrasubjective, but rather an intersubjective matter.

In an educational context, qualifying students’ competence to take action is thus basically a matter of organising learning situations which make it possible for students to transform themselves into critical, democratic and political human beings. It is a question of helping the students become autonomous persons, who at the same time are not ‘idiots’, an allusion to Ancient Greece where people who lived ‘privately’ and took no part in the affairs in community were called ‘idiots’ (Schnack 2000). The point is that while the postmodern perspective seems to favour the forming of ‘private’ people who base their lives on individualistic decisions and choices, the action
competence approach seeks to form a basis for decisions and choices that are connected to community and dialogue.

Among the many other contemporary uses of the word competence, two may be of special interest in relation to the conception of action competence. The first is linked to the discussion of school subjects, the other is of a more general character.

A subject-related use of ‘competence’

Subject-oriented curriculum theorists have trouble with a common definition of the content of subjects. Normally, school subjects are defined by lists of syllabi, required reading, and examination requirements. This tradition has been criticised for two things in particular: (a) it represents a reductionistic view of the subject followed by a not very ambitious interpretation of the subject matter in the teaching–learning situation; (b) it makes it too difficult to compare the different forms of manifestation of a subject at different levels and in different parts of the educational system (Niss 1999).

A competence-based description of the subjects has been proposed as a way out of these difficulties by people working with the subject of mathematics (Niss 1999, 2003; Blomhøj and Jensen 2003). In Denmark, at least, this proposal was followed by similar proposals for the other main school subjects, stimulated by the Ministry of Education. In this movement towards competence descriptions, the politicians, who for a couple of years had talked about the need to improve the academic level in the school, obviously saw an opportunity to call it a ‘new academic standard’. In this way it was easier for them to refute the accusation that the neo-liberal idea of quality in education was simply a reactionary step back to the traditional ‘mechanical grind’.

The different subjects, of course, apply competence descriptions in quite different ways (Busch, Elf, and Horst 2004), even if mathematics was taken as a paradigmatic case. The main point, however, is a change in focus from an enumeration of knowledge and skills to a deeper answer to the question: What does it mean to master mathematics/language/science…? And the answers consist in pointing to the competencies that are characteristic for the subject; for example, posing and solving mathematical problems, modelling mathematically, and so forth.

Inspired by the Danish psychologist Per Schultz Jørgensen (1999), Blomhøj and Jensen (2003) express the perhaps most comprehensive definition of competence as: ‘someone’s insightful readiness to act in a way that meets the challenges of a given situation’ (Blomhøj and Jensen 2003, 126). As the authors point out: (a) competence is headed for action; (b) all competencies have a sphere of exertion; and (c) competence is an analytical concept with a subjective side; i.e., it belongs to someone and has a social and cultural side: ‘...the degree to which some actions "meet the challenges" is always relative to the surroundings, adding meaning and legitimacy to the actions’ (Blomhøj and Jensen 2003, 127).

These two perspectives correspond well with the interpretation of ‘competence’ related to the action competence approach. Here, the competence dimension not only points to the handling or mastering of qualified reflections that can facilitate conscious and purposive actions, addressing the solution to the problem at stake. It also underlines that a person in seeking legitimacy for an action must go beyond private, individualistic interests and wishes and must involve ‘others’ in the choice, if the ‘challenges’ presuppose collective decisions.

At the same time, the perspectives show that the rhetoric of competence does not need to be as ambiguous as it often is, and they shed light on some important aspects
of the general notion of competence. In relation to environmental education, health education, ESD, peace education, and other fields of open, cross-curricular education, the action competence approach will warn against reduction into specific subjects. Nevertheless, this does not mean that academic knowledge from all kinds of subjects is irrelevant – quite the opposite. The learning accrued from the school subjects will probably appear more tempting and powerful in a problem-based and action-oriented education if they have been described and comprehended in this form of competence language.

A general use of ‘competence’

The next example of contemporary use of the word ‘competence’ is the DeSeCo (Definition and Selection of Competencies) project under the auspices of the Organization for Economic Cooperation and Development (OECD), which is quite general and not related to specific subjects. From its inception in 1997 to the final report (Rychen and Salganik 2003), a large number of experts from many academic disciplines and countries contributed to answering whether it is possible to define, select and justify a finite number of ‘key competencies for a successful life and a well-functioning society’.

The project not only looked for consensus, and synthesis, among the many viewpoints, but also for a consensus of the relationship between what is a good life for the individual and what is ‘needed’ by society. In spite of this, the results are not insipid or commonplace (though these are not what we are going to discuss here). Aside from the three times three sets of selected key competencies, the project comprises interesting analyses and discussions of the notion of (key) competence as used in the work. Inspired not least by the conceptual analysis of Franz E. Weinert (2001), the project decided to follow his five pieces of advice in his ‘pragmatic conclusions’ concerning the use of the concept of competence, in the hope of not finding ‘themselves helplessly lost in Paul Valery’s Dilemma: Everything that is simple is theoretically false, everything that is complicated is pragmatically useless’ (Weinert 2001, 63).

The concept of competence used in the project is, thus, characterised by being functional or demand-oriented and contextualised. In summary, it says that:

…the underlying model of competence adopted by DeSeCo is holistic and dynamic in that it combines complex demands, psychosocial prerequisites (including cognitive, motivational, ethical, volitional, and social components), and context into a complex system that makes competent performance or effective action possible. Thus competencies do not exist independently of action and context. Instead, they are conceptualised in relation to demands and actualized by actions (which implies intentions, reasons, and goals) taken by individuals in a particular situation. (Rychen and Salganik 2003, 46–7)

This does not contradict the concept of competence in the subject-related project of, for example, mathematics, though neither the context nor situation nor the competence itself is defined in relation to subjects, even if some of the (particularly cognitive) prerequisites may very well have their roots in academic subjects. This more comprehensive idea about the contexts and the demands paves the way for what, in the action competence approach, has been called ‘didactics, or curriculum, of challenge’ (Schnack 1995b), where the demands are understood as challenges for the democratic processes in relation to, for example, health, environment, peace, equity, and sustainable development. Moreover, the conceptualisation of the psychosocial structure of a
competence is in line with a model discussed in the action competence approach, where important components of action competence have been organised in cognitive, social, value-oriented, and personal dimensions (Mogensen 1995; Breiting et al. 2009).

However, one important difference between the concept of competence in DeSeCo and the action competence approach is that ‘action competence’ is not viewed as a countable word. Strictly speaking, you cannot speak of an action competence or action competencies. Action competence is an educational philosophical ideal, an overall perspective. From this viewpoint things will look different than from a behavioural change viewpoint, for example. Through the spectacles of action competence, you may look for and ask for and measure different (key) competencies, but action competence will not be one of them. Action competence will be the lens that makes some types of knowledge, skills, qualifications, competencies, abilities, and action readiness more educationally important and valuable than others.

Concluding this section of the ‘new’ interest in competences, we initially find that the interpretation of ‘competence’ differs from the one connected to individualistic-oriented Human Resource Management theories owing to their technical interests in effectiveness and focus on *intrasubjective* criteria for action-taking. Next, we have acknowledged the value of a subject-oriented notion of competence in that it points to a shift in curriculum thinking from enumeration of isolated knowledge and skills to handling or mastering of knowledge, reflection, and action that meets the challenges of a given situation. Finally, the DeSeCo perspective gives value to a notion of competence that, among other things, paves the way for a ‘didactic, or curriculum, of challenge’ in pointing to the need for identifying, discussing and taking a stand on challenges in relation to sustainability issues in the teaching–learning process. The point is that competencies do not exist independently of the context to which a potential action will respond, but are co-determined by them. We find the two last perspectives on the notion of competence relevant and in harmony with the action competence approach as both of them help students to be neither solely ‘objects of control and guidance exercised by other people’ nor ‘idiots’ who take no part, but instead contribute to qualifying their own process of Bildung. At the same time it remains a category mistake (Schnack 1994) to talk about ‘action competence’ as one among other key competences.

**The ‘new’ interest in evaluation, indicators and quality criteria**

It would hardly be wrong to claim that since the introduction of modern information technology, nothing has been higher on the agenda in the educational system than the quest for evaluation. This development challenges the action competence approach, and we will argue that a certain perspective on evaluation and evaluation strategies is needed when considered in relation to the action competence approach. In the following sections, we will explore this issue, taking into account the close relationship between the action competence approach and the philosophy of Bildung.

To begin with, the strong focus on evaluation gives rise to at least two central questions: (1) will it make sense to ‘evaluate’ whether students have become more ‘action competent’ by taking part in an ESD project?; and (2) is it at all possible to operationalise the notion in order to ‘measure’ its constituting elements? Following the previous discussion on competences, the easiest (and perhaps wisest) answer to both questions is ‘no’. This is evident because action competence is an educational
ideal that, in principle, should be seen in relation to and evaluated against an unpredictable future, which by definition is impossible to measure here and now. Thus, it will make no sense to evaluate action competence per se and especially not when evaluation, in a summative perspective, asks ‘has this and that been learned?’ However, evaluation can also have a formative character in that it promotes further learning. Evaluation will, in this perspective, particularly focus on the learning conditions that, at the moment, are expected to develop and qualify action competence.

Indicators are becoming one of the most commonly applied and promoted evaluation strategies in sustainable development and ESD (Reid, Nikel, and Scott 2006). Tilbury and Janousek (2006) identify seven comprehensive indicator programmes for monitoring and evaluating ESD across Europe, North America and the Asia-Pacific region – for example, the United Nations Economic Commission for Europe project, the UK Strategy for Sustainable Development ‘Securing the Future’, and the United Nations Educational, Scientific and Cultural Organization/International Union for Conservation of Nature Asia-Pacific Decade of Education for Sustainable Development Indicators Project. Despite this global focus, it is argued that recent experiences in developing indicators have been limited in scope and many are still in their early stages (Tilbury and Janousek 2006, 5) reflecting the complexity of the mechanisms and processes in ESD, for example, whether the information is summarised by an outsider or by the participants themselves. This is evidently both because of the problematic, contested and discursive nature of sustainable development and ESD, and the difficulties in de-structuring or operationalising education itself into measurable elements.

Different suggestions for the typology of indicators are put forward in the literature. For instance, Sollart (2005) speaks of ‘status’, ‘communicative’, ‘facilitative’ and ‘result’ indicators; Tilbury and Janousek (2006) mentions ‘status’, ‘facilitative’ and ‘effect’ indicators, while Sterling (in Tilbury and Janousek 2006) distinguishes between ‘mechanistic’ and ‘holistic’ indicators. In the first place, this suggests the somewhat contested nature of indicators that makes it difficult to settle on a single approach that aligns with ESD. It also demonstrates that indicators can be relevant to more than one purpose in seeking to meet a number of needs in relation to a learner, an institutional and even a system level, by focusing on and guiding, for example, assessment, learning, reporting, planning, policies and intervention.

**Indicators in a Bildung perspective**

As mentioned previously, the action competence approach is essentially a matter of Bildung which makes the concomitant approach to ESD neither pure adaption to certain sustainable values, nor training in subject matters in the field of economics, environment and social science. Inherent in the Bildung perspective is that fixed knowledge, solutions and correct ways of behaviour within these areas are not specified or given beforehand by experts, organisations or politicians who pursue certain interests. Essential to ESD from an action competence approach is to take guidance and advice from them seriously, but also to challenge critically such positions on sustainable development by learning in an open-ended rather than a prescriptive way the kinds of knowledge and values that lie behind them. In doing this, one key role for ESD in an action competence approach becomes that of developing the students’ ability, motivation and desire to play an active role in finding democratic solutions to problems and issues connected to sustainable development. The challenge for ESD in
this perspective is to identify what kind of learning can qualify the learners’ sound choices in a reality that is often characterised by complexity and uncertainty, and which also motivates them to be active citizens who are able to set the agenda for changes if necessary. In this sense, sustainable development is more a matter of democratic citizenship than compliance and individual behaviour – and ESD is in a never-ending process of learning about how to qualify the participants to cope with this citizenship role in a sensible way.

The notion of indicators must reflect this Bildung approach. First by acknowledging that indicators cannot be seen as a mechanism that aims to prescribe and test the ‘correct’ content (knowledge, skills and values) in ESD, but rather must be formed in ways that stimulate and qualify students to become future citizens, who can make sound judgements, think critically and independently, and who can and will play an active role. To proxy adequately for such virtues, indicators must focus on both individual and institutional learning, i.e., teaching and learning processes as well as school policy and organisation, because the process of Bildung takes place in an educational context in which ‘development’ both refers to students as individuals and to the school as an organisation (staff development, school management, community cooperation, networking, etc.). Secondly, the process of working with indicators in this perspective is a dynamic and never-ending process, since the process of Bildung is a continuous process.

From an evaluation perspective, the action competence approach calls particular attention to self-evaluation, which provides an opportunity for the participants in the education process (teachers, students and other stakeholders) to assess their own strengths and weaknesses in contrast to the evaluation done from ‘above’ by outsiders with a summative purpose. Thus, indicators and the use of them within the action competence approach does not correspond with a position which merely considers teachers passive ‘recipients’ of external interpretations of what is or what is not supposed to be ‘good’ ESD. The focus is on indicator development that acknowledges the position that indicators should be co-generated together with the practitioners and, as such, should be dynamic and open for interpretation and change. This points to the epistemological value of working with ESD indicators, in that the participants in the education process themselves must be given the opportunity to discuss and contribute to the development of their own set of indicators that, according to them, promote good ESD. By doing this, they not only reflect on what to learn (or teach) and to what extent this learning seems to promote sustainable development or not, but also the epistemologically relevant idea that they learn something about what they learn when they learn (or teach). It is, for instance, valuable learning that takes place for both teachers and students when they, through an action research approach in the local community, realise that participation, involvement in critical investigations, and action-taking, can contribute to enhancement of sustainability within a specific area.

Summarising this section on indicators, we find that a desirable indicator typology that is in concert with the action competence approach should include quality criteria that enable and promote learning and innovation by focusing on enhancement rather than performance and control. The criteria should reflect the democratic values that ESD seeks to promote, rather than focus on ‘correct’ knowledge and behaviour. They should be co-elaborated by teachers and other stakeholders rather than directed ‘from above’, and they should reflect institutional as well as individual learning. Work on developing indicators should be in concert with a relevant question asked by Vare (2006) quoted in the stimulus material (Reid, Nikel, and Scott 2006) prior to a seminar.
on indicators for monitoring and evaluating ESD: ‘Can we build an approach to “indicators” that promotes reflection on practice rather than simply hitting targets so that the shape of our ESD emerges, through practice, throughout the education system?’

The ENSI proposal on quality criteria
There is an indicator development project that follows the line of the action competence approach. It has been carried out within the frames of the ENSI network, and the publication Quality Criteria for ESD-Schools (Breiting, Mayer, and Mogensen 2005) proposes a non-exhaustive list of ‘quality criteria’ for schools that wish to work on developing ESD. The purpose of the quality criteria set, which is now translated into 17 different languages, is to provoke thinking and action regarding quality enhancement rather than quality control. The notion of ‘quality criteria’ can, in this context, be considered a ‘translation’ of a shared set of stakeholder values prepared in a transparent manner with a practical function. They are considered starting points for reflections, and are aimed at facilitating discussions within the educational context, to promote the view that developing quality criteria is a never-ending process involving ongoing criticism, evaluation and revision by the stakeholders.

To illustrate with an example from this publication how reflections on quality criteria/indicators can reflect the Bildung perspective in the action competence approach, we turn to students’ work with ‘conflicting interests’. The very notion of using conflicting interests as a starting point for the study of environmental problems has been central in many publications that deal with the development of an action competence approach in Denmark (Breiting et al. 2009; Jensen and Schnack 1997; Schnack 1995a, 1998; Mogensen 1997), in Nordic countries (Sætre, Kristensen, and Christensen 1997), and in the ENSI network (CERI-OECD 1991; OECD 1994; Elliott 1999). Many researchers also consider this approach to be highly relevant in the field of sustainable development (Breiting 2007; Lundegård and Wickman 2007; Robottom 2007; Schnack 2008) because issues within sustainability share common characteristics with environmental problems in that they are, by definition, essentially contested. Their meaning as issues belongs to differences of opinion among people with differing interests on development that reflect different values. Both environmental and sustainability issues are human constructs within a certain political, social and cultural context.

By working with conflicting interests in relation to sustainable development, the participants are encouraged to reflect on how much the following four quality criteria make sense for them, or whether they should be revised, and how they contribute to a combination of students’ critical thinking with Giroux’s (1988, 134) ‘language of possibility’:

- Students work with power relations and conflicting interests, e.g., in the local situation, between countries, between future generations.
- Students are encouraged to look at things from different perspectives and to develop empathy by identifying themselves with others.
- Students are encouraged to present arguments for different positions.
- Students are encouraged to look for examples that are useful and fruitful in other situations, in opportunities and alternative actions.

By dealing with conflicting interests as a means to combining critical thinking with the language of possibility, a central point within the action competence perspective...
is underlined, namely that for an individual to be a critical human being does not mean that the individual must be negative and sceptical of all and everything in a deterministic way. A critical thinker is not a ‘no’ man but a human being who strives to combine the critical process of reflection and inquiry with an empathetic and optimistic vision of potential, a search for solutions and a positive direction. The language of possibility underlines that the critical thinker does not look for limits and restrictions, but searches for and is inspired by ways that have been successful and fruitful for other cultures, in other periods of time, and in other situations, in a creative and open-minded way. Thus, by focusing not only on what may be ‘wrong’, but also on what might be ‘right’, critical thinking combined with a language of possibility gives human beings personal and collective capacities that can be transformative and point to new vision of the future, all of which is much needed for sustainable development to happen (Breiting, Mayer, and Mogensen 2005).

Perhaps by working with indicators in a way which focuses on quality enhancement rather than control, and by involving the stakeholders in reflections and revision of the criteria which constitute or define the indicators, a basis can be formed which contributes to reducing the gap between ideology and reality in relation to ESD. In 1987 (and reprinted in 2007) Stevenson claimed that there has been a pronounced discrepancy between the problem-solving and action-oriented goals associated with the philosophy of environmental education and an emphasis on the acquisition of environmental knowledge and awareness in school programmes (Stevenson 2007) – now referred to as Stevenson’s gap (Barratt Hacking, Scott, and Barratt 2007). In connection to ESD, a similar gap may appear between the rhetoric and philosophy behind ESD and the reality of practice in schools, unless measures are taken against this, for instance by giving the stakeholders ownership in the development of indicators.

Conclusion
The action competence approach was developed in relation to environmental education and health education, but it fits radical and democratic interpretations of ESD as well. It is an educational ideal, and the key to the notion is the understanding of ‘action’. This part has always been challenged from behaviouristic viewpoints, there is nothing new in that. However, the challenges from the expanding use of the notion of competence and the exploding interest in evaluation, indicators and quality criteria are relatively new. In both cases there are nuances and some of the less management-like and positivistic interpretations are more in line with and potentially useful to the critical-constructive educational conceptions of the action competence approach.

Note
1. The Danish School of Education in Copenhagen has gone through various incarnations: the Royal Danish School of Educational Studies, the Danish University of Education, and most recently, it has become the Danish School of Education, University of Aarhus.

Notes on contributors
Finn Mogensen is PhD and Assistant Professor at the University College West, Esbjerg, Denmark. He has been a member of the Research Programme for Environmental and Health Education, Danish School of Education, University of Aarhus since 1991. His research focuses on educational aspects in connection to the concept of action competence and to environmental
education and education for sustainable development more generally. Furthermore, he has participated in several national and international research programmes and has been a member of the steering committee in the OECD/ENSI network. He lectures in environmental education, research methodology and pedagogy at bachelor’s and master’s levels.

Karsten Schnack is Professor in Educational Theory and Curriculum at the Danish School of Education, University of Aarhus, Denmark. He is a core member of the Research Programme for Environmental and Health Education, and his main research areas in this respect are: action competence as an educational ideal, education and democracy, ideologies in education for sustainable development, environmental and health education, comparative curriculum research and participation and action research.

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