# Comparative Disciplinary Didactics 4

Ellen Krogh & Sven-Erik Holgersen (eds)

**English summaries** 

## To know or to pretend to know

By Ingrid Carlgren

This article discusses two issues. The first issue concerns the implication for the content of education, as well as for instructional practice, of ideas regarding visible learning and evidence-based practice. This is discussed in relation to the syllabuses in the latest Swedish National Curriculum. These are organized around, on the one hand, specific capabilities that the students are expected to develop within the different school subjects and, on the other hand, specified knowledge requirements, i.e. what the students must do in order to gain different marks. I argue that the combined effect of ideas about visible learning and evidence-based practice, as well as self-regulated learning and the prescribed knowledge requirements in the national syllabuses, implicates a "backwards pedagogy" where the teaching is based upon the expected outcome. This, in turn, implies a strong focus on how to perform rather than on the knowledge to be acquired. The result may be a kind of pseudo-knowledge; i.e., the students are trained to appear knowledgeable.

The second issue concerns the transformation of educational objectives (formulated as capabilities) into a content and teaching practice in accordance with a perspective of "Bildung". I suggest a focus on designing teaching practices that represent different knowledge practices and cultures as represented by different school subjects. Cultures of knowledge can be seen as different ways of knowing as well as different ways of generating new knowledge. The epistemological practice turn transforms the concept of Bildung – enhancing the significance of teaching as representing different knowledge practices.

*Keywords*: Bildung, capability, competence, knowing, epistemological practice turn, backwards pedagogy, curriculum reform.

## Learning goals and comparative writing didactics

By Peter Hobel

This article discusses learning goals in upper secondary schools in Denmark. Unlike in primary and lower secondary schools, in upper secondary schools, learning goals are not standardized. The article raises the following question: In a Bildung-perspective, is it advisable that teachers are responsible for determining subject learning goals? The article focuses on written work within school subjects and examines how teachers in upper secondary schools position evaluate explanation-

and argumentation-sequences in texts written by the students. The study shows that the teachers place great emphasis on students' ability to reproduce subject content in written form. Knowledge production, the development of personal stances and suggestions for taking action are not prioritized to the same extent. Building on this finding, the article concludes that the formulation of learning goals on all these levels is a necessity. This has to be done by teachers in the context of teaching academic writing. Finally, the article proposes linking subject-specific learning goals and Bildung-oriented goals, based on the theory of expansive learning.

*Keywords*: learning goals, Bildung, writing acts, explanation, argumentation, subject orientated didactics, writing didactics.

## Ideals and realities in goal-oriented teaching

By Jens Dolin

This article considers the implementation of a goal- and competence-oriented education in the natural sciences. In a positive light, it can be seen as a reinforcement of a learning-oriented approach in teaching or, from a more negative perspective, it can be seen as a natural step in attempting to intensify a test and measurement culture in the educational system. By seeing current curriculum initiatives like the Danish compulsory school's (*Folkeskole*) New Common Objectives in a wider educational policy context, the article illustrates the tension between an idealistic and a more performance-oriented understanding of the interventions.

A (competence) goal orientation is necessarily based on the possibility of assessing competences in a valid and reliable way which involves the ability to establish a learning progression for the various competences. This is a focus area of the EU research project ASSIST-ME (Assess Inquiry in Science, Technology and Mathematics Education) with one of the research questions being: Is it possible to work goal-oriented? In other words, are teachers in the Danish school able to assess their students' degree of goal attainment and to use the obtained knowledge (formatively) in their teaching, and which consequences would it have for the teaching to try to do this in a Danish context? The article describes this work by focusing on teachers' difficulties with defining criteria for abstract abilities, such as a modeling competence, in specific scientific disciplines. The article also discusses whether teaching that is highly goal-driven following some defined progression steps promotes an instrumentalisation of teaching.

*Keywords*: goal orientation, assessment, progression, competences, performance-approach goals, learning goals.

### Is Danish (still) a Subject Focused on Bildung?

On Backgrounds and Futures of the Danish Curriculum Reform By Jeppe Bundsgaard

The new Danish national curriculum from 2014, called Simplified Common Standards (Forenklede Fælles Mål, FFM), exemplifies a general international trend of basing school curricula on learning outcomes and key competences. However, this reform has been the subject of a variety of criticisms. The article begins with a discussion of these critiques and argues that FFM is in keeping with the German and Scandinavian tradition of Critical Constructive Didactics, as expressed in the work of Wolfgang Klafki. The second part of the article presents a case study from a research and development project focused on digitally supported learning outcome oriented teaching and learning. This case study shows how working with FFM in a professional development context has given new insights by providing teachers opportunities to discuss teaching practices and learning standard orientation with colleagues and educational consultants.

Keywords: Curriculum reform, Danish Language Arts subject, learning outcomes, competence-based curriculum.

# Teaching by objectives and different concepts of learning goals – static and dynamic learning goals

By Morten Misfeldt & Andreas Lindenskov Tamborg

The new national curriculum in Denmark, "Forenklede Fælles Mål", was implemented in schools in 2015/2016 and is characterized by a foregrounding of learning goals. It includes more detailed stipulations of what students should learn, while leaving decisions regarding classroom activities to the teacher. But what happens when explorative teaching, which emphasizes the importance of uncertainty and the presence of many valuable learning opportunities, meets increased focus on students' learning outcomes? In this article we answer this question by describing "The Goal Arrow", which is a digital tool developed in the projects *Creative Digital Mathematics* and *Digitally Supported Learning Goals*. Based on the project *Digitally Supported Learning Goals*, we describe how a

teacher's concepts of learning goals – as either static or dynamic - resonate with the criticisms which goal-oriented education has been met with. We then frame the teacher's conceptions of learning goals within pragmatic education philosophy and through the presentation of a case. The article concludes with a discussion of how tools can be used to support goal-oriented teaching from a pragmatic perspective.

Keywords: Goal-oriented teaching, teacher agency, teachers' understandings of objectives, mathematics education, learning management systems.

# A didactic argument for learning objective oriented teaching – reflections on Carlgren's and Hobel's articles By Ane Qvortrup

The article looks at the increased focus on learning objectives in education from a didactic perspective. This leads the article through a historical outline of developments and expansions of the understanding of didactic choices due to increased contingency on the teaching dimensions represented in the didactic triangle. Three topical themes within didactic thinking in Denmark and the remaining Nordic countries are identified: 1) The understanding of didactics as a science characterised by two layers of reflection; 2) The increased dialogue between the traditions of didactics and curriculum research; 3) The attention to teaching based on learning objectives. The article argues that the didactic basis and language for learning objective oriented teaching must be further developed, and it identifies the articles in this special issue of *CURSIV* as key contributions to this development.

*Keywords*: learning objectives, learning objective oriented teaching, didactics, curriculum.

## Learning goals in a literacy perspective

- A commentary on the articles by Ingrid Carlgren and Peter Hobel By Jesper Bremholm

This article is inspired by the apparent contradiction between the articles by Ingrid Carlgren and Peter Hobel in this issue of *CURSIV*. Learning goals are on the one hand (Carlgren) depicted as the cause, and on the other hand (Hobel) as the solution to the same educational problem; namely teaching that is not sufficiently qualified with regard to the treatment of subject content, and that

does not, as it should, address aspects of *Bildung*. In the article, this contradiction is discussed from the perspective of literacy. The article argues that, despite the apparent contradiction, Carlgren's and Hobel's opposing positions ultimately stem from the same, more fundamental problem: an insufficient understanding of disciplinary literacy on the part of the teachers. This argument is presented in three parts. In the first part, different concepts of literacy are presented. The close connection between literacy and learning is explored and related to one of the essential points of disciplinary literacy: that learning and knowledge acquisition in a discipline is inseparable from developing literacy in that discipline. In the second part, Carlgren's and Hobel's opposing positions are discussed and dissolved based on the points made in the first part. In the third part, the literacy perspective is broadened and related to the so-called domain paradox. It is argued that this paradox represents a more fundamental challenge to teaching than that posed by learning goals.

*Keywords*: literacy, disciplinary literacy, content area literacy, learning outcome, learning outcome-based teaching, visible learning.

# The new ministerial learning goals and the concept of *Bildung* from the perspective of the foreign language subjects

By Susana S. Fernández

The article examines, from the perspective of foreign language subjects, the new simplified learning goals for primary and lower-secondary school subjects as well as the syllabi for upper-secondary school established by the Danish Ministry of Education and focuses on the concept of *Bildung* and the way it can be fostered in the present educational framework.

There has been a noticeable change in the ministerial discourse from an input or content orientation to an output- and competence-oriented, learner-centered description of objectives. Such a focus on competences and learner-centered teaching is not a scary new thought from a foreign language pedagogical perspective since the concepts of "communicative competence", and later also "intercultural communicative competence", have defined foreign language pedagogy for a number of years. Particularly the latter is central to the potentially personally enriching experience that foreign language subjects can contribute to in the education of every child. Therefore, the question is whether the framework established

by the ministerial regulations promotes the development of such competences. A risk attached to the detailed attention to output and visible learning goals is that the competences which are less easy to grasp and assess might be relegated to a peripheral position relative to the more concrete goals that can and will be measured at the final exam. Some Danish studies seem to indicate that finding time and resources for the less tangible competences is a real challenge that many foreign language teachers face.

*Keywords:* learning goals, *Bildung*, competence, foreign language subjects, evidence-based teaching.

## Consequences of competences – in the light of social studies teaching and learning

- on the apparent contradiction between "Bildung" and competences By Anders Stig Christensen

In this article, I address two critiques of the use of the concept of competence in education, especially in competence-oriented curricula. Michael Young and others have criticised competence-oriented approaches to curricula for neglecting what he calls the "powerful knowledge". Against this I argue that when competences are expressed in accordance with the European qualifications framework (EQF), knowledge and skills are integral to these competences and there is not necessarily a conflict between a focus on powerful knowledge and on competences in this sense. Another critique is that the orientation towards competences is a departure from the tradition of education understood as "Bildung" in German and Danish pedagogical traditions. Against this I argue that the way competences are expressed in the Danish Social curriculum is in accordance with Wolfgang Klafki's concept of "kategorialer Bildung".

*Keywords*: competences, education, Bildung, EQF, Wolfgang Klafki, curriculum, social studies, civic education.

Danish curriculum reform: Learning objectives and competence – or Bildung orientation

Sven-Erik Holgersen

This article is a response to three articles in the present issue of *CURSIV*, by Jeppe Bundsgaard, Morten Misfeldt & Andreas Tamborg, and Jens Dolin, respectively

discussing learning objective oriented teaching in the subjects of Danish, mathematics and science. The initial discussion, referring to Bundsgaard's article, considers the implications of two different rationales for education: competence and Bildung. The following section refers to all three articles and focuses on the implementation of the Danish curriculum reform on a practical level. The discussion concerns the implications of visible learning and teaching for students' learning and for teachers' professional practice. Finally, music is discussed as a school subject exemplifying a holistic and critical perspective on the curriculum reform. In conclusion, the author points to the necessity of a critical rather than a pragmatic approach to the twin rationales of competence (emphasizing learning objectives) and Bildung at the core of the current curriculum reform.

*Keywords*: curriculum reform in Danish public school, competence vs Bildung orientation, learning objectives, visible learning.

## Guiding ends or guided ends in science education

- Response to three papers on goal-oriented teaching Morten Rask Petersen

This response relates central points regarding assessment (Dolin, 2016), frameworks for goal-oriented teaching (Misfeldt & Tamborg, 2016) and literacy (Bundsgaard, 2016) to the national curriculum in the Danish *folkeskole*. These points are in this response embedded within a context of science education with particular emphasis on practical work. Within this context, strengths and weaknesses of these points are discussed. Strengths are primarily found in a synthesis of the different points from the three articles while weaknesses appear as a lack of time or lack of the necessary skills to properly implement learning goals.

*Keywords*: competence goals, practical work, assessment, literacy, inquiry based science education.

Dorthe Carlsen & Rune Hansen

#### **Goal Orientation**

In this commentary, a critical response to the presentations by Hobel, Dolin, Misfeldt & Tamborg and Bundsgaard November 12th-13th 2015 at a symposium on comparative subject didactics, we outline three perspectives regarding learning

goals. These include goals concerned with: 1) a pedagogical and didactical perspective; 2) an educational policy perspective; and 3) an educational research perspective with a particular interest in acknowledging different interpretations of evidence. We argue that the four Danish presentations focused in particular on didactically meaningful transposition and translation of learning goals from the curriculum, but did not address the educational policy perspective in this context.

*Keywords*: learning goals, subject didactics, educational policy, evidence, national curriculum.