When curriculum theory came to Sweden

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Curricula have been used in Sweden as the instrument for state governance and control in the school system. In the early 20th century when a progressive pedagogy emerged, curricula were modernised and became the focus of public debates. Sweden, which did not take part in World War II, had in its wake a head start and thus a fast growing economy. A welfare state was established with education as one of its cornerstones. These post-war reforms involved educational researchers who carried out empirically based curriculum research. However, in the 1970s, a critical empirical and theoretical research emerged. This article describes this emergence of curriculum research in Sweden, focusing particularly on curriculum theory, told from my personal experience and perspective.

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In every education system, there is a curriculum, that is, a plan that outlines goals, content and outcomes. No school has existed which was not ruled by goals and results, or if it has, it has not lasted. The words used for describing the curriculum have certainly varied. In the Anglo-Saxon world, the term curriculum is used, stemming from the Latin word 'currere' (to drive, move on). It is related to 'cursus', which means 'track'. Petrus Ramus (1515–1572) was probably the first to use the word curriculum to signify goals and content for teaching. Ramus argued for a logic constructed from how cognitive processes work. Hence, logic must be based on language, and thereby logic and rhetoric are unified. In truth, this was an admirable idea which provided an alternative to scholasticism. Ramus’ programme influenced educational thinking in protestant Germany and in England. It is interesting to note that what could be called the first curriculum theory debate in Sweden revolved around the ideas of Ramus. Johan Skytte (1577–1645), Chancellor of Uppsala University, and Laurentius Gothus (1565–1646), Archbishop and Rector Magnificus at Uppsala University represented Ramus’ arguments, while Professor Jonas Magni (1583–1651) represented the alternative Aristotelian philosophy. The establishment of the Educational Act of 1611, which was the first act of this kind in Sweden, was the catalyst for the discussion. Earlier, the educational system was regulated within the Church Act of 1571.

If we see to how the concept of Curriculum has been constituted over time, we can follow the fundamental lines of education and schooling. Various phases in this development are mirrored in the words used. In medieval times, the terms ‘stadium’ or ‘ordo’ dominated, and later ‘ratio’, ‘formula’ and ‘institution’ were used. During the 16th and 17th centuries, the word curriculum came to be used more and more to indicate the sequential arrangement of material in time; this usage is returning into fashion. At the University of Glasgow, curriculum was used during the 17th century to designate a course. Within the Jesuit order, a special organisation of studies was formed, for which Ignatius of Loyola (Iñigo López Oñaz y Loyola, 1491–1556) constructed a curriculum for the education of servants of the Jesuit order (Ratio atque Institutio Studiorum). This was composed as a plan/scheme (ratio) for selection (institutio) that had to be composed from a set, or canon, of knowledge (studiorum). During the 19th century, curriculum was used in many universities around Europe. However, in Germany curriculum came, during the Enlightenment, to be replaced by ‘Lehrplan’. In most European nations the curriculum is decided by the state. But, in the United States, where there is no common curriculum and where there is local control over the school systems, it is therefore important in teacher education to educate in curriculum construction and curriculum theory.

Over the years, several different names have been used in Sweden for curriculum as a document. The word Läroplan was first used when the comprehensive nine-year school was implemented in the 1960s. ‘Läroplan’ (cf. German ‘Lehrplan’) means literally a plan for learning.
Hitherto, several terms had been used for documents containing rules and advice concerning goals, content and control of outcomes. The Swedish Church Act had earlier had a chapter for the schools of the church (Cathedral and convent schools), while for public education there were already some regulations related to baptising and confirmation during the Catholic era. During Reformation, and with Luther’s proclamation; ‘Reading is a way to direct contact with the words of God’, public education came to be a necessity both for the Nation and the Church. Indeed, with Reformation a new education for clergymen also had to be developed.

The education of priests and the organisation of the public school system were of considerable importance after the Swedish Reformation. A new Church Act was established by the Parliament of 1527, and in this act there was a chapter on the regulation of schools called ‘Skolordning’. The word was taken from the regulation of schools in Hamburg (1529) and later Mecklenburg (Hall, 1921). The new act was at first in fact a rather poor translation of the Saxon Education Act of 1528. In 1572, a new Church Act was decided upon, in which a chapter was named ‘Skolordning’. During the 19th century, the successors of the early church schools – ‘läroverken’ were regulated in special acts – Kongl. maj:ts nådiga stadga för rikets allmänna elementar – läroverk (The Royal Majesty’s gracious Charter for national public elementary grammar schools).

After the Royal decision in 1842 to implement a public school system, another form of regulation was established. In the first phase, the curriculum was more or less the same for the schools and for teacher education. With time, new curricula entered into the schools under the name of ‘normalplane’ (Normal plans). The first of these was instituted in 1878, followed by revisions in 1889 and 1900. In 1919, a radically revised curriculum was decided upon – 1919 års undervisningsplan för folkskolan (The 1919 teaching plan for elementary schools). This plan was a curriculum inspired by the early progressive movement. The most debated change was the abolition of the catechesis. The governing documents were now the Charter for the public schools, the teaching plan of 1919 and the rules for the district (Hildinger, 1944, p. 185).

Curriculum theory and didactics: the context

Education is the genetics of society. As Dewey (1916) says that as we not live forever we must it is a necessity to educate the new generation (Dewey, 1916, p. 3; compare Durkheim, 1893/1933, 1938/1977). What is to be reproduced is always related to power and control. To answer the fundamental questions in education always requires the integration of a perspective of power:

The reproduction of tradition and hence pedagogy is related to the issues of power. Any analysis of an educational methodology, practice or theory, must include a perspective on power. In whose interest is this activity happening? Who are the winners and who are the (possible) losers? There is a difference between a majority and a minority situation. Is it the tradition of the “Great society” to be reproduced in the next generation, or is it the tradition of the single (minority) group? Or is it, indeed, a combination of both? A strategy for survival in the form of isolation, or a quest for a functioning symbiosis? (Hjärpe, 2011, p. 130, my translation)

The roots in the absolutist state and the church creates another power structure which exercises control over curricula, and which stands in contrast to the ‘new world’ – in North America – where the various immigrant traditions formed a local power. The ‘pedagogical mentality’ (if that word can be used) becomes quite different. The concept of curriculum will have a slightly different meaning in European research compared to research in the US.

In 1968, I worked in the US with a comparative research project headed by Professor Ursula Springer. I translated curricula from the Nordic countries, France, Germany and the Netherlands. My interest in curriculum research started with this study of the differences of meaning in curricula, differences in meaning that many times in comparative studies were not detected and thus not analysed.

My suggestion for the title of my doctoral dissertation (Lundgren, 1972) was: ‘Frame Factors and the Teaching Process: A contribution to Curriculum Theory and Didactics’. I was advised to remove the word didactics, the argument being that few would understand what didactics was and that it did not make sense in English. It was strange enough to use curriculum theory in a Swedish context. The title became: ‘Frame Factors and the Teaching Process: A contribution to Curriculum Theory and Theory on Teaching’. And my supervisor was right. Curriculum theory caused much mirth, especially in the corridors of the Royal Board of Education. Curriculum theory was perceived as a theory about daily work done at the board. Experts and civil servants wrote curricula with support from educators and psychologists. There was no theory behind curricula.

Pedagogy as a science

The moment of birth of education or pedagogy as a science can always be disputed. With the Enlightenment and the second industrial revolution a new mentality was formed. The natural sciences emerged and research became not only the elaboration of concepts, but also considered empirical methods and empirical data. It is in this new world that a comprehensive structure for educational questions was formed by Johann Friedrich Herbart (1776–1841). He made a distinction between socialisation and education, where socialisation meant to subordinate and education was to develop a critical mind and from that establish self-dependence. In this, we can
see the definition of enlightenment as Kant formulated it: 'as the escape from authority' ('Aufklärung ist der der Ausgang des Menschen aus seiner selbstverschuldeten Unmündigkeit', Kant, 1784).

Herbart discussed three different ways of teaching: One of education without teaching (Erziehung ohne Unterricht), in which teachers educate with disciplinary methods, another is teaching without education (Unterricht ohne Erziehung), where the student is a passive receiver, and there is a third possibility, education by teaching (Erziehung durch Unterricht), where the process will take place as a formation (Bildung) of the child directed towards dealing with an unknown future. This means not only to have a critical attitude towards new knowledge but also to acquire a form of plasticity (Bildsamkeit). This idea of ‘Bildsamkeit’ is close to Wilhelm von Humboldt’s idea of ‘Bildung’. A similar idea can be found also in the work of Jean-Jacques Rousseau, who uses the term ‘perfectibilité’ about the ability to learn in all areas of life (Rousseau, 1762, 1977; cf. English, 2013, p. 11).

The study of Pedagogy is, according to Herbart, divided into two main parts – curriculum and didactics. These two parts are interrelated in a mutually supporting way, and each part is distinguished by structural questions: What are the aims and content of education? What are the methods for teaching? The answer to the latter has to be grounded in psychology. For Herbart it became ‘apperception psychology’.

The structure Herbart created for the study of pedagogy has survived and is still noticeable in the field. The conception of ‘Bildung’ as education by teaching and the ability to address new knowledge with a critical attitude (Bildsamkeit) are but two examples. A prevailing notion in didactics is that psychology provides the basis for teaching methods, and for Herbart, this did not simply mean that methods of teaching could be derived from psychology: Learning had to do with students’ interest. For Herbart, a central concept which linked education to teaching was the concept of ‘interest’. The word stems from the Latin words ‘inter-esse’ (to be in between), which means a state between observation and achievement. To acquire an interest is thus the essence of learning. But it remains important that teaching does not merely follow the threads, but that it has an order – a rhythm. This notion interest is also found in the work of Dewey discussed in an article from 1895, published in the First Yearbook of the National Herbart Society. Here the concept of interest is discussed in relation to the concept of will (Dewey, 1895/1907).

Herbart was not an empiricist instead, what he constructed was a systematic view and a conceptual system that provided a basis for the development of an empirically based pedagogy and psychology. The ‘light’ version of Herbart’s standpoint of using learning psychology as the basis for didactics was firmly established. One example: At the beginning of the 20th century the argument delivered in the Swedish parliament as a motive for financing a professor chair in education was that the science of psychology had developed to the point that it could be applied in teacher education (Fransson & Lundgren, 2003; Lindberg & Berge, 1988; Lundgren, 2009). Another example is found in the discussion between the American scientists Judd and Thorndike about learning theory. Thorndike argued for the notion of general laws for learning and also that teaching methods thus represent an application of learning theory. Judd took the standpoint that the content of what is learned always influences how learning processes are formed (cf. Shulman, 1976).

The story about curriculum theory in Sweden started in 19th century with the import of the pedagogical ideas of Herbart and von Humboldt. Herbart succeeded Kant on the chair of philosophy in Königsberg. The philosophy of Kant was in Sweden introduced by Daniel Boëthius (1751–1810) professor in philosophy at Uppsala University. Boëthius cannot have been ignorant of the work of Kant’s successor. From 1788 and during the coming four years, Boëthius together with his students studied basic pedagogical questions and concepts. Altogether nineteen theses were published under the title Prima Scientia Educationis lineae, Præside Mag. Dan. Boëthio, Eth. Et Polit. Prof. Reg. et Ord (cf. Annerstedt, 1913). Even though Herbart was translated to Swedish rather late, his thinking seems to have had an influence before that. We can, for instance, see traces in the literature used in teacher education (cf. Hildinger, 1944) where especially teaching methods (didactics) are addressed. Curriculum seems at this time not relevant to either teachers or teacher education.

During the 20th century, there was therefore a development of didactics-oriented research. This was established in a series of books, the Pedagogiska skrifter (Pedagogical writings), in the late 19th century, which were crucial to educational research above all in Germany, but also in France and England (Duprez, 1977). During the first decades of the 20th century, the word didactics became less prominent and was replaced by the term teaching methods or just methods. This is evident after World War II, when German influence was replaced with an Anglo-Saxon influence. But even if the word didactics vanished from the lexicon, didactical research was nevertheless carried out.

One of the first doctoral theses in mathematics didactics was defended in 1890 (Jonsson, 1919, cf. Johansson, 1985). It focused on strategies for problem solving. There is also one earlier historical study on textbooks in mathematics (Dahlin, 1875). During the 1950s, several studies came to be published. If didactics oriented studies in mathematics are taken as an illustrative example, we can see that they were often oriented...
towards psychology and basically dealt with numeracy skills and mathematical ability.

**Empirically oriented curriculum studies**

Going back to the late 1960s, and starting with a sketch of the North American landscape, there was an overwhelming surge in the production of texts about curriculum, curriculum design and curriculum principles based on conceptual development and prescription. As Foshay and Beilin stated: ‘Much of the literature, however, discuss what a theory should be about, rather than actually attempting to state comprehensive theories’ (Foshay & Beilin, 1969). More outspoken was Goodlad (1960) in his characterisation from 1960, stating that curriculum theorising ‘is best described as abstract speculations; curriculum research as dust bowl empiricism; and curriculum practice as a rule of thumb guesswork (often a wet thumb, at that) held aloft to test the direction of the prevailing breeze’ (pp. 185–196). On one hand, there is a long tradition which has existed since the beginning of the century, launched by the work of John Dewey and consolidated and developed by a number of philosophers. These works followed several lines of thought. One clear line was to develop a pragmatic perspective, which focused on the construction of goals. We find here important studies from the works of Bobbitt and Charters in the 1920s through Tyler’s rationale in the 1950s and the taxonomies of Bloom and Krathwool in the 1960s, to the goal and outcome-based curricula of today. Other early important lines of thought are the works of Brameld and his reconstructionist theory (Brameld, 1956, 1965) from the 1950s, Broudy’s realistic theory (Broudy, 1961) and Phenix’ science-oriented theory (Phenix, 1961) from the 1960s. The work by Taba (1952, cf. Lundgren, 2014) and Bruner (1960) provide other excellent contributions to curriculum theory.

Empirical curriculum studies were less common or, in Eisner’s (1971) words: ‘its empirical aspects, that is, the study of processes central to curriculum as a field of study, has been neglected’ (p. 5). An outstanding exception was the classroom studies carried out at Teachers College, Columbia University in New York by Arno Bellack and his research team. One member was Kliebard, who later contributed to the field of curriculum history.

**The first empirical curriculum studies in Sweden**

If we compare the development of curriculum research in Sweden we will find more or less the opposite picture to the one given above. In Sweden, empirical research laid the groundwork for a theoretical development. One background to these empirical studies was the reform of the entire school system after the Second World War.

At the beginning of the 20th century there were two parallel school systems in Sweden: one public school system (folkskola) and one academic system (realskola). The dominating political question was how to construct a common comprehensive school. When this question was answered in the political sense, the next question concerned how long the comprehensive schooling would last? In other words, when was the differentiation according to ability most appropriate? For educational research, the question focused on the effects of ability-grouping after different years of schooling. In 1940, a School Committee was established with the aim of reaching an overall view of future school planning and providing an answer to the question of ability grouping.

Six years later, in 1946, a parliamentary School Commission superseded the Committee. They delivered a report which provided a basis for the coming reforms, but they could not agree on when a differentiation of the students into various study tracks should take place. In 1950, a School Bill was introduced into Parliament, and the establishment of a 10-year experimental period was decided upon. The status of the role of the experiment was, however, unclear. Should the decision on a comprehensive school be based on the experiment or should the experiments simply guide the form of a comprehensive school? In 1956, the Parliament voted for the latter interpretation. The year after Parliament established a new Preparatory Committee to draw up the plans for the comprehensive school on the basis of the experiences of the experimental period. In relation to this Committee, curriculum studies were carried out by a group of researchers at Teachers College, Stockholm, headed by Torsten Husén.

One focus of these studies was the content of various school subjects. A study in mathematics and the national language was carried out by Urban Dahllof (1960). Later, Dahllof (1963) conducted a new curriculum study on the demands on curricula for the upper secondary school system. These studies laid the groundwork for curriculum research which was of considerable importance for the later development of curriculum theory in Sweden. It is obvious that the research design was inspired by American studies such as those by Bobbitt, Charters and Tyler, mentioned above.

During the experimental period several minor studies on the effects of various types of ability grouping were carried out. Most of them showed that early differentiation according to ability gave positive results. However, these studies were small and hard to make generalisations from.

There was one major study done in Stockholm. The Local Board of Education divided, in the 1950s, the school district of Stockholm into two districts, one with differentiated classes, and the other with undifferentiated classes. This situation was used for the study of the effects of differentiation (Svensson, 1962). Achievement was measured by ordinary standardised tests, and covariance analysis was used to keep the students’ social background
constant. The main conclusions were that there are no demonstrable effects of grouping the students differently: ‘A slight tendency towards the superiority of pupils in early differentiated classes observed in the final phase of the study was erased in grade 8 and 9’ (Svensson, 1962, p. 182). Ahlström (1962) later noted that the data could not be used for comparisons in grade 9. The comparable results, nevertheless, showed an insignificant difference between types of grouping.

Later, a more comprehensive study was carried out in the school district of Göteborg, using a more advanced statistical method than the one used in the Stockholm study. The results were similar to the ones reached in the Stockholm study (Bengtsson & Lundgren, 1968, 1969).

The Frame Factor Model
By using data from his earlier curriculum studies, Dahllof (1967, 1971) was able to re-analyse the Stockholm study. By comparing time used to reach the same results, Dahllof showed that positively differentiated classes required less time than negatively differentiated or undifferentiated groups. Furthermore, he pointed out that it seemed like the student at around the 25th percentile on the ability scale steered the pace of teaching – the steering group was introduced into science. Dahllof used these empirical data to formulate the outlines of a model – The Frame Factor Model.

The Frame Factor Model brought a new paradigm into educational research in general and curriculum research in particular in the sense that it modelled the relations between prerequisites, processes and results from the point of view of what was possible and was not possible within given frames. At that time, the dominating paradigm was a simple one-dimensional relation between independent and dependent variables.

In my dissertation, I tested the steering group hypothesis in a macro study and a micro study. The latter built on classroom observation using the classification system developed by Bellack and his research team (1967). In doing so my research was linked into a network of researchers who worked on classroom processes with an interest in curriculum theory.

In the dissertation, the steering group hypothesis was confirmed. Furthermore there was a relation between time frames and how pedagogical roles were formed (Gustafsson, 1977; Lundgren, 1973a, 1973b). These first studies were later developed into a new empirical study in which the classroom discourse was analysed in relation to the learning of the students (Lundgren, 1981). Here the variations in frame conditions were related to teaching strategies, like piloting. Piloting occurred when the frames forced the teacher to pilot a student around problems.

The point of these studies was that they focused on the interrelation between the teaching process and the learning process, and by doing so they could account for time as a frame for the organisation of the content and thus for the construction of the curriculum. The new questions focused in the next phase on how the curriculum, the syllabi and the timetable were constructed.

In the late 1960s there was a rather intensive discussion concerning education/pedagogy as a science. The discussion in the US was focused on the relation between theory and practice, while the one taking place in Sweden was more concerned with the independence of education as a science.

The first chair in education (Pedagogy) was established at Uppsala in 1910. The first chair in psychology came 40 years later. Thus, psychological research was carried out within pedagogy. Theory construction within education as a science accounted mostly for psychological constructions. The discussion in the 1960s was thus concerned with how to create a scientific discipline in its own right with its own central concepts. A similar discussion had taken place within sociology (cf. Zetterberg, 1965) after Russell’s (1948) idea that a discipline is characterised by its central and discipline-unique concepts.

Curriculum was one of these central and unique concepts for education as a science (Lundgren, 1973a, 1973b; Lundgren & Wallin, 1973; Kallös & Lundgren, 1975). Thus, the research process described above has also to be placed in this epistemological discourse (Kallös & Lundgren, 1979).

Curriculum codes
In the classroom studies (Lundgren, 1981) mentioned above, we developed a diagnostic test in arithmetic. When the lesson started, we mapped where the students were in arithmetic learning. For each teaching moment, we could determine which students were able to understand what was taught. After the lesson, the test was used again and the learning progress was analysed as an effect of how time framed the teaching process. When time was limited, the teacher piloted the students around the problem by giving clues toward the right answer. Furthermore, we were able to describe how tight timeframes had an impact on the language used, which in turn had consequences for students from different socio-economic backgrounds. These studies were later developed using Bernstein’s work with sociolinguistic codes (Bernstein, 1973; Bernstein & Lundgren, 1983). These studies raised new questions about the power and control over education, questions about how the educational system was governed, how curriculum goals were established and content selected.

The frame factor theory built on empirical studies of classroom teaching formed a foundation from which more comprehensive studies about political governance had historically been shaped and reproduced limits and possibilities of schooling. The implications of these close studies of classroom language came to more and more focus on the study of the classical issues in education.
concerning how cultural patterns and thinking were reproduced.

The first perspectives (Lundgren, 1979, 1983, 1991, 1992) were historical and an attempt to identify sustaining curriculum codes. A curriculum code is constituted by the spoken and unspoken principles that guide how goals are formed and content selected and organised for learning. In constructing the curriculum codes in relation to frames and the organisation of schooling, the question of how schools as institutions were constituted became more and more crucial.

There are two possible occasions for the birth of schools as institutions (Lundgren, 1991, 1992). One takes place when a state is established and judicially regulated. To conserve, interpret and execute the law, it is necessary to have an educated class. Moreover, laws have to be legitimated and conserved. Texts become central for education as institutions. Schools for the education of civil servants and for the servants of the church have formed their own traditions, which over time have been reproduced. The other possible occasion of birth occurs when reproduction and production are separated. This happened during the 19th century, when education and upbringing has increasingly become the task of schools as institutions (Lundgren, 1985, 1987). When schools as institutions for all citizens are constituted, there is already a pattern for how schools are organised, what content is taught and how it should be organised and mediated.

At the beginning of the 1990s there was a rather solid and consistent theory construction built on three cornerstones: organisation as frames setting the limits, curriculum codes organising what counts as legitimate knowledge and schools as institutions that have a double reproductive function, including the reproduction of the school itself (diachronic and synchronic reproduction).

**Curriculum research**

In the first classroom studies, one of the effects of the frames was, as mentioned, the formation of pedagogical roles (cf. Lundgren, 1974). These observations were further analysed by Gustafsson (1977). Emilia Pedro carried out a similar classroom study in Portugal and by also using data from Australia she was able to make comparative analysis (Ribeiro Pedro, 1981). A research group headed by Basil Bernstein at London University, (cf. Bernstein & Lundgren, 1983) elaborated on this work both theoretically and methodologically. Within this cooperative framework, Gunilla Dahlberg (1985) focused on contextual conditions and orientation to meaning within pedagogical processes.

Kerstin Mattsson further cultivated the curriculum history aspect of this field in a study of career education (Mattsson, 1984), and Kerstin Skog-Östlin extended this in a study of teacher education (Skog-Östlin, 1984). The analysis of pedagogical texts was carried further by Staffan Selander (1984) and Garefalakis (1994). Analysis was extended in studies of the culture of schools and the implementation of curricula by Gerhard Arfwedson (Arfwedson, 1983) and Lars Lundman (Arfwedson & Lundman, 1984).

The analysis of codes – curriculum codes and school codes – was enriched by cooperation with French researchers within the research team headed by Pierre Bourdieu. Donald Broady since the 1980s has developed research on educational sociology built on the foundations of cultural studies laid down by Bourdieu (Broady, 1990). In the 1980s, the Frame Factor Model was developed even further by being placed into a wider framework of political governance of education (Lindensjö & Lundgren, 1986, 2000).

**The curriculum field**

There has been an important development in the philosophical and critical aspects of the field, achieved by Tomas Englund and research at the University of Örebro. Englund (1986) developed further the concept of the curriculum code. Agneta Linné (1996), meanwhile, used and cultivated the concept of curriculum code in historical analysis of teacher education and Garefalakis (2004) achieved the same in the study of the concept of formation (Bildung) in early Greek education. The concept of curriculum code has also been used in research on pre-school education (Tallberg Broman, 1995; Vallberg Roth, 2002).

The Swedish Council for Research in the Humanities and Social Sciences conducted an International evaluation of Swedish research in education (Achtenhagen, Bjerg, Entwistle, Popkewitz, & Vislie, 1997). The conclusion concerning curriculum research and curriculum theory was:

The research is theoretically sophisticated, historically nuanced, and methodologically complex. The different research programs, we believe, contribute substantively to theoretically considering the social/political complexities of school practices. The methodological contributions are varied — from the diverse paradigmatic and interdisciplinary qualities of the studies to the sophisticated techniques used to interrogate survey data, from correspondence analysis to the “textual” analyses that draw on literary theory in analysing school textbooks and historical “sources”.

International studies of pedagogical practices have been dominated by psychological and organizational theories that are often instrumental in outlook. The Swedish research reported in this chapter, in contrast, provides systematic and intellectually important studies about the relation of State policy to the “inner core” of the school: its curriculum practices, classroom processes, and professional education. The studies are exemplars of the pragmatic...
Relation between theoretical interests and empirical investigation. The analyses illustrate an interactive process between schooling and external social conditions rather than the school “merely” responding to social conditions. (Achtenhagen et al., 1997, pp. 60–61)

I have described in this presentation some trends, which I believe, have been of importance for the development of curriculum theory in Sweden. But this presentation is of course my story, my picture. There are many stories to be told and many pictures to be painted.

**Education and educational research in the new millennium**

Throughout the beginning of the century, the landscape for educational research policy has changed its character. During the reform period in the 1960s and 1970s, educational research had an influence on policymaking and on educational planning and evaluation. The National Board of Education had a specific budget provided for research.

When the National Board was replaced by the national Agency for Education the budget for research was moved into the administration budget. The Agency, which was charged with responsibility for national evaluation, required research resources. A research policy was established based on the relation between inspection, evaluation and research. Signals from inspection could lead to evaluation which in turn could provide questions to deeper research studies. The research resources were later abolished. At the end of the 1990s a new structure and policy for state-financed research was established with the foundation of the Swedish Research Council in which research money was allocated to educational research. Within the council, a committee for research in educational sciences was appointed for a period of three years (Fransson & Lundgren, 2003). The money allocated to research meant a substantial increase compared to earlier resources. The definition of what counted as educational science was wider than education as a science or pedagogy as a science. The term educational science was used to indicate that the resources should be disciplinary, but could also cover all kinds of research on education. Besides pedagogy, new academic disciplines were established. These were called didactics, teachers work, educational science, adult education etc.

During the 1990s, the reform of tertiary education included a reform of the professor system. To earn the title of professor it was no longer necessary to have a university chair. The number of professors in education has grown to more than six times what they had been at the beginning of the 1990s. The new university colleges were based on the teacher education institutions, meaning that professors of education (pedagogy or didactic) are found in most tertiary institutions.

Education or pedagogy as a discipline was fragmented. The discussion around education as a discipline that had formed one root of curriculum theory in Sweden seemed to disappear. These changes reflect a fundamental change in politics in general, and in the politics of education in particular. At the beginning of the 1990s, reforms were implemented that opened up the choice of schools and the establishment of a market. An independent school system was also established, while the market for educational research also provided a new form of competition. Curiosity-driven, speculative research vanished and the relationship with policy changed its character. The Swedish committee system changed from a rather large investigative panel with an open mandate which included many experts, to narrower, short-term mandates for studies of consequences of reforms. The role of giving a research-base for planning and policy research now reflects on-going reforms. A market driven educational system must, to be efficient, provide good information about alternatives to this increase in assessment of various forms, which in turn attracts research on assessment. Research will then become a part of the evaluation of reforms, but will also be an instrument for the implementation of reform by focusing normative questions related to on-going implementation of reforms. In this context, curriculum research will not bring about new perspectives on basic curriculum questions, but instead it will be scaled down to questions of how to implement various teaching methods within a given political framework.

From the 1970s and onwards there has been a transformation of production and economy that can be compared with a third industrial revolution. Knowledge and education have become more and more important for economic growth in a globalised world, and what this means for educational systems and for the goals and content of education is one of the key contemporary issues. In Sweden, this challenge has been met by curriculum reforms which aimed to build on a school system built for another economy and another kind of production.

To bring my reflections to a close, I would like to use a metaphor. The Danish toy system LEGO, which can be used to build the most fantastic, imaginative creations, has today become a box with an instruction manual for building a pre-designed product (a spacecraft from a movie, for example). Imagination is replaced with a finished product, which is incorporated in a finished history. The risk becomes that this is what happens with the knowledge which is taught in our schools. Curricula is what can be measured, not an encounter with a wide variety of knowledge, values and abilities which prepare us to manage the future. In this metaphor, educational research and curriculum research is, I am afraid, simply assisting in the design of the manual.
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