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8. EDUCATIONAL CHANGE AND SCHOOL CULTURE

Curriculum Change in the Finnish School System

INTRODUCTION

This chapter will examine educational change from the standpoint of curriculum change. It focuses particularly on the implications of the changes for different dimensions of school culture. The study considers the manner in which the changes in the Finnish national curricula for the comprehensive school can be seen in school pedagogy and teachers' work. This is analyzed in the context of results from the previous qualitative research projects (Kimonen, 2015; Kimonen & Nevalainen, 2005; Webb et al., 2004a).

This chapter explores educational change by means of a qualitative methods. Data collection involved interviews, observation, and document analysis. The research data were analyzed qualitatively. Use of inductive analysis of the research data, description, and interpretation produced an integrated entity. The aim was to develop a grounded theory, when the data were systematically and intensively analyzed by constant comparison, collection, and coding (see Glaser & Strauss, 1967; Strauss, 1987).

FUNDAMENTAL EDUCATIONAL CHANGE

The Concept

Beginning in the 1980s, a new wave of educational reform and change was sparked both in the United States and across the world. It would continue into the 2010s. The concept of educational change was indeed so prevalent that it spawned a distinct field of study and even a notable research handbook (Hargreaves, Lieberman, Fullan, & Hopkins, 2014).

Changes in schools have often been merely gradual attempts to develop the current system in order to eliminate insufficiencies manifested in operating principles and

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practices. The aim has been to make the operations of the organizations more effective and to develop its special characteristics without actually addressing the principles of operation. The educational reforms that focus on changing central structures and processes of school organizations have generally been unsuccessful. A challenge for the future school is to develop change attempts that have fundamental effects on school culture using such means as identifying new objectives, structures, and roles (Cuban, 1992, pp. 218–219).

The emerging new focus on educational reform is now delineated into individual lines of research focused on educational change at distinct system levels (school, district or municipality, state, federal or province). Uniquely, this era of educational change created a resurgence of reforms that were initiated outside traditional school systems as well as inside. These reforms promised to produce broad improvement in student achievement (Kretchmar, Sondel, & Ferrare, 2014; Mette, 2013). Outside influences included the growth of private and home schooling, corporate infusion into school reform, and a broadening accessibility to on-line instruction from a variety of external, private, and corporate sources (Saltman, 2014; Sementelli & Garrett, 2015; Waks, 2007).

The United States and other countries have seen this current era of fundamental educational change to be typically marked by a general consensus that reforms initiated since the 1980s have largely failed (Good, 2011; Guthrie, 2012; Hargreaves et al., 2014; Strain, 2009). Current educational change, largely targeted standardizing curricular content and raising teacher "accountability" through mandated central government accountability measures. These reforms generally did not produce the desired and promised reduction in the achievement gap among students, while conversely promoting negative outcomes such as narrowing curriculum and discouraging teacher experimentation and innovation (Bisland, 2015; Ehren et al., 2015; Erskine, 2014; Olivant, 2015).

Waks (2007) contended that the lack of improvement in student performance through mandated reforms can partially be explained by the realization that educational innovation is rarely implemented as intended. Even when curricular reform is implemented "with fidelity," it frequently fails to produce the predicted rise in standardized test scores, especially among the neediest students (Bye, 2015; Taylor, 2005). According to Cuban (1998), the criteria used to determine success in reform actually differs between policymakers (effectiveness, popularity, and fidelity) and practitioners (adaptability and longevity).

In addition, new curricula, programs, and processes have been largely unsustainable (Cheng, 2009). Reform initiatives have even been added at an unrelenting and rapid rate and without consideration for systemic congruity or an objective assessment of their effects (Chitty, 2012). Fullan (2001) called this phenomenon "projectitis"; a "churning" of new initiatives (p. 105). Cuban (1992) proffered that school organizations, when faced with a barrage of mandated reform initiatives, absorb change into current practice in order to maintain organizational stability, and thus little "deep, second order change" actually results (Waks, 2007, p. 284). Most

reforms in the current era can ultimately be characterized as mere incremental changes intended to enhance, but not fundamentally alter, existing organizational policies and procedures. Changes of this type generally do not effect students and leave many core functions of the organization unaltered. Waks (2007) noted that Cuban argued “in a judo-like fashion, organizations respond to external forces by converting changes meant to be fundamental into minor, or incremental, changes compatible with existing organizational structure” (p. 2).

Many believe the reform barrage that characterized this era of educational change succeeded more in creating frustration and anger among overwhelmed school faculty than to help needy children learn (Bacon, 2015; Brandt, 2012; Kim, 2004; Manhong & Lo, 2007). The suggestion has even been made that reform initiatives in this era were mainly created to highlight the supposed failures of public education for the purpose of political leverage or expanding the control of state and federal governments over education (Koyama & Kania, 2014; Mehta, 2013).

During this most recent era of educational change, several competing forces were at work shaping the directions taken. These included a focus on standardization over contextualization, on efficiencies over human agency, on centralized over localized locus of educational control, on policy-oriented over empowerment-oriented teacher professionalism, and on school choice.

Competing Forces of Change

Standardization Over Contextualization

The past few decades of education reform in the United States have been characterized by English and Papa (2010) as a period of “scholasticism, standardization, and stagnation” (p. 2). Scholasticism is described by Collins (1998) as when an intellectual field becomes stagnant when its principle goal is to collect, codify, and protect compendia. In the educational vernacular, we would call these compendia common core or standardized curriculum, standardized assessment, and instructional best practices. One fundamental change in education from the 1980s to the 2010s was the focus and mandated use of singular and standardized curricula and assessment vetted not through exploration and research verification but through anecdotal case studies highlighting isolated successes. The purpose of the standards movement was to improve teacher quality and raise academic opportunities for all students. Unfortunately, scholasticism of this type did not lead to the promised reduction in the achievement gaps.

The current trend to identify and standardize a knowledge base through a common core of curriculum assumes that one “knowledge set” is necessary and adequate to provide all students and schools what they need to succeed. The presupposition that we have identified what all students need to know both for now and in the future simply cannot be supported by either logic or evidence. English and Papa (2010) deemed indefensible the argument that “the current state of knowledge was

completely adequate for resolving all of the outstanding issues of education in our society" (p. 6). Feyerabend (1993) cautioned that "the belief in a unique set of standards is nothing but a chimera" (p. 160).

The standardized movement in education can also be seen by the adoption of what was characterized as "common instructional practice." This practice was intended to "teacher-proof" curriculum so that all students could receive superior instruction despite the presumed broad variation in teacher quality. This approach carries several presumptions with it, including the belief that we have finally found the one way to teach that works best for all students. Indeed, many found that the practice primarily attempts to normalize teacher behavior for the purpose of high-stakes evaluation while limiting teacher creativity and innovation. Unfortunately, the reform movement neglects to recognize that no one instructional approach is highly effective for every student. Neither is one set of curricular content most suitable for every student need is every student ready to receive the same content at the same moment in time or at the same pace.

The standardization movement supposes that homogeneity equates to excellent. In fact, these "best practices" are mainly supported through anecdotal stories of success in isolated contexts and not broadly supported by research. Pierce (1955) noted that a "[d]irect experience is neither certain or uncertain, because it affirms nothing – it just is" (p. 67). What these approaches did achieve was to homogenize curriculum and teaching approaches through controlling and codifying content and practice. The primary result of this standardization movement was a narrowing of the curriculum and the reduction of innovation and contextualized practice. Collins (1998) noted that when "a community is oriented toward innovation, great truths are not so much an advantage as an obstacle" (p. 32).

Efficiencies Over Human Agency

Many scholars believe that the current educational change era largely ignored the unmistakable and perhaps inconvenient reality that education at its very core involves the human element. Researchers argue that recent fundamental educational change ignored the importance of local context and the human agency inherent in all educational endeavors (English and Papa, 2010; Gonzales & Shields, 2015; Kliebard, 1988).

The concept of human agency can be thought of as the negotiation and balance between "educational approaches that not only rests on knowledge but also understanding" (English & Papa, 2010, p. 34). Carl Gustav Jung (1875–1961) described the differentiation between knowledge and understanding eloquently in the following (1958, p. 21):

> Scientific education is based in the main on statistical truths and abstract knowledge and therefore imparts an unrealistic, rational picture of the world in which the individual, as a merely marginal phenomenon, plays no role. The individual, however, as an irrational datum, is the true and authentic carrier of reality.

The current era of fundamental change focused largely on improving efficiencies within schools, as well as on standardizing content and processes, thus embracing a more rational problem-solving approach to ameliorate inequities among student performance. Unfortunately, this tends to ignore reform based on the relational and individualistic realities of human learning and the loosely coupled nature of educational institutions (Orton & Weick, 1990). Hargreaves (2005) noted that the field of educational change in the recent era attended primarily to structural and strategic aspects. He urged policymakers to focus more closely on emerging societal needs affected largely by cultural shifts unique to individual school contexts. He urged educational change to "move beyond images of change as linear, predictable, means-to-an-end process in favor of models of change as a complex and even chaotic process" (Waks, 2007, p. 278).

Centralized Over Localized Locus of Control

One trend in the current era of fundamental educational change is the reduction or elimination of local community control of curriculum. This shift in control was also borne out in the expansion of private schooling and charter schools. According to the OECD (2013), "many countries have pursued a shift in public and governmental concern away from merely controlling the resources and content of education and have focused increasingly on outcomes" (p. 37). The current analysis of international assessment reveals the changing locus of control for decision-making responsibilities in education. One trend is for school systems to devolve responsibility to local school districts or municipalities, encouraging responsiveness to local needs, and strengthening accountability. Conversely, some countries, such as the United States, moved to more centralized control of educational change, using the lure of federally funded grants to entice every state to adopt a national standardized curriculum and assessment.

An important fundamental change occurred within the organizational structure of school systems and the degree to which schools are considered autonomous entities allowed to make organizational decisions independently of district, regional, or national entities. The latest OECD report (2013, p. 37) noted that:

> [S]chool systems that grant more autonomy to schools to define and elaborate their curricula and assessments tend to perform better than systems that don't grant such autonomy, even after accounting for countries' national income. School systems that provide schools with greater discretion in deciding student-assessment policies, the courses offered, the content of those courses and the textbooks used are also school systems that perform at higher levels in mathematics, reading and science.

Policy-Oriented Over Empowerment-Oriented Teacher Professionalism

Teaching practices can change fundamentally and attitudes can comply with the reform efforts of the school only if teachers have first gone through a process of professional development. Viewed from this perspective, pedagogical change is a growth process that aims at a change in thinking and practices. Webb and colleagues (2004a) argued that "at the policy-level current conceptions of teacher professionalism in Finland and in England diverge markedly" (p. 87).

In Finland, the idea of the teaching profession is based on teacher autonomy, the emphasis being on commitment to making students active and independent learners. Further features of professionalism in the postmodern era also include teacher's commitment to lifelong learning and cooperation with interest groups. The aim is to empower teachers and give them the opportunity to influence educational reforms.

In England "the government is characterized as riding roughshod over the teaching profession through a kind of 'democratic totalitarianism' in which change is achieved by assertion and coercion" (ibid., p. 101). The policy-oriented view of professionalism requires total compliance to centrist demands. The national, standardized curricula and external accountability mechanisms, coupled with marketization, have turned teachers into technicians and officials. Ultimately this will lead to an erosion of teacher professionalism (ibid., p. 101; for a culture of dependence, see Hopkins, 2007, p. 42).

School Choice

One of the recent fundamental changes in education is the extent to which students are assigned to attend their neighborhood school versus those that allow students to choose from a variety of options. In recent decades, reforms in many countries gave greater choice to parents and students to choose the schools that meet their educational needs or preferences. This trend is predicated upon a market-driven conception of schooling; focused on the fundamental belief that competition between private and public schools and the expansion of choice creates incentives for schools to improve programs and teaching quality to better meet diverse student needs and interests. However, OECD (2013) reported that once the socio-economic status and demographic background of the schools and students are taken into account schools in most countries that compete for students tend to perform no better on average than schools that do not (p. 40).

In many school systems this competition has financial implications, with schools competing for enrollment and the associated funding formulated from such. The expansion of charter schools has been paralleled by the appearance of voucher systems that give money directly to students and their families to spend on the public or private educational institutions of their choice. Finally, the promotion of school choice has led to the expansion of laws permitting home schooling, including parental control of curriculum and assessment in part or entirely.

School choice has also been pursued or opposed based on the issue of equity. It is argued that competition could incentivize schools to provide greater access to students of low socio-economic status. However, in the United States the reverse has been argued; that more local autonomy has resulted in less social equity. The most common example cited is the era of segregation of African-American and Caucasian schools in the 1960s. This practice was largely perpetuated when local communities were given control of educational decision-making and was only altered by federal intervention. Such experiences have driven the policy shift to transfer the control of school decisions to federal entities.

However, OECD (2013) reported "a weak negative relationship between the degree of competition and equity" (p. 40). OECD further reported that countries with more competition among schools tend to show a stronger impact of students' socio-economic status on their performance. In general OECD (2013) noted that "school choice – and, by extension, school competition – is related to greater levels of segregation in the school system, which may have adverse consequences for equity in learning opportunities and outcomes" (p. 40).

Readjusting the Pendulum

Future educational change is likely to move in the opposite direction of current trends. It will focus more on local control of curriculum, on contextualization of curriculum to individual institutional needs, as well as on assessments that are adaptable, formative, and diagnostic. Additionally, diversity and equity are anticipated to continue to receive emphasis in educational change. Finally, future educational change is predicted to fundamentally change through the deep integration of burgeoning technology into educational reform efforts.

This chapter analyzes educational change in the context of curriculum change. The following examination considers the implications of these changes for different dimensions of school culture. The focus is on the manner in which the changes in the Finnish school curricula can be seen in the professional orientation of teachers and their pedagogic practices. Accordingly, the collaborative school culture is further studied particularly from the following three perspectives: student-centered active learning, the teacher's professional autonomy, and the contextualized school-based curriculum. This analysis is based on the results of the previous qualitative research projects.

DIMENSIONS OF SCHOOL CULTURE

The school organization can be examined as a collaborative system that gathers and integrates different resources in order to implement desired objectives (Harisalo, 2008, p. 31). Harisalo also stated that the theory of organizations as cultures opens up a new perspective on the internal reality of organizations. Every organization has its own mental deep structure that guides people's thinking, choices, and actions.

Culture represents an organization's prevailing ways of thinking and acting, which have been created and strengthened through shared experiences (ibid., pp. 40, 265–266).

The idea of schools as cultures has been applied to Finland's national curricula for the comprehensive school since the early 1990s, when the country adopted a school-based approach to the curriculum. Arends (2009, p. 488) defined that "school culture" consists of the philosophies with which the members of the school community justify their actions. It reflects their beliefs, values, and history. The following brief account shows how the *National Core Curriculum for Basic Education 2004* defined the concept of "school culture" as "operational culture" (FNBE, 2004, p. 17):

> A school's operational culture has a significant impact on education and instruction at the school, and thus on learning. The objective is that all the school's practices be developed uniformly, so as to support attainment of the objectives established for the educational and teaching work.
>
> The operational culture embraces all the school's official and unofficial rules and operational and behavioural models, as well as the values, principles, and criteria on which the quality of the schoolwork is founded. It also encompasses extracurricular school activities such as celebrations, theme days, and various events. The school's values, educational objectives, and cross-curricular themes must assume concrete form in the operational culture. The objective is an open, interactive operational culture that supports cooperation both within the school and with the home and the rest of the society. The pupils must also enjoy the opportunity to participate in the creation and development of the school's operational culture.

Halinen, Holappa, and Jääskeläinen (2013, p. 193) considered that the development of school culture is the essence of Finland's reformed national core curriculum, which was confirmed at the end of 2014. The following brief account clarifies the manner in which this curriculum defined the concept of "school culture" (FNBE, 2016, p. 27):

> The culture of a community comprises its practices that are shaped by its history and culture. The school culture may be developed and changed. It is an entity whose components are
>
> – interpretation of the norms that direct the work and the goals of the activities
> – leadership and the organization, planning, implementation and evaluation of work
> – competence and development of the community
> – pedagogy and professionalism
> – interaction, atmosphere, everyday practices and learning environments.
>
> The school culture is shaped by both conscious and unconscious factors. The school culture affects those who are within its sphere, regardless of whether its significance and impacts are recognised or not.

The objective of the curriculum reform is to contribute to a school culture that enhances learning, participation, well-being, and a sustainable way of life (ibid., p. 28). The goal is to develop schools as learning communities, typical of which is interaction, participation, and diverse ways of work (Halinen et al., 2013, p. 193). The changes can be implemented in practical school work – even though it may be

difficult because changing school culture calls for profound collaborative reflection on thinking and action models. In this process collegial cooperation and a shared vision are essential, and on the basis of these factors school culture develops and changes.

School culture is a multidimensional entity. Schoen (2013, pp. 13, 29–31) noted that the following four dimensions must be examined when changing a school culture: the professional orientation of the school staff, the structure of the school organization, the quality of learning environments, and the student-centered focus. The professional orientation and development of the quality of the learning environments are integral dimensions of the teacher's work. All staff members must participate in development work in order to achieve real changes in the school's internal reality as well as to develop the school organization and make its activities increasingly student centered.

The following sections explore the national curricula used in Finland for the comprehensive school from the 1970s to the present. The implications of curriculum reforms for school culture are simultaneously discussed from the perspectives of the various dimensions.

APPROACHES TO THE CURRICULUM

Definitions of "curriculum" have undergone change and transformation depending on the school system in force and on the general objectives of education. The twentieth century has seen the publication of over 1,100 curriculum books, each with a different interpretation of "curriculum." After all, the notion of a curriculum tries to answer three questions fundamental to formal schooling: What knowledge, skills, and values are the most important? Why are they so? How should young people acquire them? The "whats," "whys," and "hows" have produced a rich variety of responses over the purposes, content, organization, and implementation of curriculum over the ages (Cuban, 1992, p. 221).

The historical development of curricula can be presented as a simple bifurcation: a subject and teacher-centered tradition and a student-centered tradition. The subject and teacher-centered curriculum is closely associated with Johan Friedrich Herbart's (1776–1841) systematic curriculum concept of *Lehrplan*, the curriculum design of which emphasizes subjects and subject content. In the early 1800s, Herbart developed a philosophical basis for curriculum and distinguished the ends from the means (Herbart, [1902], pp. 136–141). The ultimate goal of education was moral. It aimed at training students for an ideal society. Correspondingly, Herbart chose some basic subjects and organized them into large, connected units to arouse and keep alive the learner's deep interest (Leino, 1995, pp. 2–3). Another comparably student-centered curriculum theory originates from John Dewey's (1859–1952) aim of developing a form of instruction based on the children's own activity (Kimonen, 2015, pp. 64–70; Malinen, 1992, pp. 11–15). Dewey (1950) considered that the concept of "curriculum" refers to the planning of a child's learning experiences (pp. 14, 16).

In the 1990s Finland officially abandoned the Herbartian *Lehrplan*-type national curriculum and adopted a Deweyan line of thinking with its decentralized local school-based curricula (Rauste-von Wright, von Wright, & Soini, 2003, p. 194). The teacher and subject-centered curriculum can be termed a "classical curriculum," and the child-centered an "idealistic curriculum." The essential features of classical and idealistic curricula are presented in Table 1 based on the summary by Lawton (1982, pp. 22–23).

Table 1. Features of Classical and Idealistic Curricula (Lawton, 1982, pp. 22–23)

Classical Curriculum	Idealistic Curriculum
– Subject-centered approach	– Child-centered approach
– Skills	– Creativity
– Instruction	– Experience
– Information	– Discovery
– Obedience	– Awareness
– Goals	– Processes
– Data collection	– Attitudes and values
– Content	– Experience
– Subjects	– Real-life themes and projects
– Method	– Method
– Didactic teaching	– Participation
– Competition	– Cooperation
– Assessment	– Assessment
– Tests and exams	– Self-assessment

Curricula are ever-changing social and cultural constructs that are practical and interactive by nature. The practical aspect of a curriculum is to be seen in the written curriculum in the school as well as in the interactive component of the student–teacher encounter (Cornbleth, 1990, p. 5; Hamilton, 1995, p. 218). The curriculum aims at giving a holistic picture of the purposeful learning experience (see, e.g., Marsh, 1997a, pp. 5–6). At the same time the curriculum reflects the concepts of the human being, the world, education, learning, and knowledge held by those compiling it. Since Herbart's time considerable variety has characterized the perspectives emphasized in the curricula and the associated guidelines.

This chapter will next give a brief overview of national curricula in Finnish comprehensive schools, and of the changes made in them since 1970. In Finland comprehensive schools provide a general education for all children between the ages of seven and sixteen, taking nine years to complete. Comprehensive school education consists of a lower level (grades 1 to 6) and an upper level (grades 7 to 9) (MoE, 1994, p. 21). The specific focus here is on the 1970 reports of the curriculum committee for the comprehensive school and the national curricula of 1985, 1994,

2004, and 2014. Special attention is paid to curriculum conceptions and the key aims, principles, and teaching methods of the different curricula. The analysis is partly based on an article by Nevalainen, Kimonen, and Hämäläinen (2001, pp. 123–141) in the publication *Curriculum Approaches*, edited by Eija Kimonen (2001). The features of the curricula and their impact on the various dimensions of school culture are commented on in the light of results from the previous qualitative research projects (Kimonen & Nevalainen, 2005; Webb et al., 2004a) and the curriculum analyses presented by Marsh (1997b).

CURRICULUM CHANGE: THE CASE OF FINNISH EDUCATION

Classical Curricula

Suggestions for educational reforms, especially concerning curricula, often appear in the professional literature. This might convince us that problems exist that require great effort to solve. The endless reform proposals suggest that previous reforms did not correct the problems (Marsh, 1997a, p. 173). Finnish comprehensive school curriculum reforms in the 1970s and 1980s were based on centralized planning and decision-making. The 1970 reports of the curriculum committee for the comprehensive school and the 1985 framework curriculum for the comprehensive school are classical by nature (see VN, 1970; OPM, 1970; KH,1985). Malinen (1985, p. 44) noted that these pedagogical-administrative plans reflect, to some extent, both the *Lehrplan* and the curriculum dimensions. According to the regulations, both documents are curricula on which the local curricula are to be based. In practice, the committee reports of 1970, in particular, but to a large extent the framework curriculum of 1985 as well, were planned and developed centrally. Malinen defined the concept of a “comprehensive school curriculum” as a document directing school education (ibid., pp. 41, 44). It does such things as set out the objectives and contents of instruction, teaching methods, means of evaluation, extracurricular activities, student welfare work, and subject-specific curricula.

The 1970 Reports of the Curriculum Committee

Structural planning for the comprehensive school began as early as in the 1950s, but it was not until 1965–1966 that a thorough curriculum development began. A detailed curriculum was presented in a two-volume report, totaling 700 pages, by the curriculum committee for the comprehensive school in 1970 (Malinen, 1985, p. 26; 1992, p. 15). Its first part defined the overall objectives for the comprehensive school, while the second part was concerned exclusively with subject-specific curricula. The original intention was to implement the curriculum reform flexibly according to local circumstances (VN, 1970, p. 57). However, in 1972 the reform became centralized due to the restrictive regulations of the National Board of General

Education (Malinen, 1992, p. 16). In practice, it was the 1970 committee reports and the subsequently appended subject curricula published by the National Board of General Education that constituted Finland's regional and school curricula.

The 1970 committee reports were somewhat ambiguous in their curricular thinking. The first part included various features of an idealistic curriculum. It stated that the primary responsibility of the school was to provide substance and stimulation to promote all-around development of student personality. School was to focus on students' individual abilities and their cultural environment. In learning situations the student was not to be the object of external influence, but rather the subject of the activities. Modern principles, however, were not fulfilled, either in the second, subject-specific part of the report or in any of the teaching guides specifically related to this report. The plans were quite comprehensive in their objectives and content. Furthermore, teachers felt that these plans were forced on them by the powers-that-be. As a result, instruction remained substantially behaviorist and its methods were mainly teacher and textbook centered (see Malinen, 1981, pp. 116–117; 1985, p. 52; 1992, pp. 16–17). Teachers' professional orientation emphasized a "transmission meta-orientation". According to this view, the primary duty of the teacher is to transfer information and supervise learning (Nevalainen & Kimonen, 2013b, p. 230).

The 1970 committee reports, and particularly instruction based on them, aimed at complying with the classical curriculum model presented by Tyler in 1949. This model was influential in the Finnish school system, especially throughout the 1970s and the early 1980s. According to Tyler (1969, p. 1), the curriculum includes the following four principles:

1. setting educational objectives;
2. selecting learning experiences to attain these objectives;
3. organizing learning experiences for effective instruction; and
4. evaluating the effectiveness of the learning experiences.

Marsh (1997b, p. 125) reported that the influence of Tyler's curriculum thinking was visible in the following features of school education:

– The objectives were expressed in terms of student behavior traits.
– The learning experiences required for the fulfillment of educational objectives came under ever-increasing scrutiny.
– In addition to the encouragement given to teacher-centered methods, emphasis was placed on the student's awareness of the objectives to be pursued and on the acquisition of concepts and their integration.
– Evaluation was based on curricular objectives, utilizing informal and formal methods, and focusing on the entire teaching period.

Tyler's curriculum model was applicable to all subject areas and at all levels of teaching. Due to its logical approach and step-by-step organization, the model was easy to implement. However, it did not offer any clear basis for the choice of objectives. Tyler's model ignored unintentional learning and over-emphasized the importance of measurable learning outcomes. Only a limited number of teachers utilized the objectives or phase-by-phase teaching as the premises for curricular

planning (ibid., p. 125). These weaknesses in the model eventually revealed themselves in the Finnish comprehensive school curriculum and its implementation.

The 1985 National Framework Curriculum

The new school legislation that came into effect in 1985 consolidated and clarified the role of the curriculum in school activities. Local authorities were increasingly able to make their own decisions concerning the curriculum. At the same time, their responsibility for curriculum development crystallized. Efforts were also made to provide local authorities and schools with more educational options (Malinen, 1985, pp. 65–66).

Local curricula were based on the 1985 framework curriculum for the comprehensive school (KH, 1985). Compared to the 1970 reports, it was noticeably more concise, totaling 328 pages. The 1985 curriculum was a national curriculum, the text of which could be used as a framework for local curriculum development. Local authorities could supplement the national curriculum to conform with prevailing local conditions (Malinen, 1992, p. 34).

Local curricula varied significantly. In some municipalities, the contents in particular showed a tendency to be supplemented by local issues. In most of them, however, the section on curriculum objectives was written completely in compliance with the national curriculum. Administrative solutions such as language policy and special education arrangements were individualized in each municipality (ibid., p. 34). Municipal curricula were approved by the Provincial Government Departments of Education. The principal or head of each school cooperated with the teachers to draw up its annual work plan, which was then submitted to the provincial government. This work plan specified how the school organized education, such as the division of students into groups, group sizes, and club activities. In addition, school-based pedagogical characteristics and topics to be emphasized as well as textbook choices were presented (Kosunen, 1994, p. 97).

Curricula were rapidly produced in the municipalities. Atjonen (1993) described that almost one third of teachers participated in compiling the local curricula. This process implied a shift from a nationally centralized curriculum toward a decentralized one that was considered to be individual. Participants developing the curricula reported their need to familiarize themselves with both the national and the local curricula, cursorily with the former and thoroughly with the latter. The local curriculum, however, appeared to be forced upon the majority of teachers by the powers-that-be. Teachers involved in developmental work benefited most from this system (pp. 175–177).

Teachers identified insufficient financial and human resources as the greatest problem in curriculum development and implementation. This was the reality, particularly in small municipalities. Teachers also reported problems related to their lack of experience in first-hand curriculum development, the extensive workload curriculum development demands, and the lack of time. Further obstacles were the lack

of local and student-centered learning materials and inexperience in using authentic, unedited resources in teaching and learning. More administrative and pedagogical training on curriculum development was needed. In the 1980s, the aim was indeed to pay more attention to pedagogical leadership in schools. A local curriculum offered an opportunity to take a sizeable step toward an idealistic curriculum: away from the teacher-centered, behaviorist approach and toward a student-centered, humanistic, and constructivist approach to learning (ibid., pp. 177–181).

In the 1980s, local curriculum work resembled the approach presented by Walker (1971), which was based on deliberation. The premise of Tyler's model was to piece together how curriculum work should be, whereas Walker's model focused on examining how the curriculum development process proceeded in practice (Marsh, 1997b, p. 129). Finnish researchers (e.g., Atjonen, 1993; Kosunen, 1994) were also interested in what actually happened in local curriculum work, not so much in what should have happened. To generalize, we can note that Walker's three-step naturalistic model for curriculum development began to influence curricular work in Finland in the late 1980s.

The model for curriculum development by Walker (1971) includes the following stages: platform, deliberation, and design. The platform comprises conceptions, theories, and aims. These three components imply profound "products of reflections on life and education." The act of reflecting is also connected to various less explicit expressions, in other words, mental "images" and "procedures." These provide detailed information on the development process (p. 56).

The second stage of curriculum planning consists of a negotiation process based on deliberation. Walker held the view that this development phase is complicated and challenging: the designers must be able to justify in practice their previously agreed principles. During the deliberation stage, the designers must also identify the problems existing in the circumstances for which the curriculum is being developed. Furthermore, they must realize how the curriculum can alleviate these problems (ibid., p. 55; for a closer examination of the Walker's model, see Reid, 1994, p. 20).

Finally, curriculum work leads to decisions about the measures to be taken. At this design stage a curriculum is created that contains such things as the subjects, learning materials, and recommended activities (Marsh, 1997b, p. 132). When applying these results in practice, some descriptions of curriculum work produced by Finnish researchers (e.g., Atjonen, 1993; Kosunen, 1994; Syrjäläinen, 1994) can be interpreted to include features of Walker's model. In Finland, curriculum development based on the naturalistic approach varied from municipality to municipality and from school to school. Atjonen (1993) noted that in some schools planning was largely done for the school's own benefit. In these cases the personal dialogue between participants was of primary importance. In some other schools, their curriculum was merely a document written to "appease the regional authorities" (p. 233).

Implications of a Centralized Curriculum for School Culture

Classical, centralized curricula represent the Finnish curriculum thinking prevalent in the 1970s and 1980s. At that time, some transition toward idealistic and decentralized curricula was naturally already to be observed, a trend that strengthened in the 1990s. This is how Finland gradually moved from a behaviorist teaching and learning mode of thinking toward a constructivist idea of learning. It is worth mentioning that while Finland was moving away from centralized curricula toward decentralized and school-based planning, many school systems, that of England in particularly, were moving in the reverse direction.

The era of centralized national curricula was a heyday for the classical curriculum in Finland. During the creation of the comprehensive school system, traditional curriculum thinking had several strengths. Its objectives included provision of a uniform foundation for the school system. Gradually, however, various recognized ontological and epistemological factors related to the Finnish system of values changed. As a result, concepts of the world, people, learning, and knowledge, to mention a few, received fresh emphasis and content. Classical curricula could no longer respond to the new challenges of a transforming world.

Marsh (1997b, p. 141) identified some advantages and disadvantages of a centralized curriculum. In the following these aspects will be explored from the perspective of the four dimensions of school culture presented by Schoen (2013, pp. 13, 29–31).

The Teacher's Professional Orientation

In the context of a centralized curriculum, the professional orientation of teachers can be called the narrow-band transmission of their meta-orientation. In compliance with this latter orientation, the key responsibilities of teachers include the transmission of information and the guidance of learning. This leaves teachers minimal room for their own initiatives. Teachers thus often assume the role of mere technicians lacking the possibility to participate in the planning of the activities of their school. In traditional school culture, teachers use a learning process that is reproductive. They react to changes in the internal and external operating environments at their schools chiefly by identifying and correcting errors. That is how they preserve the behaviorist thought and action models that stress the external control of learning. This kind of single-loop learning actually aims at preserving the prevailing school practices and routines.

The Structure of the School Organization

A homogeneous school organization that follows a centralized curriculum is highly hierarchic and bureaucratic. Its decision making is centralized and goal oriented. It emphasizes supervision. This model does not allow for the analysis of the local needs of individual schools. The purpose of an effective and easily controllable organization is to save time, energy, and money. The organization

often lacks implementation strategies, or insufficient attention is paid to them, even though the central administration monitors activities at individual schools, also requiring them to attain certain goals. This results in a uniform school culture in which schools are expected to be more similar than diverse. This may lead to limited goals. This type of rational organizational model expects school staff members to be willing to implement the operating principles created by the central administration.

The Quality of Learning Environments

A centralized curriculum favors traditional learning. Learning occurs mainly in closed environments in which studying is connected to a specific time and place. The pace of studying is strictly predetermined. Studying is subject centered, its contents include clearly defined problems and answers that are common to all learners. Learning is primarily based on external motivation. The classroom is the dominant learning environment in which students have only little or no contact with authentic alternative learning environments. The school culture does not allow concentration on local problems.

A Student-Centered Focus

Centralized curriculum thinking favors teacher-led and traditional methods that guarantee continuity but hinder diversity and creativity. In some subjects, they also reduce the opportunities to learn. Instruction utilizes technologically advanced methods and tools. At the national level, the methods used at different schools are mostly uniform.

Idealistic Curricula

The school system does not merely seek to adapt to ongoing changes – it aims at being an active agent in the development process. This was also the core idea of the curriculum reform in fall 1994. The intention was for schools to lead the change and not just follow it. Schools were to launch totally new a kind of curriculum work instead of merely updating existing curricula (FNBE, 1995, p. 8). The new school was described as flexible and analytical, and one of its major objectives was to encourage students to learn how to learn. Future schools were expected to produce intellectually curious citizens who could pose critical questions and find answers to them. A consequence of the renewals was that every school was allowed to create its own curriculum based on the general guidelines confirmed by the Finnish National Board of Education (Elo, 1994, p. 70).

The curriculum reform was connected to the change occurring in Finnish society at the time, which also implied a desire to develop educational quality and renew the concepts of curricular theory, learning, and knowledge (MoE, 1994, p. 65). Fundamentally, then, the approach of the 1990s curriculum represented a constructivist idea of learning and idealistic curriculum thinking. In the new school-

based curriculum, the student was seen as an active acquirer of information and creator of interpretations (Atjonen, 1993, p. 238; 1994, pp. 111–112, 118).

The 1994 Framework Curriculum

The *Framework Curriculum for the Comprehensive School 1994*, a report of 120 pages created by the Finnish National Board of Education, was considerably more concise than its predecessors. Its content supported the constructivist learning theory (FNBE, 1994). Consequently, Rauste-von Wright and associates (2003) considered that the aim of this report was not to create uniform and detailed curricula. The pedagogical implications of the approach actually suggested flexible curricula. It only prescribed the main points for curriculum work (p. 201). The following brief account illustrates the manner in which the framework curriculum of 1994 defined the concept and purpose of a “curriculum” (FNBE, 1994, pp. 10, 18):

> According to the present understanding, the curriculum is a dynamic process which is constantly reacting to the results of evaluation and the changes in the environment. The aims which have been set show the direction in which to go, but they are not to place restrictions on the tuition. ... The curriculum makes up the most important basis for the planning, evaluation, and implementation of work in schools. The guidelines issued by the National Board of Education are the foundation which is then interpreted, adapted, and added to at the local level in order to come up with a curriculum which is descriptive of, develops, and directs the practical work of teaching.

In compliance with the framework curriculum of 1994, school-based curricula were to express the mission statement, educational idea, and distinctive characteristics of each school. The objectives and content of topic units, school subjects, and integrated subjects were to be defined according to the guidelines set out in the national curriculum. The curriculum was also to cover the school’s teaching methods and ways of working. All members of the school community, including students’ parents and other interest groups closely involved in school activities were encouraged to participate in curriculum formulation. The process of actually writing the curriculum was regarded to be both active and continuous. The objective was to transform the school into a learning center with close relationships to interest groups in the local community (ibid., pp. 10–11, 15, 18–19). It was thus important to promote active cooperation between schools and the surrounding community, trade, and industry, as well as to develop teachers’ work based on self-evaluation (FNBE, 1995, p. 9).

The summary provided below illustrates the process of curriculum change in one small school in Finland. This is based on the study *Towards Active Learning* by Kimonen and Nevalainen (2002, p. 99):

> Changes in the teacher’s process of work and learning proceeded in phases. The process continued inductively through the comparison of individual experiences, which led to a decision of action. During the initiation phase of the change process, the teachers observed the needs for changes in the school curriculum, as well as in the practices

> and settings of action. They designed changes and tried out different realizations. Experiences gained during the implementation phase were analyzed with the school board, and the most essential features of the changes were then described at the parents' meetings. The models of action were compared, and their success was evaluated. During the continuation phase the observations and experiences gained over about five years, concerning the strengths and weaknesses of the process of work and learning, were discussed in detail at teachers' joint meetings. Finally, the new curriculum for the school was given its final form. This innovation process was naturally facilitated by decisions coming from the central educational administration.

The National Core Curriculum of 2004

The report *National Core Curriculum for Basic Education 2004*, drawn up by the Finnish National Board of Education, was externally clearly broader than its forerunner (319 pages). In terms of content, it intended to rely on a constructivist idea of learning. The act of 1998 for elementary and lower-secondary schools increased independent decision making in municipalities and schools (FNBE, 2004). Sahlberg (2011) observed that a new type of flexibility in the educational system also provided schools with the opportunity to learn from each other. In this manner the viable and innovative practices used at individual schools could be applied more broadly in development work (p. 39).

On the other hand, the 2004 national core curriculum increased the external control of teachers' professional activities, since it included detailed descriptions of students' good learner performance which teachers were to follow in student assessment (FNBE, 2004, p. 260). The contents of instruction were determined more closely than in the previous report of 1994. Rokka (2011, pp. 32–34) noted that this implied a return to more centralized regulation and steering. The new curriculum also defined concepts related to learning, learning environments, school culture, and working methods, aiming to make education more uniform at the national level. The curriculum was expected to include sections decided upon locally, but in practice these were mere details as the text was chiefly prepared at the National Board of Education.

The Finnish core curriculum is a national framework and norm, on the basis of which local curricula are created. Rokka also found that this centralized approach may have led to teachers' weak commitment and reluctance to change or develop pedagogical activities (ibid., p. 32). Halinen (2008) noted that municipal authorities in most cases have delegated considerable power to schools. The school-based curriculum provides the basis on which schools draw up their year plans, working plans for teachers, and potential individual study plans for students. The following description presented by Halinen (2008, p. 225) shows how teachers and the rest of school staff are actively involved in their process of curriculum development:

> When teachers discuss together issues relating to the curriculum, they have to think about all the basic things influencing their teaching and students' learning. Teachers

> decide on how to organise support for those with learning difficulties, how to organise multicultural education and special needs education, and student guidance and counselling, and how to take care of students' well-being. They plan cooperation between home and school, and draw up the knowledge strategy for their school, which defines how information and communications technology and virtual teaching are utilised in instruction, what kind of equipment is needed and how the ICT know-how of teachers is developed.

The 2014 National Core Curriculum

The Finnish National Board of Education confirmed the latest national core curriculum for elementary and lower-secondary schools in December 2014. In fall 2016, local curricula that comply with the new core curriculum was adopted in elementary schools (years 1 to 6). In years seven to nine, the new core curriculum will be put to practice gradually in 2017, 2018, and 2019. The actualization of the curriculum may be a significant challenge for teachers' basic and continuing education. Even physically, the core curriculum is an extensive document, with the English translation comprising 508 pages. In addition, its introduction presents some new concepts that were not included in the previous national curricula. These concepts include "school culture," which is based on a learning community, and "transversal competence," which refers to the competences needed in the future.

Halinen and colleagues (2013) stated that "the central idea of the curriculum reform is to be found in the change of pedagogy and the operating culture of schools" (p. 193). The reform is expected to transform schools into learning communities characterized by interaction, participation, and multifaceted ways of work. Such a community takes care of student well-being and safe daily activities. In addition, it considers cultural diversity, takes responsibility for the environment, and orients itself to the future. Additionally, this reform in teacher education must be taken into account if future teachers are to be provided with the professional competences necessary for developing schools into networked and team-organized learning communities (ibid., p. 193).

The *National Core Curriculum for Basic Education 2014* (2016) declared that school-based curricula define the organization and implementation of education, teaching, learning assessment and support, guidance and student welfare services, home–school collaboration, and related activities. School-based curricula complement and specify the local emphases of national curricular objectives, policies, contents, and similar issues related to the arrangement of instruction (FNBE, 2016, pp. 9–10). Furthermore, the national core curriculum defines the competences needed in the society and modes of employment of the future. The following seven interconnected competence dimensions underlie the concept of transversal competence: (1) thinking and learning to learn; (2) cultural competence, interaction, and self-expression; (3) taking care of oneself and managing daily life; (4) multiliteracy; (5) ICT competence; (6) employability competence and entrepreneurship; and (7)

participation, involvement, and ability to build a sustainable future (ibid., pp. 21–26). The conclusion could be made that the development of transversal competence in students, as well as the creation and implementation of local curricula, all require schools and teachers to promote a collegial and collaborative school culture.

The core curriculum is being reformed in order to enhance the prerequisites of schools for educational work, the meaningful learning of all students, and a sustainable future. Schools are guided to deepen their idea of learning and to develop opportunities for collaborative learning in multifaceted learning environments in which new knowledge is generated and students' needs are taken into account. The aim is to support local pedagogical development and to encourage education providers to integrate curriculum development with the strategic development of teaching and education at the local and national levels (OPH, 2015, para. 1).

Implications of a School-Based Curriculum for School Culture

From a teacher's perspective, the school-based curriculum no longer seemed to be something forced upon them by the authorities. Instead, it was a tool for schools to define their own objectives along with the associated means and contents (Välijärvi, 1999, p. 102). Syrjäläinen (1995) reported that teachers' experiences and views of the realization of school-based curricula have varied, depending on the school level. Elementary school teachers have mainly experienced the school-based curriculum as an inspiring source of new possibilities. At higher school levels, teachers report their experiences and views to have been less positive. In any case, school-based curriculum work has offered teachers opportunities for professional growth, development of awareness, and professional identity. It has forced teacher communities to become accustomed to teamwork and cooperation. Notable points of development included the non-graded schools, periodization of instruction, provision of elective subjects, personal study plans, teaching methods based on student activity, and qualitative evaluation (pp. 42–43, 115–117; see also Norris, Aspland, MacDonald, Schostak, & Zamorski, 1996, pp. 87–90). Marsh (1997b, p. 149) listed the following reasons for the adoption of school-based curriculum development:

- Curriculum design models managed from above do not function.
- School-based curriculum work gives schools more autonomy.
- Schools must be responsive to their environment, and in this process they need freedom, opportunities, responsibility, and resources in order to define and direct their activities.
- Schools are the most suitable bodies for designing and creating curricula and developing forms of teaching and learning in specific programs.
- Teachers' self-actualization, motivation, and sense of achievement are linked to decision making in curriculum work, this being essential for teachers' professional life.
- The school is a more stable and permanent institution for curriculum work than regional or national organs.

Teachers have also encountered difficulties in school-based curriculum work. These difficulties have led to problems such as burnout and exclusion of some staff members along with the formation of cliques and divisions within the work community. In addition, many schools have remained quite isolated from the surrounding society (Syrjäläinen, 1995, pp. 115–117). Marsh (1997b, p. 149) noted that commonly recognized obstacles to school-based curriculum work include a lack of time, expertise, and resources, as well as problems related to school atmosphere. However, even more serious problems arise from obstacles related to the professional development of the teacher, such as resistance to change both personally and in the environment. Marsh also identified some sources of the problems (ibid., p. 149):

- If the school is responsible for both the creation (planning) of the curriculum and the decisions on practical actions (implementation), considerably more financial resources need to be allocated to teachers' professional development and the hiring of support staff.
- Many teachers are not interested in school-based curriculum work because they feel that they are only implementing curricula created by others.
- Powerful lobbyists can sometimes bring about changes at the local level that lead to curricula that are overextended, biased, and no longer relevant.

The implications of a school-based curriculum for school culture are next examined from the perspective of the four dimensions presented by Schoen (2013, pp. 13, 29–31). These are Professional Orientation, Organizational Structure, Quality of Learning Environments, and Student-Centered Focus. The following analysis is based on the results of the previous qualitative research projects. The focus of these studies is on the following topics: students and teachers as active learners, curriculum change, teacher professionalism, and authentic learning environments (Kimonen, 2015; Kimonen & Nevalainen, 2002; 2005; Nevalainen & Kimonen, 2013a; 2013b; Vulliamy, Kimonen, Nevalainen, & Webb, 1997; Webb et al., 2004a; 2004b).

A Teacher's Professional Orientation

According to school-based curriculum thinking, teacher professionalism rests on autonomy. A teacher is committed to help students become active learners. An additional requirement is commitment to personal lifelong learning and cooperation with various groups. A teacher's professional orientation is based on emphasis on a broad-band transaction of his or her meta-orientation. This implies that students should be provided with learning opportunities based on active learning and cooperation in different learning environments. A teacher should participate in the development of teaching and other school activities together with colleagues, other staff, and different interest groups. Central characteristics of the profession would include enthusiasm and participation in continuous learning and skills improvement.

A teacher's learning process and the associated school development are closely interconnected. The transformation of a traditional school context requires teachers to critically reflect on their own operating principles and practices as well as to renew them, in other words, they have to create a new school context. For teachers,

the change in their work and the management of change imply a holistic learning process in which the prevailing school culture is internalized and changed through externalization. A school culture based on progressive pedagogy and a constructivist idea of learning presumes "transformative" learning. If they are to change the school context, teachers must acquire new models for thought and action that will facilitate changing the basis of action so that it becomes a double-loop learning process for them. Transformative learning also includes "reflective" learning, this being based on deliberation and discussion.

The Structure of the School Organization

A school organization that follows a school-based curriculum has its own culture that can be changed and improved. This requires collegial cooperation and in-depth reflection on thought and action models. The objective is to empower teachers to influence the direction and development of reforms. However, forced cooperation in order to achieve externally determined goals can suppress the desire of teachers to cooperate and develop school culture.

The Quality of Learning Environments

A school culture that is implementing a school-based curriculum gives preference to open and contextual learning environments. The responsibility, inner motivation, and self-direction of students are emphasized. Learning is oriented toward authentic learning environments that are connected to physical, mental, and cultural dimensions of the reality outside the school. IC technology is frequently utilized in learning and teaching. School culture supports the utilization of local resources in teaching.

A Student-Centered Focus

School-based curricula provide teachers with considerable freedom to test alternative pedagogical methods. The curriculum reform favors approaches of active learning, including collaborative research and problem-solving projects, theme-based learning, inquiry-based learning, as well as on small-group discussions of phenomena. Active learning is based on personal, action-based experiences, accompanied by reflection on them. Inner motivation and a genuine interest in exploring one's own environment are essential. Self-direction and cooperation as well as initiative data collection and the ability to process data are emphasized in the learning process. Active learning takes place in an environment that is open and also allows the learner to participate in planning, implementing, and evaluating the learning experience. According to Kimonen and Nevalainen (2014, p. 122), active learning is characterized by the following attributes:

– *Utilization of concrete materials in authentic learning experiences*. Active learning requires conditions that allow immediate and meaningful experiences in genuine learning situations. Learners create new knowledge by utilizing prior learning when they reflect on their experiences gained through concrete activities.

- *Utilization of methods based on research and problem solving*. Learning is active when the material to be learned is expressed as problems and questions for which students look for solutions guided by their inner motivation, independently or in small groups.
- *Utilization of collaborative small groups*. Of prime importance in the work and learning of the small groups is interaction, discussion, and joint reflection.
- *Learner participation in planning the objectives, activities, modes of study, and evaluation of the learning process*. The possibility to make choices at the various stages of the learning process is essential for the learner to be empowered as a result of the activities.
- *Personal meaningfulness of the learning process and activities for the learner. Active learning should develop self-knowledge in students*. Throughout the learning process, students must be able to evaluate how well they have attained their own objectives. Furthermore, they should be able to evaluate the validity of information and the development of learning skills in their group.

Active learning implies that students are mentally and physically active. They guide their own learning, invent solutions to problems, define and interpret concepts, as well as reflect on their mutual interrelations. Interaction with their environment is also important for students. Through active learning, students enhance their reflective thinking as well as their metacognitive knowledge and skills. For example, students conducting a research project define a problem, make observations on phenomena, collect information, classify and interpret the observations, form and test hypotheses, and make conclusions and generalizations.

TOWARD THE SCHOOL OF THE FUTURE

Curriculum thinking in Finland has shifted from a nationally controlled and subject-centered curriculum model toward one that is school based and student centered. The two models have occasionally overlapped, which has led to an inconsistent use of concepts and a lack of coherence in curriculum development (Malinen, 1992, p. 27). Centrally steered comprehensive school curriculum work in the 1970s relied on the ideology of mastery learning. This ideology was still present in the 1980s, when a so-called pedagogical-administrative curriculum model was adopted. An innovative feature of this model was its emphasis on local planning. The curriculum reform did not radically change the pedagogical design processes used by teachers (ibid., p. 21; see also Atjonen, 1993, p. 231; Syrjäläinen, 1994, pp. 11–12).

However, the reform gave rise to strong criticism of classical curricula. Their cumulative nature, stability, and alienation from the surrounding reality were considered to be problems in a changing world. A common ideas were that the traditional curricular model represented a static view of knowledge, a superficial view of learning, a mechanical view of humankind, a linear concept of time, and a distorted view of reality. Its foundation was built on a behaviorist approach, according

to which reality could be split into separately learned parts and their measurable partial objectives (ibid., pp. 13–14; Välijärvi, 1991, pp. 60–61).

The transition to school-based curricula in the 1990s was, according to Syrjäläinen (1995, pp. 6–43, 115–117), a remarkable change for most schools. It was associated with changes on the administrative, structural, and pedagogical levels, as well as with those affecting human relationships and work communities. At its best, the curriculum became an explicit document guiding school operations, one that was read and considered to contain ideas worthy of being put into practice. Although the school-based curriculum could provide teachers with an opportunity to develop their school, the required changes were not necessarily realized, with many of the plans remaining as mere rhetoric. In reality, insufficient time and other resources as well as the lack of expertise and training often prevented teachers from fully implementing curricula. Other problems might also have resulted from a lack of sufficient dialogue, reflection, or activities.

Despite its advantages, the period of school-based curricula demonstrated itself to be burdensome for many teachers. The decentralization of administration to the school level was often experienced as a failed solution because teachers and principals were used to following centralized management practices in their activities. The freedom to do and decide independently was felt to be abandonment, and the resulting insecurity was an obstacle to successful reform. Syrjäläinen concluded that strong support for teachers had to be an essential element of the new situation. If teachers feel that they have been left alone in their work and development efforts, the situation is inadequate (ibid., p. 112). Norris and associates (1996) noted how crucial it is to harness, direct, and efficiently utilize existing structures and resources if the reform is to be given adequate support (p. 77).

The 2014 national core curriculum for elementary and lower-secondary schools aims at providing better prerequisites for educational work at schools, for joint meaningful learning, and for a sustainable future. It emphasizes the joy of learning, an active role for students, interaction skills, and collaboration. The goal is to respond to future challenges by enhancing students' transversal competence (see OPH, 2015, para 1). The curriculum is perceived as a learning tool for the school organization in the effort to create the school culture of a learning organization. Understood in this way, the curriculum is a tool for shared expertise in a school community requiring a reflective approach from all members of the organization (Rauste-von Wright et al., 2003, p. 203).

This chapter examines educational change from the standpoint of curriculum change. It focuses particularly on the implications of the changes for school culture. Many researchers believe that implementing curriculum reform will be a formidable challenge for the schools of the future (see, e.g., Marsh, 2009, p. 170). This transformation should also be visible in practice as a change in the different dimensions of school culture. This change process requires teachers to master new pedagogical models and have strong support when adopting new work methods and models. They must also have the relevant in-service training as well as sufficient resourcing (Jordman, Kiili, Lonka, Schneiz, & Vauras, 2015, pp. 79, 81, 82).

The starting point for changing school culture comes from teacher professional orientation. Motivated and committed teachers can achieve a profound change in school operations. A shared view on the direction of the change is essential. To implement a successful change, teachers must have relevant professional knowledge and skills. A further crucial factor is steadfast support from the work community. The transformation of organizational culture requires that teachers change their thought and action models in compliance with the school-specific shared educational philosophy and operating strategy. Strong and inspiring pedagogical leadership is also needed if teachers are to be sincerely motivated to change school culture. Development of the school organization calls for detailed strategic co-planning and precise monitoring of progress. From the viewpoint of learning environments, enthusiasm for learning new material is an important objective. It can be achieved when students also have the opportunity to carry out their study projects in authentic contexts outside the school (for more details, see Schoen, 2013, p. 29).

The following is a brief outline of an ideal school that has successfully undergone an educational reform. This includes three modules concentrating on student-centered active learning, teacher professional autonomy, and local school-based curriculum. The ultimate objective is the transformation of school culture:

1. *Promoting student-centered active learning*. The aim is to enhance the processes of active learning. Teaching and education are connected with situations of social reality in which learning can be connected to each student's life, experiences, and practical problems. In this manner learning can be linked to its natural context. Ideal instruction is actively problem oriented, holistic, and life centered (see Kimonen, 2015, pp. 260–261).
2. *Encouraging professional autonomy with a collaborative culture in schools*. Core factors in the teaching will be promotion of social orientation, cooperation, and continuous work development. The enhancement of teachers' commitment to work with their colleagues in a school culture based on cooperation is of the utmost importance. This problem solving process involves mutual help, support, and shared expertise (see Goodson & Hargreaves, 2003, p. 132).
3. *Enhancing the balanced local school-based curriculum*. Future educational change will focus more on local control of the curriculum. In so doing fundamental change will place a curriculum in the appropriate context of an individual school. A school-based curriculum is designed by teachers together with their interest groups. It focuses on twenty-first century skills and has equal weight in all learning areas. Through contextualizing a curriculum teachers anchor their instruction to the context of students' lives.

REFERENCES

Arends, R. I. (2009). *Learning to Teach* (8th ed.). New York, NY: McGraw-Hill.

Atjonen, P. (1993). *Kunnan opetussuunnitelma koulun hallinnollisen ja pedagogisen kehittämisen kohteena ja välineenä* [The local curriculum as an object and instrument in the administrative and pedagogical development of the school system] (Acta Universitatis Ouluensis, Ser. E, No. 11). Oulu, Finland: Kajaanin opettajankoulutuslaitos, Oulun yliopisto. (In Finnish)

Atjonen, P. (1994). Peruskoulun kasvatus- ja opetustyön päämäärät [The goals of education and teaching in the comprehensive school]. In S. Kinos (Ed.), *Uudistuva peruskoulu* (pp. 107–133). Helsinki, Finland: Opetushallitus. (In Finnish)

Bacon, J. (2015). The impact of standards-based reform on special education and the creation of the 'Dividual. *Critical Studies in Education*, *56*(3), 366–383.

Bisland, B. M. (2015). An exploration of the impact of accountability testing on teaching in urban elementary classrooms. *Urban Review: Issues and Ideas in Public Education*, *47*(3), 433–465.

Brandt, C. B. (2012). Misrecognition and science education reform. *Cultural Studies of Science Education*, *7*(3), 579–583.

Bye, J. (2015). Foucault and the use of critique: Breaching the self-evidence of educational practices. *International Journal of Qualitative Studies in Education*, *28*(4), 394–414.

Cheng, Y. C. (2009). Teacher management and educational reforms: Paradigm shifts. *Prospects: Quarterly Review of Comparative Education*, *39*(1), 69–89.

Chitty, C. (2012). The birth of New Labour and the death of comprehensive education. *FORUM: For Promoting 3–19 Comprehensive Education*, *54*(2), 313–318.

Collins, R. (1998). *The Sociology of Philosophies: A global theory of intellectual change*. Cambridge, MA: The Belknap Press of Harvard University.

Cornbleth, C. (1990). *Curriculum in Context*. London, UK: Falmer Press.

Cuban, L. (1992). Curriculum stability and change. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum* (pp. 216–247). New York, NY: Macmillan.

Cuban, L. (1998). How schools change reforms: Redefining reform success and failure. *Teachers College Record*, *99*(3), 453–477.

Dewey, J. (1950). *The Child and the Curriculum*. Chicago, IL: University of Chicago Press. (First published 1902)

Ehren, M. C. M., Gustafsson, J. E., Altrichter, H., Skedsmo, G., Kemethofer, D., & Huber, S. G. (2015). Comparing effects and side effects of different school inspection systems across Europe. *Comparative Education*, *51*(3), 375–400.

Elo, P. (1994). Winds of change at the comprehensive and upper secondary schools. *Life and Education in Finland*, *31*(1), 70–71.

English, F., & Papa, R. (2010). *Restoring Human Agency to Educational Administration: Status and strategies*. Lancaster, PA: Proactive.

Erskine, J. L. (2014). It changes how teachers teach: How testing is corrupting our classroom and student learning. *Multicultural Education*, *21*(2), 38–40.

Feyerabend, P. (1993). *Against Method*. London, UK: Verso.

FNBE. (1994). *Framework Curriculum for the Comprehensive School 1994*. Helsinki, Finland: Finnish National Board of Education.

FNBE. (1995). *Comprehensive School in Finland*. Helsinki, Finland: Finnish National Board of Education.

FNBE. (2004). *National Core Curriculum for Basic Education 2004*. Helsinki, Finland: Finnish National Board of Education.

FNBE. (2016). *National Core Curriculum for Basic Education 2014* (Publication 2016, No. 5). Helsinki, Finland: Finnish National Board of Education.

Fullan, M. (2001). *Leading in a Culture of Change*. San Francisco, CA: Jossey-Bass.

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for qualitative research*. London, UK: Weidenfeld and Nicolson.

Gonzales, S. M., & Shields, C. M. (2015). Education "reform" in Latino Detroit: Achievement gap or colonial legacy? *Race, Ethnicity and Education*, *18*(3), 321–340.

Good, T. L. (2011). Reflections on editing “The Elementary School Journal” in an era of constant school reform. *Elementary School Journal*, *112*(1), 1–15.

Goodson, I. F., & Hargreaves, A. (2003). Educational change and the crisis of professionalism. In I. F. Goodson, *Professional Knowledge, Professional Lives: Studies in education and change* (pp. 125–133). Maidenhead, UK: Open University Press.

Guthrie, G. (2012). The failure of progressive classroom reform: Lessons from the curriculum reform implementation project in Papua New Guinea. *Australian Journal of Education*, *56*(3), 241–256.

Halinen, I. (2008). Basic education curriculum system in Finland. In J. Hautamäki, E. Harjunen, A. Hautamäki, T. Karjalainen, S. Kupiainen, S. Laaksonen, ... R. Jakku-Sihvonen, *PISA06 Finland: Analyses, reflections and explanations* (pp. 223–226). Helsinki, Finland: Ministry of Education.

Halinen, I., Holappa, A.-S., & Jääskeläinen, L. (2013). Opetussuunnitelmatyö ja yleissivistävän koulutuksen uudistaminen [Curriculum work and reform in general education]. *Kasvatus*, *44*(2), 187–194. (In Finnish)

Hamilton, D. (1995). Studying curriculum: Cases and methods. *Curriculum Studies*, *3*(2), 217–221.

Hargreaves, A. (2005). The emotions of teaching and educational change. In A. Hargreaves (Ed.), *Extending Educational Change: International handbook of educational change* (pp. 278–295). Dordrecht, The Netherlands: Springer.

Hargreaves, A., Lieberman, A., Fullan, M., & Hopkins, D. W. (Eds.). (2014). *International Handbook of Educational Change: Part two*. New York, NY: Springer.

Harisalo, R. (2008). *Organisaatioteoriat* [Organizational theories]. Tampere, Finland: Tampere University Press. (In Finnish)

Herbart, J. [1902]. *Algemaine Pädagogik aus dem Zweck der Erziehung abgeleitet* [General pedagogics derived from the purpose of education]. Leipzig, Germany: Reclam. (In German)

Hopkins, D. (2007). *Every School a Great School: Realizing the potential of system leadership*. Maidenhead, UK: Open University Press.

Jordman, M., Kiili, K., Lonka, K., Schneiz, A., & Vauras, M. (2015). Oppimisympäristöt ja menetelmät [Learning environments and methods]. In N. Ouakrim-Soivio, A. Rinkinen, & T. Karjalainen (Eds.), *Tulevaisuuden peruskoulu* (Opetus- ja kulttuuriministeriön julkaisuja, No. 8, pp. 76–83). Helsinki, Finland: Opetus- ja kulttuuriministeriö. (In Finnish)

Jung, C. (1958). *The Undiscovered Self* (R. Hull, Trans.). New York, NY: Mentor.

KH (National Board of General Education). (1985). *Peruskoulun opetussuunnitelman perusteet 1985* [Framework curriculum for the comprehensive school]. Helsinki, Finland: Kouluhallitus. (In Finnish)

Kim, J. W. (2004). Education reform policies and classroom teaching in South Korea. *International Studies in Sociology of Education*, *14*(2), 125–146.

Kimonen, E. (Ed.). (2001). *Curriculum Approaches: Readings and activities for educational studies*. Jyväskylä, Finland: Department of Teacher Education & Institute for Educational Research.

Kimonen, E. (2015). *Education and Society: The essence of outdoor-oriented education in the United States and India*. Rotterdam, The Netherlands: Sense.

Kimonen, E., & Nevalainen, R. (2002). *Towards Active Learning: A case study on active learning in a small rural school in Finland* (Research, No. 57). Jyväskylä, Finland: Department of Teacher Education, University of Jyväskylä.

Kimonen, E., & Nevalainen, R. (2005). Active learning in the process of educational change. *Teaching and Teacher Education*, *21*(6), 623–635.

Kimonen, E., & Nevalainen, R. (2014). Aktiivinen oppiminen ja muuttuva koulukulttuuri: Tapaustutkimus oppilaiden ja opettajien aktiivisesta oppimisesta maaseudun pienessä koulussa [Active learning and changing school culture]. In P. Tikkanen & E. Törmä (Eds.), *Lahja yhteiseksi hyväksi* (pp. 121–137). Jyväskylä, Finland: Tuope. (In Finnish)

Kliebard, H. M. (1988). Success and failure in educational reform: Are there historical lessons? *Peabody Journal of Education*, *65*(2), 144–157.

Kosunen, T. (1994). *Luokanopettaja kirjoitetun opetussuunnitelman käyttäjänä ja kehittäjänä* [Elementary school teachers as curriculum implementers and curriculum makers] (Kasvatustieteellisiä julkaisuja, No. 20). Joensuu, Finland: Joensuun yliopisto. (In Finnish)

Koyama, J., & Kania, B. (2014). When transparency obscures: The political spectacle of accountability. *Journal for Critical Education Policy Studies*, *12*(1), 143–169.

Kretchmar, K., Sondel, B., & Ferrare, J. J. (2014). Mapping the terrain: Teach for America, charter school reform, and corporate sponsorship. *Journal of Education Policy*, *29*(6), 742–759.

Lawton, D. (1982). *Social Change, Educational Theory and Curriculum Planning*. London, UK: Hodder & Stoughton.

Leino, J. (1995). The changing concept of curriculum. In D. K. Sharpes & A.-L. Leino (Eds.), *The Dynamic Concept of Curriculum* (Research Bulletin, No. 90, pp. 1–6). Helsinki, Finland: Department of Education, University of Helsinki.

Malinen, P. (1981). Curriculum as a tool for the teacher. In G. Nissen, W.-P. Teschner, S. Takala, & H. Haft (Eds.), *Curriculum Change Through Qualification and Requalification of Teachers* (pp.115–123). Lisse, The Netherlands: Swets Zeitlinger.

Malinen, P. (1985). *Opetussuunnitelmat nykyajan koulutuksessa* [Curricula in modern schooling]. Helsinki, Finland: Otava. (In Finnish)

Malinen, P. (1992). *Opetussuunnitelmat koulutyössä* [Curricula in school work]. Helsinki, Finland: VAPK-kustannus. (In Finnish)

Manhong, L., & Lo, L. N. K. (2007). Teacher professionalism in educational reform: The experiences of Hong Kong and Shanghai. *Compare: A Journal of Comparative Education*, *37*(1), 53–68.

Marsh, C. J. (1997a). *Perspectives: Key concepts for understanding curriculum 1* (rev. ed.). London, UK: Falmer Press.

Marsh, C. J. (1997b). *Planning, Management and Ideology: Key concepts for understanding curriculum 2* (rev. ed.). London, UK: Falmer Press.

Marsh, C. J. (2009). *Key Concepts for Understanding Curriculum* (4th ed.). London, UK: Routledge.

Mehta, J. (2013). How paradigms create politics: The transformation of American educational policy, 1980–2001. *American Educational Research Journal*, *50*(2), 285–324.

Mette, I. M. (2013). Turnaround as reform: Opportunity for meaningful change or neoliberal posturing? *Interchange: A Quarterly Review of Education*, *43*(4), 317–342.

MoE. (1994). *Developments in Education 1992–1994 Finland*. Helsinki, Finland: Ministry of Education.

Nevalainen, R., & Kimonen, E. (2013a). The teacher as an implementer of curriculum change: A case-study analysis of small rural schools in Finland. In E. Kimonen & R. Nevalainen (Eds.), *Transforming Teachers' Work Globally: In search of a better way for schools and their communities* (pp. 111–147). Rotterdam, The Netherlands: Sense.

Nevalainen, R., & Kimonen, E. (2013b). Teacher competences in a changing school culture: A comparative analysis of teacher professionalism in England and Finland. In E. Kimonen & R. Nevalainen (Eds.), *Transforming Teachers' Work Globally: In search of a better way for schools and their communities* (pp. 229–259). Rotterdam, The Netherlands: Sense.

Nevalainen, R., Kimonen, E., & Hämäläinen, S. (2001). Curriculum changes in the Finnish comprehensive school: The lessons of three decades. In E. Kimonen (Ed.), *Curriculum Approaches: Readings and activities for educational studies* (pp. 123–141). Jyväskylä, Finland: Department of Teacher Education & Institute for Educational Research.

Norris, N., Aspland, R., MacDonald, B., Schostak, J., & Zamorski, B. (1996). *An Independent Evaluation of Comprehensive Curriculum Reform in Finland*. Helsinki, Finland: National Board of Education.

OECD. (2013). *Lessons from PISA 2012 for the United States: Strong performers and successful reformers in education.* OECD Publishing. Retrieved July 5, 2016, from http://dx.doi.org/10.1787/9789264207585-en

Olivant, K. F. (2015). "I am not a format": Teachers' experiences with fostering creativity in the era of accountability. *Journal of Research in Childhood Education*, *29*(1), 115–129.

OPH (Finnish National Board of Education). (2015). *Opetussuunnitelman perusteiden uudistamisen tavoitteet: Ops2016* [The objectives for reforming the core curriculum 2016]. Opetushallitus. Retrieved March 29, 2015, from http://www.oph.fi/ops2016/tavoitteet. (In Finnish)

OPM (Ministry of Education). (1970). *Peruskoulun opetussuunnitelmakomitean mietintö: Oppiaineiden opetussuunnitelmat* [Report of the curriculum committee for the comprehensive school. Subject-

specific curricula] (Komiteamietintö 1970, Pt. 2, Ser. A, No. 5). Helsinki, Finland: Opetusministeriö. (In Finnish)
Orton, J. D., & Weick, K. E. (1990). Loosely coupled systems: A reconceptualization. *Academy of Management Review*, *15*(2), 203–223.
Pierce, C. (1955). *Philosophical Writings of Pierce*. J. Buchler (Ed.). New York, NY: Dover.
Rauste-von Wright, M., von Wright, J., & Soini, T. (2003). *Oppiminen ja koulutus* [Learning and education] (9th ed.). Helsinki, Finland: WSOY. (In Finnish)
Reid, W. A. (1994). *Curriculum Planning as Deliberation* (Rapport, No. 11). Oslo, Norway: Pedagogisk Forskningsinstitut, Universitetet i Oslo.
Rokka, P. (2011). *Peruskoulun ja perusopetuksen vuosien 1985, 1994 ja 2004 opetussuunnitelmien perusteet poliittisen opetussuunnitelman tekstinä* [The policy-level analysis of the national curricula] (Acta Universitatis Tamperensis, No. 1615). Tampere, Finland: Tampere University Press. (In Finnish)
Sahlberg, P. (2011). *Finnish Lessons: What can the world learn from educational change in Finland?* New York, NY: Teachers College.
Saltman, K. J. (2014). Neoliberalism and corporate school reform: "Failure" and "creative destruction." *Review of Education, Pedagogy & Cultural Studies*, *36*(4), 249–259.
Schoen, L. (2013). Supporting teachers' work: Insights from a study of differentially improving schools in the United States. In E. Kimonen & R. Nevalainen (Eds.), *Transforming Teachers' Work Globally: In search of a better way for schools and their communities* (pp. 3–34). Rotterdam, The Netherlands: Sense.
Sementelli, A. J., & Garrett, T. M. (2015). MOOCs: Meaningful learning tools for public administration education or academic simulacra? *Education & Training*, *57*(4), 461–470.
Strain, M. (2009). The Education Reform Act of 1988: Success or failure? A short report of a BELMAS discussion forum. *Management in Education*, *23*(4), 151–154.
Strauss, A. L. (1987). *Qualitative Analysis for Social Scientists*. Cambridge, UK: Cambridge University Press.
Syrjäläinen, E. (1994). *Koulukohtainen opetussuunnitelmatyö ja koulukulttuurin muutos* [School-based curriculum development and changing school culture] (Tutkimuksia, No. 134). Helsinki, Finland: Opettajankoulutuslaitos, Helsingin yliopisto. (In Finnish)
Syrjäläinen, E. (1995). *Koulukohtaisen opetussuunnitelman toteutuminen: Opettajan ansa vai mahdollisuus?* [The implementation of school-based curriculum. A trap or an opportunity for the teacher?] (Opettajankoulutuslaitoksen julkaisuja, No. 5). Tampere, Finland: Tampereen yliopisto. (In Finnish)
Taylor, D. L. (2005). Class and schools: Using social, economic, and educational reform to close the Black? White achievement gap. *School Effectiveness & School Improvement*, *16*(4), 445–449.
Tyler, R. W. (1969). *Basic Principles of Curriculum and Instruction*. Chicago, IL: University of Chicago Press.
VN (Finnish Government). (1970). *Peruskoulun opetussuunnitelmakomitean mietintö: Opetussuunnitelman perusteet* [Report of the curriculum committee for the comprehensive school. Framework curriculum] (Komiteamietintö 1970, Pt. 1, Ser. A, No. 4). Helsinki, Finland: Valtioneuvosto. (In Finnish)
Vulliamy, G., Kimonen, E., Nevalainen, R., & Webb, R. (1997). Teacher identity and curriculum change: A comparative case-study analysis of small schools in England and Finland. *Comparative Education*, *33*(1), 97–115.
Välijärvi, J. (1991). Uudistavan opetussuunnitelma-ajattelun lähtökohtia [Starting points for renewing curriculum thinking]. In E. Kangasniemi & H. Saari (Eds.), *Arviointia ja ajatuksia koulun kehittämisestä* (Teoriaa ja käytäntöä, Ser. B, No. 69, pp. 59–69). Jyväskylä, Finland: Kasvatustieteiden tutkimuslaitos, Jyväskylän yliopisto. (In Finnish)
Välijärvi, J. (1999). Opettajan muuttuva asiantuntijuus [The changing expertise of the teacher]. In H. Heikkinen, P. Moilanen, & P. Räihä (Eds.), *Opettajuutta rakentamassa* (The Principles and Practice of Teaching, No. 34, pp. 101–106). Jyväskylä, Finland: Opettajankoulutuslaitos, Jyväskylän yliopisto. (In Finnish)
Waks, L. J. (2007). The concept of fundamental educational change. *Educational Theory*, *57*(3), 277–295.

Walker, D. F. (1971). A naturalistic model for curriculum development. *School Review*, *80*(1), 51–65.
Webb, R., Vulliamy, G., Hämäläinen, S., Sarja, A., Kimonen, E., & Nevalainen, R. (2004a). A comparative analysis of primary teacher professionalism in England and Finland. *Comparative Education*, *40*(1), 83–107.
Webb, R., Vulliamy, G., Hämäläinen, S., Sarja, A., Kimonen, E., & Nevalainen, R. (2004b). Pressures, rewards and teacher retention: A comparative study of primary teaching in England and Finland. *Scandinavian Journal of Educational Research*, *48*(2), 169–188.