ED 452 149   SP 039 877

AUTHOR   Kimonen, Eija, Ed.
TITLE   Curriculum Approaches: Readings and Activities for
                  Educational Studies.
INSTITUTION   Jyvaskyla Univ. (Finland). Inst. for Educational Research.
ISBN   ISBN-951-39-0934-4
PUB DATE   2001-00-00
NOTE   278p.
AVAILABLE FROM   Institute for Education Research, Customer Services,
                  University of Jyvaskyla, P.O. Box 35, FIN-40351 Jyvaskyla,
                  Finland. Tel: 358-14-260-3220; Fax: 358-14-260-3241; e-mail:
                  teairama@jyu.fi; Web site: http://www.jyu.fi/ktl/.
PUB TYPE   Books (010) -- Collected Works - General (020)
EDRS PRICE   MF01/PC12 Plus Postage.
DESCRIPTORS   Collegiality; *Curriculum Development; *Educational Change;
                  Educational Environment; Educational Improvement; Elementary
                  Secondary Education; Faculty Development; Foreign Countries;
                  Higher Education; Inservice Teacher Education; Language
                  Skills; Preservice Teacher Education; Rural Schools; School
                  Culture; Second Language Learning
IDENTIFIERS   England; Finland; Learning Organizations; Professionalism

ABSTRACT
        This collection of papers examines the premises for changes
to the curriculum and the manner in which those changes are reflected in the
development of schools in Finland and England. The papers provide an
intrinsic context for integrating language and content. The book begins with
a foreword, "The Challenges of Curriculum Development and the Complexity of
Learning" (Jouko Kari); a preface, "Approaches to Curriculum Development:
Learning from Research" (Eija Kimonen); and a note to language students, "The
Ambiguity of English: Adding Value or Devaluing Identity" (Glyn Hughes). Part
1, "A Context for Curriculum Issues," includes (1) "The Function of
Curriculum and the Concept of Learning" (Maijaliisa Rauste-vol Wright); (2)
"Teacher Growth and Site-Based Curriculum Development: Developing Inservice
Teacher Education" (Viljo Kohonen); and (3) "Effectiveness and Improvement in
a Learning Organization"(Pentii Nikkanen). Part 2, "Examining Curriculum
Change," includes (4) "A Decade of Curriculum Change in English Primary
Schools" (Rosemary Webb and Graham Vulliamy); (5) "A Case-Study Analysis of
Curriculum Change in Small Primary Schools in England" (Graham Vulliamy and
Rosemary Webb); (6) "Curriculum Changes in the Finnish Comprehensive School:
The Lessons of Three Decades" (Raimo Nevalainen, Eija Kimonen, and Seppo
Hamalainen); and (7) "Teachers Facing the Challenges of Curriculum Change in
the Small Rural School in Finland" (Eija Kimonen and Raimo Nevalainen). Part
3, "Focusing on Reflection," includes (8) "Integrating Content and Language
in FL-Medium Instruction" (Anne Rasanen); (9) "New Teacher Professionalism
and Collegial School Culture: Empirical Findings of an Action Research
Project" (Viljo Kohonen); (10) "The Atmosphere of a Learning School" (Pentti
Nikkanen); and (11) "Active Learning for Educational Change" (Eija Kimonen
and Raimo Nevalainen). The book concludes with an "Afterword" (Rosemary Webb
and Graham Vulliamy). (Papers contain references.) (SM)

Readings and Activities for Educational Studies

Edited by
Eija Kimonen

CURRICULUM
APPROACHES

Department of ┃ Institute for
Teacher Education ┃ Educational Research
UNIVERSITY OF JYVÄSKYLÄ

CURRICULUM
APPROACHES

CURRICULUM APPROACHES

Edited by Eija Kimonen

Readings and Activities
for Educational Studies
**Readings and Activities
for Educational Studies**
Readings and Activities
for Educational Studies
Readings and Activities
for Educational Studies
Readings and Activities
for Educational Studies

Department of | Institute for
Teacher Education | Educational Research
UNIVERSITY OF JYVÄSKYLÄ

Contents

Jouko Kari
Department of Teacher Education
University of Jyväskylä

FOREWORD

The Challenges of Curriculum Development and the Complexity of Learning

The meaningfulness and challenging nature of curriculum development is often reflected in the nature of this work, which is a continuous process without any visible end in sight. Each existing curriculum is evaluated – also criticised – and public debate, perhaps along with more systematic evaluation measures, always forms the basis for drafting a new curriculum. This is how democracy works within the school system. This is good since each curriculum – or at least the basis for each document – is public, a document shared by all concerned parties. A dear child cannot be left unattended for a single second.

Personally, I have had the good fortune to be closely involved over many years in both the general school system and in the development of curriculum foundations for teacher education and its implementation. One of the most important observations has been that the challenges and demands for change that curriculum reform entails are always closely linked to broader changes in society, which we can only rather inadequately take into consideration in the concrete implementation of a school curriculum. There is never enough time devoted to physical education – nor indeed to other subjects – whilst there is a dearth of the mathematics and natural science subjects needed to ensure Finland's global competitiveness. Fatigue, discontent and stress all too often determine the school atmosphere. So what should be done?

8

Evaluation as an On-going Curricular Process

In efforts to understand the relativity of these pressures, however, there have been a few calming moments. The series of earlier Finnish curricula (1952, 1970, 1985 and 1994) is a very solid indication that, throughout the post-war era, Finland has systematically developed a national curriculum. In recent years, the standard procedure has been, especially concerning curricula for general education, to call at some stage for an external, impartial evaluation. This was the method adopted, for example, in the most recent Finnish curriculum development process (OPS/1994) and its associated 'running-in' period (Norris, Asplund, MacDonald, Schostak & Zamorski 1996). At that time, and indeed previously during the 1980s, the Finnish education system was considered, according to European (OECD) assessment, to be high-level and extremely ambitious. In addition, learning outcomes have generally shown that none of the many areas making up Finland's extensive geography needs to feel ashamed (IEA international comparison of learning outcomes in school subjects).

Post-war educational policy in most northern European countries has produced school structures which, with small variations, contain the following guidelines:
- A 9 or 10-year-long comprehensive school model which, in practice, caters for all children eligible for schooling.
- The length of compulsory schooling has been and is being extended towards younger age groups (6 year-olds).
- Efforts towards maximum integration of disabled children in general education schools (community-based special education curricula to be implemented in Finland in 2000).
- Closer contacts between branches of so-called *post-secondary education* and also with higher education (e.g., polytechnics).

Ideologically this is a question of:
- maximally equal opportunities for education and a broad range of subjects available to all
- the abolition of educational privileges
- modernisation of curricula.

In the 1990s *multiculturalism* arrived in Finland, and it has come to stay, bringing new challenges to both schools and teacher education. These issues, too, require further investigation.

Methodologically, the easiest option is to work at the level of written documentation relevant to educational policy. Seidenfaden (1996) terms this level the *formulation arena*. It would be slightly more demanding to investigate what happens to students at the end of the chain – at the 'grass roots level' – and what is required of the teacher in order to solve educational problems.

Curriculum implementation can be evaluated both *quantitatively* and *qualitatively*. The difference between quantitative and qualitative evaluation is also probably reflected in different views of human nature. According to Lahdes (1986), in quantitative evaluation a person is seen as an object with a personality composed of certain characteristics, whilst in qualitative evaluation a person is seen as *the subject of evaluation and a continuously developing personality*. The learning concept in turn stems from the concept of human nature.

Socio-psychological Aspects of the Curriculum

The curriculum is, at least in principle, the central document in schoolwork. Demarcation between curricular studies and teaching method studies is often problematic in practice. Curricular study is based on the idea that *teaching should be planned thoroughly and systematically in order for it to become a sufficiently aware and objective-oriented process*. Besides schools, the foundations of the curriculum are also of central importance to *teacher education*.

Pedagogy and developmental psychology run parallel in curriculum work. In this way, *teaching has to comply with the principles and laws of learning and developmental psychology*. We can also conclude that particularly in an increasingly unifying Europe citizens *must possess the skills to serve their country, their continent and the entire world*. This calls for socially acceptable attitudes and a desire for peace.

Decentralisation of the curriculum, by which we mean the implementation of the wishes of local educational policy makers, and *individualisation*, which refers to 'schooling for all', is prominent in northern European curricula. Denmark has the longest traditions in this respect, the Finnish system remaining comparatively highly centralised until the 1970s and 80s. The implementa-

tion of the comprehensive school system has encountered cutbacks as a result of economic recession to the extent that every good idea about 'schooling for all' has not been fully implemented in Finland.

The quest for humanism and democracy in education and respect for law and one's fellow human beings are formal goals and objectives. Preparing ourselves to meet the demands of a rapidly changing society – the constant presence of that change, the need for continual education, the information explosion, rapid yet economically sound development, competition and integration: these are the challenges of today.

Present-day schooling is centred around the activity and relative freedom of the student. This activity usually takes the form of thought processes, and the forming or changing of attitudes. The students themselves do not always realise the extent of their own activity and at best they will perhaps only be aware of their own physical activity, i.e., their concrete actions. On the other hand, *the construction of meaning*, which is of central importance to school work, remains at least partly beyond their threshold of awareness. Often only after considerable time has passed do students perceive what they have become in terms of their intellectual qualities. Only human beings can be changed and renewed in this way.

Knowledge often takes shape more effectively and enjoyably when individuals sharing a common goal of study form small, active groups. In this way, knowledge acquisition and other learning processes become, in effect, a social activity. A *socio-constructivist* or *socio-constructionist* concept of learning implies that school-based learning is a phenomenon linked to social context and culture. It is comforting that school culture can also be changed. School culture is made up of elements, rather like construction scaffolding, the arrangement of which depends on the kinds of study structures that the school and school environment create.

In school pedagogy it is sensible to assume that *society* is a product of humankind, manifested both as objective and subjective reality. We continually shape the latter of these realities in everyday schoolwork, primarily through language, but hopefully also in other ways – by actively doing – by also 'handling' objective reality. Similarly, skills for continuous *knowledge acquisition* and attitudes towards lifelong learning demand our particular attention. Only when learning methods are examined together with the students can we best grasp the transience and relativity of knowledge.

In Conclusion

The book you are holding seeks to examine curriculum development in the context of educational psychology and educational sociology. The first section tackles curricular change, beginning with the foundations of learning, the teacher's professional growth and the learning organisation. The traditional model of *teaching* is seen as more interactive with emphasis on the activity of both pupil and teacher in terms of objectives, implementation and also assessment.

Schools clearly want a *co-operative* growth environment so that the basic security of pupils, their solid self-concept and joyful learning can be better realised. Of decisive importance is the professional skill of the teacher, employing *head, heart and hand* to promote active learning. New, improved arrangements for learning conditions do indeed also presuppose increased economic input on the part of those maintaining schools: the state and the community.

Some of the contributors have long experience of involvement in international co-operation aimed at comparing and evaluating curricula in different European countries. In addition to school policy decisions, the issue in such cases has been the pedagogical development of the school, not forgetting teacher education. In the second section of the book curricular change in England and Finland is considered along the axis of centralisation – decentralisation. In addition, demands for change are examined in four case-study schools. Universal trends in curricular change over the decades are indeed interesting to follow.

The third section presents an entirely new perspective on curriculum development. In the 1990s especially Finnish teacher education departments and also schools have provided teaching through the medium of a foreign language. Justifications for such content and language-integrated learning (CLIL) are associated with the concepts and methods of experiential learning. The discussion activities direct readers to examine the papers in the book in practice, in a foreign language or in their own language. The focus here is on *experiential, active learning*. I believe the book is admirably suited as the starting point for high-quality learning.

References

Lahdes, E. 1986. Peruskoulun didaktiikka. (The didactics of the Finnish comprehensive school.) Helsinki: Otava.

Norris, N., Asplund, R., MacDonald, B., Schostak, J. & Zamorski, B. 1996. Arviointi peruskoulun opetussuunnitelmauudistuksesta. (An independent evaluation of the comprehensive school curriculum reform in Finland.) Helsinki: National Board of Education.

Seidenfaden, F. 1996. Bildungspolitische Probleme und Tendenzen in Europa. (European problems and tendencies in educational policy.) In J. Kari, M.-L. Huttunen & E. Varis (Ed.) EU und das Bildungssystem im nordischen Europa. Die Lehrerausbildung und das Schulwesen. Das XXVII internationale Kolloquium in Jyväskylä, Finnland 28.8–2.9.1995. University of Jyväskylä. Department of Teacher Education. Principles and Practice of Teaching 25.

Approaches to Curriculum Development:
Learning from Research

The new national educational policy in Finland supports educational practices based on active learning. The main principles of the curriculum reform currently being implemented in this country support a school culture which lays stress on the autonomous control of learning, encouraging flexibility and developing interactiveness both in the school and between the school and the surrounding community. At the same time as this process was taking place, England was moving in the opposite direction in the educational principles and practices adopted (see Vulliamy, Kimonen, Nevalainen & Webb 1997, 97). England was revising the detailed and prescriptive National Curriculum first introduced by the 1988 Education Reform Act and was increasing its attempts to influence teaching styles, as well as the curriculum.

In the future, Finnish and English schools will naturally change and develop in diverse directions. Curriculum development continuously requires new data regarding successful models and practices of action in schools. In their work, schools together with their associated interest groups need qualitative and contextual information, which can possibly best be acquired from school-based case studies. The experiences of teachers and other participants in working life as implementors of the new curriculum should also be utilized in the pre- and in-service training of teachers and others, such as administrative and social personnel. One important task of training is to develop forms of education offering the people involved an opportunity for constructing internal models of action (see Kimonen & Nevalainen 1995, 121–129). They can con-

nect different theories of learning and teaching to these models of action, later to be utilized in their work. During the continuous formation of models of action an essential role is played by experiences gained in practical work and by critical deliberation on these experiences. The goal is to learn strategies which change school practices by means of transformative learning.

Overview

The purpose of this book is to examine the premises for changes to the curriculum and the manner in which these changes are reflected in the development of the school in Finland and in England, in the principles and practices according to which it functions. Curriculum changes are observed here in the light of new research findings. This book is divided into three parts, the first part focusing on contexts for curriculum issues, the second on an examination of curriculum change in the form of case studies, and the third consisting of reflection on the ideas previously presented.

In Part One, changes in the curriculum are examined in the context of learning, professional growth and the organization involved in learning. In the first chapter, *The Function of Curriculum and the Concept of Learning*, Maijaliisa Rauste-von Wright (University of Helsinki) analyses the curriculum from the perspective of the constructivist concept of learning, where learning is seen as a core issue in the planning, realization and evaluation of schooling. A learning-based curriculum such as this has emerged from attempts to integrate the study of learning and teaching within an ecologically relevant framework, and to bridge the traditional gap between theory and practice, as reflected in the experimental teacher training project at the University of Helsinki. In Chapter 2, *Teacher Growth and Site-based Curriculum Development: Developing In-service Teacher Education*, Viljo Kohonen (University of Tampere) emphasizes the importance of the teacher's professional growth towards site-based curriculum development. A central theme is the question of how to support the teacher's professional growth, as part of school reculturing as a collegial work place. In this new model of collaboration, based on the constructivist and emancipatory paradigms, teachers are encouraged to assume a critical understanding of themselves and their work and to undertake an active role in the school community and the surrounding society. This chapter presents parts of

an action research school development project carried out at the University of Tampere. In Chapter 3, *Effectiveness and Improvement in a Learning Organization*, Pentti Nikkanen (University of Jyväskylä) concentrates on the opportunities available to different school organizations in their effective school improvement, pointing out the powerful role of the existing school culture in this regard. Organizational learning is here seen as a process which occurs in the structure or context of a learning organization. There is discussion of how organizational learning differs from individual learning, conclusions being drawn regarding the effectiveness and improvement in the case of the learning organization. This chapter will utilize parts of an international project on effective school improvement.

In Part Two, curriculum change is studied on the basis of data provided by a series of case studies of small schools in England and in Finland. The section begins with the chapter by Rosemary Webb and Graham Vulliamy (University of York) entitled *A Decade of Curriculum Change in English Primary Schools*. Here they give a contextual overview of recent changes in English primary schools, the purpose being to offer Finnish readers a better understanding of the detailed case-study analysis provided in the chapter on curriculum change in two small English primary schools. They also illustrate the pace of change and give an update on events occuring after the completion of the research project from which the case study is taken. The findings reported in Chapter 5, *A Case-study Analysis of Curriculum Change in Small Primary Schools in England*, by Graham Vulliamy and Rosemary Webb, form part of a wider comparative research project investigating the processes of curriculum change in primary schools in England and in Finland. The York-Finnish Project, based on in-depth case studies of six primary schools in each country, examined the effect of the national policy changes on the nature, planning and teaching of the curriculum and the processes involved in the management of change within schools. In Chapter 6, *Curriculum Changes in the Finnish Comprehensive School: The Lessons of Three Decades*, by Raimo Nevalainen, Eija Kimonen and Seppo Hämäläinen (University of Jyväskylä) give a contextual outline of curricula in the Finnish comprehensive school and of the changes in them during the last three decades of the 20th century. They examine the curricular thinking and the core aims, principles and teaching methods outlined in the curricula. The features of the curricula and their implementation are also evaluated and commented on in the light of previous research. In the last chapter in this part,

Teachers Facing the Challenges of Curriculum Change in the Small Rural School in Finland, Eija Kimonen and Raimo Nevalainen examine the process of curriculum change as seen in two small schools in Finland. They analyse the effect of the changes on curriculum policies and pedagogical practices. The examination exploits previously published empirical research. This chapter will present parts of three comparative research projects conducted at the University of Jyväskylä.

In Part Three, curriculum changes are observed in the light of reflection on the ideas previously presented. In this part, the aim of the tasks connected to the texts is to offer alternative forms of active learning, either alone or in learning groups of various sizes. The learning process may take place through the medium of the learners' own language or through that of a foreign language. Part Three begins with an introductory chapter, posing us with the challenge of exploring the issues concerned while using the foreign language as a medium. In the chapter, *Integrating Content and Language in FL-medium Instruction*, Anne Räsänen (University of Jyväskylä) gives a brief account of the principles and 'prototype' models of content teaching through a foreign language, along with explanations of some of the diverse terminology used in the field. She outlines the study skills (or academic competence) required from learners, followed by descriptions of what the teacher can do to facilitate the development of these skills to enhance learning in this way. In conclusion, some key areas requiring extra attention are collected as prerequisites for successful FL-mediated instruction from the point of view of integrated content and target language learning.

In the last three chapters of the book, the authors continue to focus on the synthesis of the results of their research projects. Changes in the curriculum are examined in the context of professional growth, the atmosphere within the school and active learning by the teachers and students. In Chapter 9, *New Teacher Professionalism and Collegial School Culture: Empirical Findings of an Action Research Project*, Viljo Kohonen analyses teachers' developmental essays and interview data in order to elucidate the processes of professional growth and school development in the six participating schools at the end of the school development project presented in Chapter 2. The major themes that emerged in the analyses are as follows: 1) the importance of autobiography for teacher growth, 2) the changes in the professional role of the teacher, 3) the development of collegial school culture, 4) the emerging new profes-

sionalism, 5) the teachers' experiences and feelings about the change process-es, and 6) the pressure of time and resources for professional renewal. In Chapter 10, *The Atmosphere of Learning School*, according to Pentti Nikkanen, learning calls for favourable conditions and a secure learning environment. He gives descriptions of the atmosphere in educational establishments presenting the examples from Finnish vocational education institutions and upper secondary schools. In the analyses, the major emphasis is placed on interactional relationships and processes between the members of the organization (social atmosphere) and the manner in which they experience it, both individually and as members of the organization (psychological atmosphere). This chapter continues to focus on the issues introduced in Chapter 3. In the final chapter, *Active Learning for Educational Change*, Eija Kimonen ja Raimo Nevalainen present their central findings of a research project investigating active learning in the educational practices of seven OECD countries. Here they describe especially the manner in which the process of change is to be seen in the activities of teachers and students in one small Finnish school presented in Chapter 7. The focus of their observation is on the process of active learning, its goal setting, task structuring, accessing of information, the process of working and learning, the utilization of the outcomes of work and learning and the assessment procedures used.

Acknowledgements

cere thanks are due to Professor Pirjo Linnakylä (University of Jyväskylä), Professor Graham Vulliamy and Dr. Rosemary Webb for their invaluable referees' comments. I am also indebted to Glyn Hughes, PhLic, for proof-reading the text. In addition, I wish to thank the Institute for Educational Research and the publication committee of the Department of Teacher Education for making it possible to publish this book. Finally, my special thanks to the teachers and students involved for their generous co-operation.

Eija Kimonen

References

Kimonen, E. & Nevalainen, R. 1995. Towards active learning. A case study on active learning in a small rural school in Finland. University of Jyväskylä. Department of Teacher Education. Research 57.

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.

Glyn Hughes
Department of Teacher Education
University of Jyväskylä

TO THE LANGUAGE STUDENT

The Ambiguity of English: Adding Value or Devaluing Identity

The English language has been called the linguistic equivalent of an environ-mental disaster. Many minority languages are doomed to become extinct, un-able to resist the dominant status and global usefulness of English. There are now more non-native speakers of English than native speakers. The language has become the property of the entire planet, simplifying trade, speeding com-munications, spreading knowledge and breaking down barriers (see, for ex-ample, McArthur 1998).

Language, however, is not simply a tool for maximising business profits and browsing websites. It also constructs our immediate environment and its real-ities. Its daily use reinforces our intuitive sense of belonging to that same world and reality. To learn a foreign language is to take a cautious look into another, often very different, world and inevitably to question one's sense of identity, the strength of one's allegiance to a country and its culture. At the dawn of the 21st century, globalization and the information technology revo-lution oblige us to question our central allegiances even more. What is the role of the community, the local region, the nation state, the supranational alliances and the global organizations that regulate our lives? And how do we deal with the fragmentation that may be taking place in what we once saw as a uniform culture? And what is the role of education in maintaining estab-lished identities and in creating new identities and allegiances? What will be the ultimate effect of European Union programmes such as ERASMUS and COMENIUS – the strengthening or weakening of linguistic and national iden-tity?

In recent years discussion of language teaching trends in Finland has focussed very much on the pros and cons of Content and Language-Integrated Learning (CLIL). The contentious issues have included its role alongside conventional language teaching, the level of language skills required of would-be CLIL teachers and its implications for the future of the Finnish language (Mustaparta & Tella 1999). Whatever the outcome of this discussion, it is clear that parents have recognised the value of CLIL as an enhancement of traditional language teaching programmes offered in the Finnish school system. They are keen for their children to benefit from these developments and schools have been obliged to meet parental demand for 'language immersion', 'language sprinkling' and 'bilingual' classes.

Teacher Education cannot remain unaffected by the demand for CLIL teachers, i.e., qualified primary school teachers who have official competence to teach English and the necessary skills to teach various other school subjects through the medium of English. In 1995 the Teacher Education Department of Jyväskylä University introduced its JULIET programme. JULIET (*Jyväskylä University Language and International Education for Teachers*) is a study package of 35 credits within the existing 160-credit Masters of Education degree. It includes studies in English Language and Culture (15 credits), English Language Pedagogy (10 credits), and Intercultural Education (10 credits). In addition, and very importantly, JULIET students receive some 15–20 credits of their education and school subject studies through the medium of English. These studies are often taught by lecturers who themselves have recently completed some CLIL training and now demonstrate the self-same skills that JULIET studies aspire to (see Häusler-Greenfield, Hughes & Ritchie 1999).

One of the major problems facing the JULIET programme lies in the CLIL acronym itself: integration. Students may complete courses related to aspects of practical English usage, or to the problems of a multicultural society, or to curriculum development, but the task of effectively integrating such courses remains a logistical nightmare, and thus a pedagogical dream. One other serious obstacle to integration has been the lack of suitable printed materials, i.e., articles written by Finnish experts dealing with issues of general educational interest but with a specifically Finnish approach relevant to teacher education.

The present publication represents a significant and welcome step in removing this obstacle. The eleven articles included provide an intrinsic con-

21

text for integrating language and content. Used skilfully and flexibly, they will simultaneously develop all-round foreign language skills, facilitate the acquisition of current terminology and introduce some of the key issues at the heart of the current educational debate in Finland. CLIL should be seen as a bonus, as added value in the language learning process. Hopefully, this volume will make that bonus all the more tangible.

References

Häusler-Greenfield, P., Hughes, G. & Ritchie, R. 1999. (Eds.) Learning through the ROMEO experience: The ROMEO Project dissemination pack. Jyväskylä: ROMEO Project.

McArthur, T. 1998. The English languages. Cambridge: Cambridge University Press.

Mustaparta, A-K. & Tella, A. 1999. Vieraskielisen opetuksen järjestäminen peruskoulussa ja lukiossa. (Arranging CLIL teaching in the Finnish comprehensive school and upper secondary school.) Helsinki: Opetushallitus.

Part
One

Part

One

Part

One

Part

One

Part

One

Part

One

Part

A CONTEXT FOR
CURRICULUM ISSUES

One

Part

One

Part

One

Part

One

Part

One

Part

One

Part

One

Part

One

Part

23

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter 1
chapter
chapter
chapter
chapter
chapter
chapter
chapter

Maijaliisa Rauste-von Wright
Department of Teacher Education
University of Helsinki

The Function of Curriculum and the Concept of Learning

1 Introduction

Since the Cold War, international competition has led to an increasing emphasis on the importance of schooling. Many routines of the divided but relatively stable world of the past decades have lost their function. Among the consequences are, in many countries, an increase in learned helplessness or violent action on the one hand, but a new awareness of the value of innovative action-strategies and the role of education on the other hand.

In a discussion of schooling in this decade in modern European countries, Husén, Tujnman & Halls (1992) argue that we are now, in the 1990's, faced with an international crisis in education similar to the crisis in the 1960's, and largely concerned with the same issues. In the meantime there have occurred considerable changes in the educational system of many countries. For instance, England has introduced a National Curriculum at the same time as the Scandinavian countries have decentralized curriculum planning. However, the results have not always been the desired ones. As Husén et al. (1992, 42) remark, 'schools are [still] generally engaged in the preparation of their students for solving yesterday's problems, not for solving those problems which today's children will encounter as adults'.

In Finland the National Curriculum was replaced in the 1990's by a set of fairly general goals, approved by the Ministry of Education, while the responsibility for curriculum planning has been shifted to the grass-roots level of

communities and individual schools. At the same time the schools have been given freedom to compete with each other, i.e. the parents can choose a school for their children independently of regional limitations.

The new legislation has been mainly initiated by politicians and administrators who have been emphasizing the importance of entrepreneurship on the one hand and life-long learning on the other. Interestingly, the new legislation is in an adequate way based on a constructivistic view of learning. Many Faculties of Education, however, have been critical of the new legislation. Because of this, teacher training (which takes place in the universities) still tends to be very traditional. The experts on traditional associationistic paradigms have found the conceptual changes required to be difficult and frustrating.

The problem of standards is currently being solved partly by a new emphasis on self evaluation, partly by retaining traditional 'final' standards. That is, common standards have been retained in the form of a common matriculation examination at the end of High School, administered and evaluated by the National Board of Education. In addition, a decision has recently been made about introducing common standards in a number of 'basic subjects' at the end of comprehensive school.This kind of 'testing of competence' may, in fact, be used by any school at any level (of the comprehensive school). However, this possibility has not been accepted by all 'experts', and hence there are still serious attempts to develop an alternative control system based on traditional differential psychological tests.

2   The Form and Content of Curriculum

Attempts to develop the school system have usually focused on designing new curricula. Curriculum design is still frequently 'based on a view of curriculum as a static list of "facts" to be learned or "topics" to be mastered' (Freeman & Sokoloff 1995, 1). This approach is ultimately based on the traditional view that the most important regulator of human development is one's biologically determined abilities. In this view, effort is seen as something an individual needs to compensate for his/her lack of ability (in contrast to the view of, e.g., Resnick that effort creates ability; see below). This way of thinking is still popular not only among educational experts but also among parents, who

endorse traditional curricula and demand the selection of children with 'better' genetic resources to 'better' schools with good discipline. This type of argument is quite frequent in Finland today.

Interesting here is that the *curriculum*, rather than the teaching/learning *process*, is seen as the core issue in the planning, realization and evaluation of schooling. But what is the function of a fixed curriculum in a rapidly changing world? Is it sensible to see it as the core when considering the processes and possibilities of human development and the function of culture and society as regulators of educational processes (Bruner 1996)? In other words, can it be taken as a realistic plan for complex human activities in the prevailing cultural and historical context – or is it rather the history and tradition of the curriculum itself which is steering our analyses of and research on curricula?

The traditional conception of curriculum consists of three phases:

GOALS/AIMS —> REALIZATION —> EVALUATION

Traditionally, different sets of people (or organizations) have often been responsible for the different phases. How could we describe the relationship between these phases? Obviously the 'chain' is not based on an interactive model of the teaching/learning process. Its roots are in empiricist learning theory (association theory, behaviouristic theory) and the didactic educational tradition. Typical of this type of theory are the assumptions that (a) essential in learning is to learn the right responses (answers) to the given stimuli (tasks), and (b) learning proceeds typically from the simple toward the complex, from parts to wholes, and from 'lower order' to 'higher order' skills. These assumptions are easiest to fulfil when the curriculum consists of a detailed programme written in advance of teaching.

One of the many difficulties connected with the view of curriculum I have described has been the problem of divided goals and aims. The curriculum has been the link connecting the administration (the political and economical regulation) and the detailed planning (the 'didactic' practice) of the educational process. However, this has entailed two sets of goals/aims. The 'high-level' (general) goals and values of the school system are politically defined. The activities of the teachers – who are responsible for realizing the curriculum – have, on the other hand, largely been guided by what may be called subject-specific goals (i.e. separate goals for different school subjects). Through-

out the history of our school system, the 'high-level' and 'low-level' goals have been unconnected. For instance, expertise in problem-solving and social interaction have not been part of the script of teachership. Characteristic of a good teacher has been the skill to transmit knowledge to the learner. This has often led to a view of teaching as the 'transmission' of a consecutive series of contents and skills according to a predetermined timetable: a sequence of separate and well-defined parcels of knowledge and skills.

In this kind of curriculum the function of pupils is to be objects of the goals which the teacher is trying to realize. Their 'duty' is to produce the right responses which are defined in the curriculum. Thus, the pupils have few possibilities to participate in the goal setting or planning and realization of the educational processes. This easily leads to 'inert' knowledge, separate from the pupil's personal world-view. It may also lead pupils to learn 'examination games', i.e. to pay attention to ways of preparing for examinations instead of paying attention to their own learning processes (Rauste-von Wright 1997).

3 Learning as a Phenomenon

What would be an alternative which would take into account the conditions for learning suggested by research? First of all, the traditional didactic model should be substantially changed so that its three 'phases' are interconnected:

$$\begin{array}{ccc} & \text{GOAL/AIMS} & \\ / & & \backslash \\ \text{REALIZATION} & <\!\!-\!\!> & \text{EVALUATION} \end{array}$$
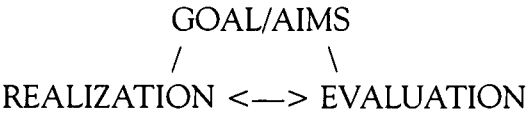
In each phase teachers and pupils participate actively, making the process into a 'self-correcting' one. This model requires flexibility and co-operation: a continuous assessment of the relations between goals, activities and achievement. An important task of the teacher is to suggest, in each situation, possible means for advancing towards the goal, i.e. to create and regulate learning environments flexibly. The first condition for this is to get the school system to focus on *learning* and its problems instead of teaching.

My argument is that good teachership is primarily dependent on insight into the conditions of learning (Rauste-von Wright 1997; 1999). Learning is

the most important coping strategy of human beings (Bruner 1996; von Wright 1996). It is thus important to be aware of the 'model of humanity' on which we base our assumptions about the factors which regulate human activity. For instance, what assumptions do we make about the relationship between ability and effort? Traditionally effort has been seen as a way to compensate for lack of genetically determined ability. As was mentioned above, a different view has been presented by Resnick (1995), who argues that ability is to a large extent a product of effort. This view leads to a change in the traditional concept of 'intelligence' (see also Resnick & Hall 1998). The focus shifts from an emphasis on hereditary factors to an emphasis on the role of learning. At the same time this view questions the everyday schema of school as a place, one goal of which is to distinguish those who 'have ability' from those whom we try to get to manage by exerting effort.

Learning is always a context-dependent and situated interaction process. It is an active process of knowledge construction (selection and interpretation of information) by the learner who interprets and tests available information on the basis of his/her current world view, including the self. Essential is action and the interpretation of feedback from it. The core of the learning process is exploration, problem solving and understanding. The whole of the learning situation and especially social interactions serve as sources of information. Knowing is the ability to interact with things and other people in a situation (Gruber, Law, Mandl & Renkl 1996; Greeno 1989). An important factor here is the 'emotional atmosphere' of the situation and the motivating goals of the learner, since they codetermine what is selected (attended to) by the learner and how it is interpreted by him/her.

The self-correcting model of curriculum which I have tried to outline has emerged from attempts to integrate the study of learning and teaching within an ecologically relevant framework, and to bridge the traditional gap between theory and practice. It is based on a pragmatic constructivistic view of learning (e.g. Resnick 1987; Glaser 1991; 1994; for a historical review, see Rauste-von Wright & von Wright 1994), and is aptly summarized by Resnick's (1989, 2) statement that 'the learner's constructive mental activity [is] at the heart of any instructional exchange'.

4   The Premises for Learning

When the considerations about the structure and role of curriculum which I have outlined are presented to teachers and school administrators, their usual reaction is something like 'Well, but what is the *content* of the curriculum you are proposing?' To this one may answer with the counter-question suggested by Freeman and Sokoloff (1995): 'What fundamental questions do we want students to grapple with before they graduate?' My suggestion is that the traditional model of proceeding from the bottom up – starting from facts and part-skills which gradually grow into a whole (a 'behavioural objective') – should essentially be replaced by an approach which could be called 'phenomenon-centred' (Rauste-von Wright 1999). The themes (phenomena) to be treated may be decided by the teacher, but the relevant topics and facts should be found in a process of interaction between teachers and students using different kinds of information-seeking strategies (debates, essays, various uses of computers, etc.), reflecting the phenomenon in varying contexts.

The starting point for new learning is always the current world-view of the students and the spectrum of their skills. It is important to bring these out explicitly, since implicit models of the world (e.g. unquestioned everyday beliefs) may easily interfere with the learning of scientific concepts and adequate skills (Caravita & Halldén 1994; Rauste-von Wright & von Wright 1994). In other words, it is important to start from the students' current conceptions when we attempt to awake in them questions concerning the phenomenon to be studied. For instance, confronting learners with data that contradict their current beliefs can cause constructive frictions which make it easier for learners to change their conceptions (Vermunt & Verloop 1999). The goal is to help the students towards an understanding and mastery of the phenomena under consideration using flexible means.

I mentioned above that learning is always situated and context-dependent. What kind of contexts are likely to give rise in the students to 'constructive confrontations'? From this point of view, the strictly (pre-)planned context of the traditional curriculum seems very rigid in comparison with an active explorative interaction process in which the students are activated to search and test different kinds of solution to problems. We are here confronted with one of the basic questions of the culture of education. I agree with Bruner

that we 'shall commute back and forth between questions about the nature of mind and about the nature of culture, for the theory of education necessarily lies at the intersect between them' (Bruner 1996, 13).

Two of the major issues in recent educational research have been the problems relating to adequate learning environments and to the concept of self-regulation. When shaping learning environments (for instance in school), it is essential to take into account the everyday realities of the learners. It is important not only to try to link the issues to be taught to those everyday realities, but also to keep in mind that if the learners are involved in any problem they are likely to seek information about it independently of whether they are inside or outside of the school.

The concept of self-regulation has been the subject of much debate, partly due to the emphasis on this concept in so-called humanistic theories of learning. Among researchers there seems to be a growing consensus that self-regulation is a skill which has to be learned – it is counterproductive to see it as the 'natural' starting point for all learning processes (e.g. von Wright 1992; Reinmann-Rothmeier & Mandl 1999; Rauste-von Wright 1999). This raises the problem of the conditions for learning self-regulation. My own opinion is that the most important condition for learning self-regulation (as well as learning to learn) is the learning of self-reflective skills. I agree with Vygotsky (see Wertsch 1985) that becoming conscious of one's own awareness is at the root of the ability or skill to reflect on one's own intentional learning processes and intentional use of what one has learned.

5   The Leaning-based Teacher Training Project

In conclusion I will briefly describe the beginnings of an experimental teacher training project at the University of Helsinki (Rauste-von Wright 1999). The reason for starting this project has been some shortcomings – as I see them – in current practice.

Teacher training in Finland has traditionally focused heavily on teaching, problems of learning receiving little attention. The general background model has been one of transmission of knowledge from teacher to student, and the conception of learning predominantly associationist. At its worst, the study process has consisted of collecting credits from a wide variety of courses relat-

ed to various aspects of education, with little emphasis on coherence or on interaction processes. This leaves the students ill-prepared to participate in curriculum planning, in co-operation with colleagues and parents, and in the fostering of a coherent world view and moral understanding. It also makes it difficult for the student-teacher to build a meaningful script of 'I as a teacher', related to such scripts as 'I as an active problem-solver' or 'I as a participant in interaction processes'.

In the early 1990's an international panel evaluated teacher training in Finland. The main criticisms in their report concerned the lack of educational psychology and of constructivistic approaches to learning. As a consequence, a chair of Educational Psychology was founded at the University of Helsinki. When I was appointed to the chair, I asked for permission to design a new teacher training curriculum for experimental purposes. In this curriculum, educational psychology would be the core subject, and the general approach would be phenomenon-centred and problem-based, with an emphasis on the constructivistic approach. This suggestion interested high level administrators, who arranged the necessary modification of the relevant legislation, and in the autumn of 1997 I got permission to start the experimental curriculum, with a maximum annual intake of ten new students. I was fortunate enough to find straightaway a group of eight reform-minded first-year students who were willing to participate in the experiment (for further details, see Rauste-von Wright 1999).

The contents of the curriculum are arranged round five general themes (phenomena). Two of them, (a) learning and (b) interaction, are the main themes of the courses of educational psychology, which form the backbone of the studies. The other three themes are (c) the human being, (d) society, and (e) the environment. Studies of these three themes are planned together with the teachers of the various fields involved (language, mathematics, history, biology, etc.). An attempt is made to create learning environments suitable to the themes studied. These include workshops, lectures, teamwork, tutoring, self-directed work in small groups, and practice in various ways of aquiring knowledge (e.g. use of libraries and computers). The results of the studies are presented in essays, learning diaries, portfolios and group discussions, etc.

During the *first term* (the spring term of 1998) the experimental programme focused on three topics:

a) an analysis of teachership,
b) an intensive group process, and,
c) the construction of personal study plans, and the creation of a joint poster describing the goals and plans of their studies.

The goal of the *analysis of teachership* was to outline the action competence needed in the teacher's profession. To begin with, the students reviewed their prior and present representations of teachership. They then made analyses of the requirements of good teachership, first individually, then in pairs and finally in four-person small groups for debates. In parallel with this analysis, the students visited various schools and interviewed teachers and pupils. They also got acquainted with the main points of the relevant legislation.

This analysis of learning and teachership led the students to focus on some new concepts, perhaps the most important of which was 'active transfer' (see also Soini 1999), that is, the conscious use of metacognitive skills to access learned knowledge in a new context. This implies asking, for instance, what have I learned that is relevant to the present context? what kind of use can I make of the things I am learning now in the future? and so on. Another concept which emerged from the discussions was 'environmental literacy', i.e., the 'ability to read the environment'.

The goals of the *group process* were (cf. Rauste-von Wright & von Wright 1999):
a) to become aware of one's own self concept and conception of human beings ('model of humanity'),
b) to learn participation in different interaction processes (giving and getting positive and negative feedback, noticing the functions of nonverbal communication, etc.),
c) to understand group dynamics and learn to analyze group processes, and,
d) to acquire readiness for questioning and modifying one's own beliefs and strategies of action.

The group process proved to be a strong and surprising experience for the students. They were not able to conceptualize the process adequately at the time, but in their subsequent papers all of them have emphasized the importance of interaction as a necessary condition for learning, and their ability to work in interactive groups has shown notable progress during the second year of study. It was evident that during the group-process students had learned to trust themselves both individually and as a group.

32

The term culminated in the presentation to the Department of a jointly made poster which described the activities and plans of the group.

As mentioned above, the students have been making brief (one day to one week) visits to different types of schools to get acquainted with their working practices. In addition, the group has found a school for their full year of practical training; a school in which the head-master, teachers and parents are interested in new approaches to teaching. In the beginning of the 1999 autumn term the group started to practise in this school.

The three major topics of the first term (described above) proved to serve as an adequate 'learning environment' in many ways. The students acquired readiness for self-reflection (including active transfer) and learned self-correcting study strategies.

It must be admitted that the process of curriculum reform was fraught with some difficulties characteristic of any reform where change is experienced as threatening established traditions. The traditional teacher training curriculum at the University in Helsinki contains a year of study of all the subjects taught in comprehensive school, that is, a long series of separate courses given by the didacticians in each field (from mathematics to history and so on). In the plans for the experimental curriculum, this collection of separate courses was to be replaced by a year of phenomenon-centred and problem-based studies, focusing on three main themes: the human being, society, and the environment. In the autumn term of 1998, the students started to work on the new curriculum. They decided to divide their work into a series of two-week periods, each period having a clear-cut goal and ending with a day of joint discussions with the teachers.

As a consequence of this process – and succesful institutional negotiations – the curriculum was accepted in the spring of 1999, and the students are currently hard at work with the theme 'the environment' (in parallel with their teaching practice). They have been joined by nine lecturers from the department, representing different fields of study, who have shown an active interest in phenomenon-centred teacher studies. Perhaps the greatest interest has been shown by mathematicians. The course started in April with a joint 'brain-storming' session, in which the main lines of activity were agreed on. An e-mail *agora* was opened and an intensive process is going on, enlivened by occasional confusions when the participants – mainly the teachers – try to get accustomed to a new style of working.

In the meantime, while the negotiations were going on, the students continued their studies in various ways. They completed (and revised) their study plans, i.e. their goals, plans to realize the goals, and ways to evaluate the process. They participated in an intensive course in personality development from a constructivistic life-span point of view, focusing on learning and interaction in a cultural-historical context. And they continued reading and writing essays, with the teachers functioning mainly as tutors and consultants. It has been emphasized by Mitchell (cf. White 1994) that conditions of trust are essential in the teaching situation: students must trust the teacher to take their ideas and questions seriously, and they must trust each other to be supportive. The processes during the second year of the experimental programme clearly showed how the feeling of trust – or the lack of it – has a strong influence on the students' level of arousal, which in turn is a major regulator of selective attention and of the ability to try out new action-strategies flexibly.

6   Concluding Comments

Obviously, no general conclusions can be drawn on the basis of the process I have described; it has been unique in too many ways. The first chance to evaluate adequately the ideas and programme of the experimental teacher training curriculum will be provided by the new group of students who entered the Department in September 1999. Their studies will be organized on the basis of our experiences from the experimental training I have described.

In the above I have discussed the fact that educational processes are hierarchically regulated, and there is often a long distance between the macro and the micro levels. The processes also have a history, a present and a future. Most important is the future, but when planning for it we have to take into account both history and the present situation. Educational reforms have their roots in social and economical changes and the initiatives are often taken by politicians, but it takes a long and complex process for the reforms to appear in curriculum practices at the grass-roots level. There are many bridges to build.

Educational research has contributed to this process: there is an abundance of both theoretical analyses and practical studies of curricula. But on the whole educational theory and practice have had great difficulties in find-

ing each other; they tend to pass one another by. It is interesting to compare this situation with that in medical studies. In most countries, those who want to become medical researchers have to participate in clinical studies where they meet complex ecologically relevant problems. The task of medicine as a science is to find important problems and to look for answers which in the long run lead to better problem-solutions in everyday-level medical practice. The results (health) are used as evaluation criteria. Hence the links between theory and practice are necessarily strong. (This may be one reason for the present interest in changes of medical studies in the direction of problem-oriented instruction.) By contrast, the evaluation of educational processes is only seldom concerned with the question of how and why the school has (or has not) had positive effects on the life-strategies of the pupils.

The title of this chapter is 'The function of curriculum and the concept of learning'. If I had followed the traditions of education I would have called it '... and the concept of teaching'. In this chapter I have tried to give reasons for the shift of emphasis from teaching to learning. I believe that current research on educational processes points to the conclusion that learning should be the core concept of curricula. This does not imply that teaching is less important – good teaching is often a basic condition for good learning – but it redefines to a large extent the role and tasks of the teacher. Learning is the fundamental coping strategy for human beings in their interaction with the environment. A basic question is thus: what are the optimal conditions for learning? In educational studies this question has often been overshadowed by the debate between didactic theorists and practitioners. One reason for this may be that 'as theories of learning and instruction have become more sophisticated, they have also often become more abstract, more removed from the "on the ground" problems of education' (Resnick 1999). Perhaps we should reconsider the strategies of research with a view to making the theories more directly concerned with ecologically relevant processes and practices.

One attempt in this direction was outlined in a recent symposium entitled 'Research as design: Learning research as a component of educational reform' (Resnick 1999). Resnick characterised the research model as follows:

> A tradition of 'design experiments' has grown up, in which the design, ongoing study and refinement of functioning learning experiments replaces both short-term highly controlled experiments and purely descriptive/analytic field research. Design research

aims to solve practical problems and develop viable theory at the same time, in a partnership between researchers and education practitioners. It calls for the use of multiple research methods in continuous interaction with one another ...

The experimental teacher training I have described above was one of the studies reported in that symposium. I believe that the programme outlined by Resnick will prove to be useful in the attempt to guide research on learning-centred curricula in a more realistic and ecologically relevant direction.

References

Bruner, J. 1996. The culture of education. Cambridge, MA: Harvard University Press.

Caravita, S. & Halldén, O. 1994. Re-framing the problem of conceptual change. Learning and Instruction 4 (1), 89–111.

Freeman, C. C. & Sokoloff, H. J. 1995. Toward a theory of thematic curricula: Constructing new learning environments for teachers & learners. Education Policy Analysis Archives 3 (14).

Glaser, R. 1991. The maturing of the relationship between the science of learning and cognition and educational practice. Learning and Instruction 1 (2), 129–144.

Glaser, R. 1994. Application and theory: Learning theory and the design of learning environments. Paper presented at the 23rd International Congress of Applied Psychology. July 1994. Madrid.

Greeno, J. G. 1989. Situations, mental models and generative knowledge. In D. Klahr & K. Kotovsky (Eds.) Complex information processing: The impact of H. A. Simon. Hillsdale, NJ: Erlbaum, 285–318.

Gruber, H., Law, L., Mandl, H. & Renkl, A. 1996. Situated learning and transfer. In P. Reimann & H. Spada (Eds.) Learning in humans and machines. Towards an interdisciplinary learning science. Oxford: Elsevier Science, 168–188.

Husén, T., Tujnman, A. & Halls, W. D. 1992. Schooling in modern European society. Oxford: Pergamon.

Rauste-von Wright, M. 1997. Constructivistic teaching as a means for breaking up 'examination game' practices. Paper presented at the 7th European Conference for Research on Learning and Instruction. August 1997. Athens.

Rauste-von Wright, M. 1999. A learning-based teacher training project – the first two years. Paper presented at the 8th European Conference for Research on Learning and Instruction. August 1999. Göteborg.

Rauste-von Wright, M. & von Wright, J. 1994. Oppiminen ja koulutus. Porvoo: WSOY.

Rauste-von Wright, M. & von Wright, J. 1999. A pedagogical experiment in higher education: T-groups in the training of psychologists. University of Helsinki. Unit of Educational Psychology.

Reinmann-Rothmeier, G. & Mandl, H. 1999. Unterrichte and Lernumgebungen gestalten (überarbeitete Fassung). (The shaping of teaching and learning environments.) Forschungs-bericht 60. München: LMU. Lehrstuhl für Pädagogische Psychologie und Empirische Päd-agogik.

Resnick, L. 1987. Education and learning to think. Washington, DC: National Academy Press.

Resnick, L. 1989. Introduction. In L. Resnick (Ed.) Knowing, learning, and instruction: Es-says in honor of Robert Glaser. Hillsdale, NJ: Erlbaum, 1–24.

Resnick, L. 1995. From aptitude to effort: A new foundation for our schools. Daedalus 124 (4), 55–62.

Resnick, L. 1999. Research as design: Learning research as a component of educational re-form. Symposium at the 8th European Conference for Research on Learning and Instruc-tion. August 1999. Göteborg.

Resnick, L. B. & Hall, W. M. 1998. Learning organizations for sustainable educational reform. Daedalus 127 (4), 89–118.

Soini, T. 1999. Preconditions for actively managed transfer (in press).

Vermunt, J. D. & Verloop, N. 1999. Congruence and friction between learning and teaching. Learning and Instruction 9 (3), 257–280.

Wertsch, J. V. 1985. Vygotsky and the social formation of mind. Cambridge, MA: Harvard University Press.

White, R. T. 1994. Commentary: Conceptual and conceptional change. Learning and In-struction 4 (1), 117–121.

von Wright, J. 1992. Reflections on reflection. Learning and Instruction 2 (2), 59–68.

von Wright, J. 1996. Oppiminen selviytysmiskeinona. (Learning as a means of coping.) Psyko-logia 31 (5), 351–358.

Viljo Kohonen
Department of Teacher Education
University of Tampere

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter **2**
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter

Teacher Growth and Site-based Curriculum Development:

Developing Inservice Teacher Education

1 The Changing Context of the Teacher's Work

1.1 Changes in Society and Families

The school is naturally part of the surrounding society, sharing its values and practices. It creates a community of its own that reflects the prevailing culture in society. Inevitably, learners bring society to school with them through their family and peer cultures. The school also provides learners with an important experience of what it means to live as a member of society through being a member of the school community. It is consequently useful to consider what prospects the current developments in society seem to suggest for education.

Due to recent political and social developments worldwide, needs and tensions have emerged that pose new demands on work life. Requirements for increasing efficiency in competitive work environments create pressures for improving work productivity. Rapid changes require new skills. Such skills include flexible thinking, continuous learning, good communication, team work, taking the initiative and coming to terms with uncertainties and conflicting pressures.

For a great number of people in working life, these developments are challenging and motivate them to extend their professional skills. For many people, however, they also create feelings of stress and inadequacy under a work

overload. While working life has become increasingly busy, the recent economic depression and increasing automation in production have also caused a high proportion of labour to lose their jobs or live under threat of unemployment. The structural changes in work places are consequently accompanied also by feelings of inequity and insecurity, even anxiety.

The globalization of capital markets and the increased mobility of the work force, students and specialists emphasize the need for cross-cultural contacts. In Europe, the current integration processes are moving the whole continent towards a multilingual and multicultural political and economic union. Contacts are facilitated enormously by the new information technology. It will make vast amounts of information services readily available to more and more people through international networks. The developments will create new demands for global communication and tolerance for intercultural diversity (Kaikkonen 2000). This entails changes in deep-rooted values and attitudes.

The structure of the central administration in many post-industrial societies is being reformed towards more democratic and participatory practices. The relations between central and local government are increasingly guided by the principle of decentralization in order to allow greater participation at the lower levels of administration. These developments underscore the need for democratic citizenship education and socially responsible action at all levels of schooling.

The developments in society, work places and families are changing the teacher's work in school. While the developments in technology are providing unseen possibilities for enhancing learning, the psychological well-being of an increasing number of students is undermined by the pressures experienced by parents in working life. If tired parents cannot provide their children with sufficient presence in the family, the children will inevitably bring the stress and insecurity with them to school. This is seen in school as an increasing number of students who show symptoms related to stress behaviour: tiredness, restlessness, deviant behaviour and bullying, anxiety and depression, use of various drugs, and the lack of concentration and attention during lessons. According to recent surveys of school health as experienced by the students, such symptoms have increased in Finland during the last few years and variously affect nearly a third of the students at the end of compulsory education (Rimpelä 1999). The lack of well-being felt is further related to experiences of learning difficulties among the students (Kaltiala-Heino 1999).

1.2   Changes in Curricula and Evaluation

In education, the trend towards decentralization is seen as the deregulation of power from central administration to the municipal and local levels. The purpose is to give schools more freedom in designing their curricula and using resources. Schools are expected to design their own curricula, based on the national curriculum framework and guidelines.

In accordance with this movement, Finnish schools have been in the new situation of preparing their own curricula since 1994. The purpose is to involve the teachers in decision-making concerning their own work. The curricula are designed basically at the school level within the nationally determined guidelines and broad educational goals established by the National Board of Education (1994). Briefly stated, the guidelines emphasize the importance of supporting a holistic personality development of the students, democratic citizenship education, active learning through student involvement, and ethical reflection on and respect for cultural diversity.

The obligation of shared responsibility for curriculum design was underscored in the new school laws (1999) whereby schools are required to evaluate the progress of their curriculum work and report the outcomes to the local educational authorities. The municipalities are responsible for coordinating the evaluation at the local level, in accordance with the policies and guidelines formulated by the National Board of Education. The law also emphasizes the importance of self-assessment by the individual student and the teacher. Some schools have already integrated parents' assessments as part of their evaluation processes. Practices vary in different municipalities.

As Finland gave up school inspection long ago, the current plans do not include any large-scale external evaluation (and public ranking of the schools by auditing boards as, for example, in England). The emphasis is placed on collegial self-assessment with an obligation to report to the local educational authorities. However, the prospect of increasing the control mechanisms of a market economy, evident in the current discussions on quality assurance, is clearly causing concern among teachers and researchers.

The site-based curricula and the evaluation of quality in learning emphasise the need for the teachers to collaborate in developing the curriculum together with the stakeholders of the school. In this process it is necessary for the participants to consider the educational values and goals they wish to

promote in school. This is a matter of making far-reaching value-based choices. Site-based curriculum development requires the teacher to have a fundamental understanding of different educational approaches and their theoretical underpinnings, such as the conceptions of man, learning and knowledge. The process entails a new school culture involving collegial collaboration (Kohonen 2000b).

1.3   Changes in the Professional Role of the Teacher

In addition to these changes, the conceptions of man, learning and teaching have evolved radically over the past years. In this chapter I can only briefly outline some of the implications of the shifting conceptions of learning for the teacher's role, related to three paradigms: the positivistic paradigm, the constructivist-interpretive paradigm and the critical-emancipatory paradigm (see Guba & Lincoln 1994; Patrikainen 1997; Heikkinen, Huttunen & Moilanen 1999; Kohonen 2000b).

1. In the *positivistic paradigm*, reality is seen as external and objective, summarized as context free generalizations. Research is aimed at objective, context-independent generalizations which can explain and predict human behaviour. The *teacher's role* is restricted to that of consumer of expert knowledge produced by researchers. Teachers are didactic implementors of the curricula and materials produced by outside experts, acting according to their guidance (and also inspection, in a number of national contexts). Top-down administration imposes on them a dependent professional role. Implicitly, this also encourages them to use a similar power relationship with their students. This interest of knowledge is generally known as *technical interest* whereby knowledge is used as a guide to efficient action. It is assumed that the most effective means to a given end can be defined and controlled.

2. In the *constructivistic-interpretive paradigm*, reality is seen as mental constructions which are socially and experientially based. Research focuses on understanding and interpreting individual meanings in context, not on generalizing across cases or contexts. New knowledge is gained through the negotiation of meanings in interaction between the participants. The *teacher's role* is that of a reflective practitioner

who can benefit from useful research-based knowledge and pedagogical suggestions. To understand others, the teacher needs to be engaged in the process of reflective self-understanding. The process encourages teachers to use their own judgement in pedagogical decisions. The teacher's position is thus more independent. This orientation is based on a *practical interest* of knowledge: understanding the conditions of meaningful communication and grasping the meanings that constitute social reality.

3. In the *critical-emancipatory paradigm*, reality is seen as being shaped over time by various factors (social, political, cultural, ethnic, gender) and transformed into a series of personal constructs. These are elucidated in research through an open dialogue between the participants. Critical reflection leads to a deeper personal awareness and develops the individual's self-understanding in the social, cultural and historical contexts. It invites the participants to engage in practical action for change when necessary. In this orientation the *teacher's role* goes far beyond merely understanding subjective meanings in a social context. Teachers need to emancipate themselves from the routines and tacit beliefs and assumptions concerning their work. Critical self-reflection permits them to understand the constraints imposed on their work by external circumstances and suggests a course of action to improve them. In accordance with this *emancipatory interest* of knowledge, teachers need to voice disapproval of their working conditions and take active charge of developing their profession.

As the above discussion shows, there have been significant changes recently in society, in the context of schooling and in conceptions of learning. Their implications for the teacher's work underscore the need for a pedagogical shift towards collaborative, active learning in school, involving a new school culture. They suggest an interactive professional identity for the teacher whereby teachers move away from their traditional isolation towards a collegial culture of professional sharing and learning from each other. These changes pose significant challenges for developing schools as collegial work places.

The changes entail a fundamental reculturing of schools as communities of learners. The processes need to be investigated to be understood and facilitated. To pursue this research, I undertook a school development project with my colleague Pauli Kaikkonen at the Department of Teacher Education in

42

Tampere University, the so-called OK school development project (short for the Finnish title of the project, 'Learner, curriculum and culture change', between 1994–98). In this chapter, I discuss the design of the project emphasizing the teacher's professional growth and ways of supporting it through a long-term school-university partnership.

2 Professional Growth and School Culture: the OK Project

2.1 The OK School Development Project

The starting point of the OK project was that there is a need to explore new ways of promoting inservice teacher education through a university-school partnership. A central goal was to enhance the teacher's professional growth as part of fostering a collegial school culture (Kohonen & Kaikkonen 1996; 1998; Kohonen 1999; 2000a; Kaikkonen & Kohonen 1999). Teachers' participation in the project was voluntary, but the schools were expected to make a basic commitment to the project. We thus wanted to ensure that the teachers were motivated and that they received clear support from the head teacher and the school. The local educational authorities also gave their strong support to the project, including funding for the teachers' inservice education. About 40 teachers joined the project from six schools in Pirkanmaa region. They committed themselves to working together with the researchers for a period of four years (1994–98).

In traditional models of university-school cooperation, researchers have usually given teachers lectures and seminars on learning and teaching while remaining outside experts and evaluators of the results. Such positivistic orientations have encouraged the teachers to remain in a dependent role of didactic technicians and implementors of curricula and materials. We set out to develop a new model for collaboration, based on the constructivistic and emancipatory paradigms. As noted above, these orientations encourage teachers to assume a critical understanding of themselves and their work and to undertake an active role in the school community and the surrounding society.

Essential in the new model of university-school partnership is that it is based on an equal status of the partners and a mutual trust and respect. It also

40

encourages the teachers to take charge of developing their school through a research orientation. This means developing an inquiring attitude to the work: becoming sensitive to potentially interesting problems and learning to think about them more systematically and rigorously. At a more advanced level, the teacher's inquiry becomes action research that is carried out in relation to a specific context. As defined by Kemmis and McTaggart (1988; see also Kohonen & Kaikkonen 1996; Heikkinen et al. 1999), action research is 'a form of *collective* self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out.'

The definition underscores the motives for undertaking action research: improving the quality of teaching and learning as well as the conditions under which teachers and students work in school. Essential in the process is to promote the teacher's professional growth and school development. Research is geared to classroom realities and is carried out mainly by the teacher (rather than by an outside researcher), in collaboration with other teachers. Teachers also report their findings themselves to others.

While structural reforms may be necessary for innovations to take place in school, they do not as such guarantee real changes in teaching practices and educational outcomes. Teachers can still pursue their old practices in the new structures. What matters is the quality of learning rather than mere administrative and management structures. Quality of learning depends heavily on such powerful factors as the teacher's pedagogical skills, attitudes and beliefs, and the shared norms and expectations, i.e., the culture in school. It is thus imperative to support the changes in the teacher's beliefs, assumptions, knowledge, understanding and skills. Teachers need to learn to work differently in their own classes and develop shared expectations about what good learning is for them in their context (Elmore 1995; David 1996; Kohonen & Kaikkonen 1996; Fullan 1996; Kohonen 1999).

Consequently, a central theme in the OK project design was how to support the teacher's professional growth, as part of school reculturing as a collegial work place. The project aimed at exploring the educational outcomes of schooling as experienced by the participants in the process, at the levels of 1) the changes in the teachers' professional thinking and pedagogical choices, 2) the culture in the participating schools, and 3) the development of individual

44

students' knowledge and skills in the different subjects as well as their social skills in moving towards collaborative, self-directed and intercultural learning (Kohonen & Kaikkonen 1996; Kaikkonen & Kohonen 1999). I was in charge of analysing the empirical data on the above research areas 1) and 2), while Pauli Kaikkonen concentrated on the data on the project's impact on student learning (see Kaikkonen & Kohonen 1997; 1999a; 1999b).

We gradually developed a distinction between the teachers' and the researchers' roles and responsibilities in the project. Teachers were doing action research on their own teaching, finding ways of developing their work in the light of their observations and empirical data. They reported on their findings regularly in their own site-based project teams and at the project seminars, sharing their discoveries also with the other participants.

As researchers we functioned as consultants, coordinators and co-researchers and participated in the work as equal partners. We saw our role, however, as conducting action research into ways of supporting the teachers' action research in their classes, and evaluating the process as a whole. We set out to develop inservice teacher education together with the participants, relating our research questions to the collaborative goals of the OK project. Our action research was thus dependent on the action research carried out by our teacher colleagues. As Elliott and Adelman (1996) point out, this distinction between the roles and goals of the participants in action research needs to be made clear, and it is often blurred.

2.2   Design of the OK Project for Teacher Growth

The concept of new professionalism in the teacher's professional identity means a shift away from the teacher's isolated privacy towards new forms of relationships with colleagues, students and the school's stakeholders. It entails willingness to change beliefs and assumptions about schooling and acquire new personal understandings. Niemi and Kohonen (1995, 24) summarize the key properties of the concept as follows:

1. *Professional commitment to enhance growth and learning:* having confidence in the value of teaching and seeing learning as a shared enterprise between the participants.

2. *Professional autonomy:* assuming an independent, ethical basis for the work by clarifying one's educational values and conceptions of learning.
3. *Dynamic learning concept:* supporting active, responsible learning, working towards student ownership and seeing oneself as an active and reflective learner.
4. *Collaboration and interaction:* assuming an active role in the school community and surrounding society and developing curriculum through action research.

We also used the views of David Hargreaves (1994), who traces the following nine trends in promoting the teacher's new interactive professionalism: 1) From individualism to collaboration, 2) from ones to twos, 3) from hierarchies to teams, 4) from supervision to mentoring, 5) from inservice training to professional development, 6) from liaison to partnership, 7) from authority to contract, 8) from process to product, and 9) from survivalism to empowerment. These ideas were the starting point for the design of the OK project (Kohonen & Kaikkonen 1996; Kaikkonen & Kohonen 1999).

2.2.1 Goals of the Project

In the goals that we proposed for the OK project, we emphasized professional growth, collegial school culture and reflective intercultural learning. These goals evolved gradually into the following five principles that guided our work during the project:

1. providing support for site-based curriculum design, while leaving the ownership of the project to the participating teachers;
2. supporting collegial collaboration by facilitating joint planning of the project and working in a number of different groupings;
3. helping the schools to establish networks through various interest groups, including international networking;
4. promoting openness of professional discussions and exchange of ideas between the participants; and
5. developing the notion of teachers as researchers through a participatory action research orientation and dissemination of the findings.

Our goals and the above principles allowed ample room for the teachers to make their own site-based decisions. Our fundamental orientation was to develop instruction within an experiential learning approach emphasizing reflective and socially responsible learning (see Kohonen 2000b). The project was one component in the schools' action plans and evolved from the needs and goals identified by the schools themselves. The teachers designed their school's projects independently and evaluated them by collecting empirical data on the process. The research data were mainly qualitative (teachers' project plans, diaries and field notes, student portfolios, interviews and various questionnaires given to students and parents).

2.2.2 Professional Networking

From the outset of the project, we established a joint *project planning group* which consisted of the two researchers and one teacher from each participating school. The group had regular monthly meetings for planning the project and inservice teacher education, and for evaluating progress. The spirit of shared responsibility for the project was reinforced by the *site-based planning groups* in the six schools. These groups were in charge of planning and coordinating the work in the school and reporting about it to the other teachers at teacher's meetings. The groups were chaired by the teacher who was currently a member of the planning group. This arrangement made it possible to bring ideas directly from the schools to the project planning group, and vice versa.

We organized inservice workshops almost monthly during the project (with a total of 32 workshops between 1994–98), usually lasting half a working day or a full working day. In the design of the inservice workshops, we encouraged collaborative culture through an extensive use of collaborative work in small groups, providing ample time for the teachers to share their experiences and report their discoveries. The groups worked in a variety of combinations: subject groups (consisting of e.g., language or math teachers only), thematic groups (e.g., teachers interested in portfolios or intercultural learning), site-based groups, random groups, and groups by school level (with the lower and upper secondary teachers working in their own groups). The workshops also included a regular component of lectures and presentations by the participants (and,

in some cases, by invited outside speakers). We gave teachers a large amount of duplicated professional literature (topical articles) for further reading, connected with the themes discussed in the workshops (Kaikkonen & Kohonen 1999).

The teachers also established cross-school interest groups who conducted research and development work on the same topic. Three such groups emerged during the project: a group working on portfolio assessment, another group interested in intercultural learning, and a further group of teachers who joined in a European cooperative learning project on complex instruction (CLIP Project), coordinated by the University of Utrecht in Holland (see Batelaan 1998). The teacher teams aimed to promote the joint ownership of the project through active involvement. They provided a natural context for professional growth in an interactive dialogue with the others.

Various kinds of partnerships were thus developed in the project at a number of levels: 1) between the university and the participating schools; 2) between the schools (locally, nationally and internationally, e.g. networking based on interest in portfolio assessment; schools taking part in the CLIP project; schools networking with a primary school in Falun, Sweden); 3) among the staff members in the schools; 4) between the school and its stakeholders; and, last but not least, 5) between the teachers and the students in the schools. Developing these partnerships for mutual synergy continued to be an important resource during the project.

The role of the head teachers in relation to the OK project evolved so that we established a *project steering group* consisting of the researchers and the head teachers of the six participating schools (in 1996). The group meetings were also attended by the directors of education in Tampere and Nokia. We conducted a number of seminars with them on the project design and leadership questions in their schools. The seminars provided a significant forum for discussing the strategies of project design and staff development, sharing the expertise of the participants for mutual benefit.

2.2.3 Supporting the Teachers' Professional Growth

A problem in traditional inservice training has been that teachers have taken courses in isolation, based on what happens to be available, what their cur-

rent interests are, and the school's resources to pay the costs. While such courses have undoubtedly been personally useful and helpful in many cases they have, however, remained fragmented and too short for real long-term impact on classroom practices. For this reason they have also had little impact on the school as a whole, or at least such impact and continuity have not been built into the design of the courses. Individual coursework has fostered teacher isolation rather than collegial sharing and collaboration.

The development of site-based curricula has increased the need to find ways of linking inservice teacher education with the aims and needs identified by the schools in their curriculum goals. To support ongoing curriculum development, we encouraged the schools to plan teacher development by reconciling the needs arising from personal interests with those arising from the school's goals. We encouraged the participating teachers to identify their personal aims and interests. For this purpose in spring 1995 we provided several sessions on reflective learning, qualitative research and hermeneutical philosophy as a theoretical underpinning. We also introduced the idea of the teacher's professional growth portfolio as a tool for increasing self-awareness and facilitating student learning. We returned to these topics several times during the project, inviting the teachers to read relevant literature and discuss their thoughts in small groups (see Kaikkonen & Kohonen 1999).

We thus encouraged teachers to keep a diary and write a personal developmental essay at the end of each school year, based on the diary notes and other documentation. We asked them to submit the essays to us as research material. About half of the teachers undertook this task, finding it personally useful to report on their reflections and discoveries. Further, we encouraged the teachers to identify a topic in which they were personally interested and consider the possibility of working on it over a long period of time. We thus aimed at facilitating the task of the teachers to identify for themselves a long-term pedagogical project to which they could commit themselves during the OK project. This is how the three thematic groups gradually emerged in the project (on portfolio assessment, intercultural learning and complex instruction). In 1997 the teachers received a small sum of money from the project funding for further inservice coursework related to their personal needs. We suggested that the teachers discuss their plans together in school, in relation to the site-based goals (Kaikkonen & Kohonen 1999).

We suggested that the teachers would identify their own professional development aims and interests and work on them over time. Our purpose was thus to enable the teachers to relate their personal aims to the goals of their school curriculum, in consultation with the head teacher. This meant that the teachers would outline for themselves a long-term plan for continuous professional development, linked with the site-based areas of focus. However, these ideas entail such a big change in the traditional practices of inservice education that they obviously need more time to evolve. Some schools were discovering possibilities for promoting their goals by involving teachers in goal-related action groups, encouraging all the teachers to join in one action group. While a number of teachers were ready to commit themselves to such groups there were also teachers whose interest in collegial collaboration remained low.

2.3 The OK Project as a Forum for Professional Reflection

A new approach to promoting professional development was thus emerging in the project schools with a clear orientation towards interactive, collegial teacher professionalism. Sharing pedagogical experiences in collegial groups and discussing professional literature together created a culture of caring that increased mutual trust and openness. Such an environment gave the participants opportunities for exploring their educational beliefs and assumptions and re-examining their school practices. The approach aimed at linking inservice teacher education with school development, thus providing continuity and a site-based context for teacher development. The OK project was able to support these tendencies by encouraging collegial collaboration and an action research orientation.

In connection with the workshops the teachers frequently undertook bridging tasks to work on further in their classes and to report on their thoughts and experiences at the following seminar. Through these bridging tasks we were able to link the workshops together and provide the necessary continuity for the work while enabling the participants to combine theory and practice in their thinking and teaching. At the beginning of each school year, the schools prepared their action plans in the site-based groups and presented them to the others in the first workshop. These presentations promoted a spirit of openness, shared responsibility and collegiality in the project.

The OK project thus provided a common forum and a context for exchanging ideas about how learning was understood in the schools, in concrete enough terms to be communicated to colleagues who teach learners of different ages in different subjects and in different schools. The teachers shared their findings in our project seminars and reported on them to other teachers in a host of seminars both nationally and internationally. Another important way of disseminating the findings were the three collections of papers written by the participating teachers and the researchers (Kaikkonen & Kohonen 1997; 1999a; 1999b).

3   Professional Growth as Transformative Learning

The teacher designs the curriculum, the learning tasks and the learning environments within the constraints of the school curriculum, culture and the prevailing culture in society. The process aims at a coherent approach to integrating the goals, contents and the processes. Coherence in curriculum thus entails an effort towards a consciously designed and balanced relationship between the learning goals, experiences and the desired outcomes. To increase coherence, we need to examine critically what is said in the school curricula, what is being done in actual practices in school, and how the whole process is experienced by the participants. Teachers therefore need to work on their understanding of what they are doing and how they do it, and what consequences the practices might have on student learning.

Teacher growth and curriculum development are thus closely connected. As Lawrence Stenhouse noted in the pioneering Humanities Curriculum Project in England in the early 1970s, the curriculum expresses the view of knowledge and a conception of the process of education. The curriculum provides the framework for the teacher to develop new skills and relate them to her views of knowledge and learning. Stenhouse consequently pointed out that there is no curriculum development without teacher development (Rudduck & Hopkins 1985). Further, the teacher's professional growth is closely connected with the development of the school as a collegial community. Thus there is little significant school development without teacher development, as David Hargreaves (1994) points out.

To develop curriculum, teachers need to share their ideas, insights and problems with each other. They need to clarify and redefine their educational beliefs, images and assumptions. They need to work towards increased reflectivity by considering their goals and practices, judging their decisions against concrete empirical evidence. The purpose of the reflective work is to integrate their prior beliefs and images, their theoretical knowledge and their classroom experiences into new personalized professional understandings The re-construction process often involves experiences of cognitive and emotional dissonance and feelings of uncertainty and ambiguity. A supporting environment is necessary for the intensive work on self-understanding.

Such ideas on the teacher's professional growth and the possibilities for supporting the process through inservice teacher education have been discussed in recent literature with reference to transformative learning. Essential in this concept is that the teachers are emancipated from their constraining beliefs and assumptions and create for themselves new pedagogical solutions. The change is an experiential process that integrates the cognitive, social and emotional aspects of professional learning. The process is community-based and aims at a new culture of professional sharing and caring. The development of the collegial community creates more space for individual growth. There is thus a reciprocal relationship between community development and the growth of its individual members. Transformative learning includes the following properties (Cranton 1996; Darling-Hammond 1998; Askew & Car-nell 1998; Kohonen 1999; 2000b):

- realizing the significance of professional interaction for growth,
- developing an open, critical stance to professional work and seeing oneself as a continuous learner,
- developing a reflective attitude as a habit of mind, involving reflection on educational practices and their philosophical underpinnings,
- developing new self-understandings in concrete situations,
- reflecting on critical events or incidents in life history and learning from the personal insights,
- conscious risk-taking: acting in new ways in classes and in the work community, and
- ambiguity tolerance: learning to live with uncertainty concerning the decisions to be made.

52

The approach emphasizes the teacher's self-understanding as an educator and the importance of pedagogical reflection based on concrete situations. This is what Lawrence Stenhouse also emphasized in his views on the interplay between teacher growth and curriculum development, noting that it is the teachers who will finally change the world of school by understanding it (Rudduck & Hopkins 1985, 68). The reflective orientation can lead to a new kind of 'pedagogical literacy' in the encounter situations. A teacher who has become sensitized to her own growth is likely to be in a better position to perceive and support growth processes in her students and colleagues as well. The procedures that we developed in the OK are thus clearly in accordance with transformative learning for professional growth.

William Pinar and his colleagues point out that curriculum development has traditionally been oriented towards improving curricula through reforms aimed at concrete results (Pinar, Reynolds, Slattery & Taubman 1995). The focus on immediate action has restricted the horizons of curriculum development. They propose a reconceptualization of the field as a profound understanding of what is involved in curriculum innovation. They emphasize the importance of understanding curriculum from multiple perspectives that involve historical, political, racial, gender, phenomenological, biographical, aesthetic, theological and instructional texts and discourses. Teachers need to address the basic questions of the purpose of education and what it means for them to be teachers in today's school. In so doing they develop a critical understanding of their profession that enables them to take active charge of developing it together, for the benefit of student learning. Transformative professional learning thus entails teachers moving from the role of being consumers of expert knowledge and implementors of curricula towards the critical-emancipatory stance outlined briefly above (see section 1.3).

Linda Darling-Hammond (1996) notes that there is a 'quiet revolution' in rethinking about teacher development. Reforms need to focus on teachers as learners and enhance their professional autonomy, in collaboration with other teachers. She points out that regulations as such cannot transform schools; transformation can be made only by the teachers, together with the parents and administrators. Teachers need to focus more on 'doing the right things' in school, rather than 'doing things right'. Increasing coherence in curriculum is thus closely related to the teacher's professional growth. It is also a matter of developing a collegial atmosphere of the whole school by reculturing the school

as a community of learners.

As discussed in this chapter, we were thus designing a number of ways for facilitating the processes of professional growth and site-based curriculum development during the OK project, in close collaboration with the participants. We were clearly able to develop a significant forum for sharing the experiences and disseminating the findings to colleagues and researchers through professional presentations and publications. The project will continue to have an important impact on promoting curriculum design by encouraging a new culture of open collegial discussions and fostering the teacher's professional growth as part of the process.

References

Askew, S. & Carnell, E. 1998. Transforming learning: individual and global change. London: Cassell.

Batelaan, P. 1998. (Ed.) Towards an equitable classroom. Cooperative learning in intercultural learning in Europe. Hilversum: International Association for Intercultural Education (IAIE).

Cranton, P. 1996. Professional development as transformative learning. San Francisco: Jossey-Bass.

Darling-Hammond, L. 1996. The quiet revolution: rethinking teacher development. Educational Leadership 53 (6), 4–10.

Darling-Hammond, L. 1998. Teacher learning that supports student learning. Educational Leadership 55 (6), 6–11.

David, J. L. 1996. Who, what, and why of site-based management. Educational Leadership 53 (4), 4–9.

Elliott, J. & Adelman, C. 1996. Reflecting where action is: the design of the Ford teaching project. In C. O'Hanlon (Ed.) Professional development through action research in educational settings. London: Falmer, 7–18.

Elmore, R. 1995. Structural reform and educational practice. Educational Researcher 24 (9), 23–26.

Fullan, M. 1996. The school as a learning organization: distant dreams. In P. Ruohotie & P. Grimmett (Eds.) Professional growth and development. University of Tampere and Simon Fraser University: Career Education Books, 215–226.

Guba, E. & Lincoln, Y. 1994. Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.) Handbook of qualitative research. London: Sage, 105–117.

Hargreaves, D. H. 1994. The new professionalism: Synthesis of professional and institutional development. Teaching and Teacher Education 10 (4), 423–438.

Heikkinen, H., Huttunen, R. & Moilanen, P. 1999. Siinä tutkija missä tekijä. Toimintatutkimuksen perusteita ja näköaloja. (Merzing the roles of researchers and actors. Perspectives to action research.) Jyväskylä: Atena.

Kaikkonen, P. 2000. Intercultural learning through foreign language education. In V. Kohonen, R. Jaatinen, P. Kaikkonen & J. Lehtovaara, Experiential learning in foreign language education. Harlow, Essex: Pearson Education, 61–105.

Kaikkonen, P. & Kohonen, V. 1999. OK-projekti vaikuttajana koulukulttuurin muutoksessa. (The OK project as an influence in school culture change.) In P. Kaikkonen & V. Kohonen (Eds.) Elävä opetussuunnitelma 3. University of Tampere. Reports from the Department of Teacher Education A19, 7–21.

Kaikkonen, P. & Kohonen, V. 1997. (Eds.) Elävä opetussuunnitelma 1. (The living curriculum 1.) University of Tampere. Reports from the Department of Teacher Education A9.

Kaikkonen, P. & Kohonen, V. 1999a. (Eds.) Elävä opetussuunnitelma 2. (The living curriculum 2.) University of Tampere. Reports from the Department of Teacher Education A18.

Kaikkonen, P. & Kohonen, V. 1999b. (Eds.) Elävä opetussuunnitelma 3. (The living curriculum 3.) University of Tampere. Reports from the Department of Teacher Education A19.

Kaltiala-Heino, R. 1999. Millainen on suomalaisnuorten psyykkinen vointi? (What is happening to the psychological well-being of Finnish young adults.) Paper presented at the conference on Well-being in School, Tampere University. August 1999.

Kemmis, S. & McTaggart, R. 1988. Action research planner. Victoria, Australia: Deakin University Press.

Kohonen, V. 1999. Uudistuva opettajuus ja koulukulttuurin muutos OK-projektin päätösvaiheessa. (Renewing teachership and changing school culture at the end of the OK project.) In P. Kaikkonen & V. Kohonen (Eds.) Elävä opetussuunnitelma 3. University of Tampere. Reports from the Department of Teacher Education A19, 37–63.

Kohonen, V. 2000a. Aineenopettajan uudistuva asiantuntijuus ja sen tukeminen. (Enhancing the subject teacher's professionalism.) In K. Harra (Ed.) Opettajan professiosta. Helsinki: OKKA-Säätiö (in press).

Kohonen, V. 2000b. Towards experiential learning in foreign language education. In V. Kohonen, R. Jaatinen, P. Kaikkonen & J. Lehtovaara, Experiential learning in foreign language education. Harlow, Essex: Pearson Education, 8–60.

Kohonen, V. & Kaikkonen, P. 1996. Exploring new ways of inservice teacher education: an action research project. European Journal of Intercultural Studies 7 (3), 42–59.

Kohonen, V. & Kaikkonen, P. 1998. Uudistuva opettajuus muutosten ja vaatimusten ristipaineissa. (Renewing teachership amidst conflicting changes and demands.) In H. Niemi (Ed.) Opettaja modernin murroksessa. Jyväskylä: Atena, 130–143.

Niemi, H. & Kohonen, V. 1995. Towards new professionalism and active learning in teacher development: empirical findings on teacher education and induction. University of Tampere. Reports from the Department of Teacher Education A2.

Patrikainen, R. 1997. Ihmiskäsitys, tiedonkäsitys ja oppimiskäsitys luokanopettajan pedagogisessa ajattelussa. (Conceptions of man, knowledge and learning in the pedagogical thinking of class teachers.) University of Joensuu. Reports from the Faculty of Education 36.

Pinar, W. F., Reynolds, W. M., Slattery, P. & Taubman, P. M. 1995. Understanding curriculum. New York: Peter Lang.

Rimpelä, A. 1999. Terveys, oireet ja väsymys: trendejä ja uusia tuloksia. (Health, symptoms and tiredness: trends and new findings.) Paper presented at the conference on Well-being in School, Tampere University. August 1999.

Rudduck, J. & Hopkins, D. 1985. Research as a basis for teaching. Readings from the work of Lawrence Stenhouse. Portsmouth, NH: Heinemann Educational Books.

56

Pentti Nikkanen
Institute for Educational Research
University of Jyväskylä

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter **3**
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter

Effectiveness and Improvement in a Learning Organization

1   Introduction

Learning organization (LO) and human resource development (HRD) have received more and more attention in recent years, as different organizations struggle with ever-increasing environmental turbulence. Security and certainty have been experienced as turning into insecurity and uncertainty in many organizations – not only in Finland. Increased global competitiveness, changing technologies, and many other changes in markets are challenging managers in working life and headmasters in schools to utilize the human resources of their staff more effectively to gain a competitive advantage. Managers and headmasters must understand the importance of creating work structures and human resource processes that enable people to work more effectively within organizations (see Bratton & Gold 1994). For instance, Niemi (1992, 2) recommended that 'to deal with these circumstances, organizations must give to HRD a central place in their mission and goals, and begin transforming themselves into a learning organization'. Traditional management models are inappropriate in the dynamic work environments of today.

This chapter tries to concentrate on the opportunities that are available to different school organizations in their effective school improvement. In the following text, *firstly*, the concepts 'improvement' and 'effectiveness' are examined. *Secondly*, some descriptions of school cultures are demonstrated in order to point out the powerful role of school culture in school improvement.

Thirdly, a learning organization is defined and described using relevant litera-ture. Organizational learning is here seen as a process which occurs in the structure or context of a learning organization. *Fourthly,* there is discussion of how organizational learning differs from individual learning. *Fifthly* and finally there are some conclusions about effectiveness and improvement in the case of learning organization.

2   School Improvement and Effectiveness

In the past 20 years there have been at least two different groups of educa-tional researchers that have made attempts to answer the following two relat-ed but distinct questions (Stoll & Wikeley 1998, 29–30): Firstly, 'How can we make our school better than it is now?' and secondly, 'Which of the many activities that we do have greater benefits for pupils?' These are basic ques-tions that arise in a learning organization, too. They can be derived from two paradigms: A school improvement paradigm and a school effectiveness para-digm. The two paradigms have different knowledge bases and differing goals (Stoll & Wikeley 1998; Reynolds, Bollen, Creemers, Hopkins, Stoll & Lager-weij 1996). Recently more and more efforts have been made to link them, to foster the links more actively, and to explain the relationship.

In the mid 1980's a widely accepted definition of school improvement was launched in the International School Improvement Project (ISIP). Partici-pants in the project concluded that school improvement is as follows: '*A sys-tematic, sustained effort aimed at change in learning conditions and other related internal conditions in one or more schools, with the ultimate aim of accomplishing educational goals more effectively*' (Miles & Ekholm 1985, 48; see also Stoll & Wikeley 1998, 35–36). According to Stoll and Wikeley (1998, 36):

> Assumptions underlying this definition were that school improvement needs to be carefully planned, managed and implemented, even through periods of inevitable tur-bulence, until changes are 'embedded or built into the structure', where they are part of the school's natural behaviour (See Huberman & Miles, 1984). Additionally, through-out stages of the change process, those involved must recognise the need for change, be committed to the particular improvement focus and feel they have ownership of it, for the change to have any 'meaning' (See Fullan, 1991).

Stoll and Wikeley (1998, 36) go on to say:

> While real improvement focuses on teaching, learning, the curriculum and conditions that support learning, successful school improvement also extends to other related internal conditions; supporting roles, relationships and structures needing to be directly addressed. Furthermore, while improvement takes place in the school, schools are also located within an educational system where benefits can be reaped by collaborating and cooperating with other schools and being supported by external partners and agencies.

Hopkins, Ainscow and West (1994, 3) have recognized the changes in schools' external context in, for instance, decentralized decision-making power 'to schools, and succinctly defined school improvement as 'a distinct approach to educational change that enhances student outcomes as well as strengthening the schools' capacity for managing change'. Hopkins and his colleagues add:

> In this sense school improvement is about raising student achievement through focusing on the teaching-learning process and the conditions which support it. It is about strategies for improving the school's capacity for providing quality education in times of change, rather than blindly accepting the edicts of centralized policies, and striving to implement these directives uncritically. (Hopkins et al. 1994, 3)

The definitions all reflect that the relationship between school improvement and change is complicated. While clarifying the term 'improvement' Hoeben (1998, 165) noticed that Fullan (1991, 4) did not use the concept 'school improvement'. Hoeben discovered that Fullan's treatment of what he called 'the confusion between the terms change and progress' may be of help in gaining insight into the meaning of the concept 'improvement': 'Not any change is progress; progress is change in a certain approved and good direction' (Hoeben 1998, 165). Stoll and Fink (1996) explicitly maintained that an essential part of school improvement is that the school assesses its current culture and works in order to develop positive cultural norms.

When elaborating certain key concepts of the Effective School Improvement (ESI) project, Hoeben (1998) interpreted the definition of Miles and Ekholm (1985, 48) as specifying improvement as an innovation (i.e. planned change) with specific means (change in learning and other internal conditions of schools) and specific goals (ultimately to accomplish educational goals

more effectively). He noticed that the definition came very close to the definition of ESI, where the enhancement of effectiveness is seen as a very concrete goal of the improvement activities, and it is this difference that is the ultimate aim of enhancing effectiveness. According to Hoeben's (1998, 164–166) proposed definition for the ESI-project, improvement here means the following: *School improvement is planned or managed change (either the change process or its result) of a school in a certain approved and good direction.*

According to Stoll and Wikeley (1998, 33) the fundamental question of school effectiveness is: 'How do we know that what we are doing makes a difference to pupils?' In their article they describe an effective school as follows:

- It promotes progress for all of its pupils beyond what would be expected given consideration of initial attainment and background factors.
- It ensures that each pupil achieves the highest standards possible.
- It enhances all aspects of pupil achievement and development.
- It continues to improve from year to year.

They concluded that it is increasingly clear that what works in one context may lack relevance in others. Therefore they stated that listings of generic school effectiveness characteristics may be insufficient (Stoll & Wikeley 1998, 35).

Creemers and Hoeben (1998, 13) noticed:

> Most effectiveness research defines the output criterion as achievement in basic cognitive skills. A theoretical framework that offers a step forward beyond the state of the art in educational innovation and school effectiveness and towards theoretical explanations of success and failures, needs to broaden the traditional concept of school and classroom effectiveness from achievement scores in basic school subjects to a new operational definition of educational effectiveness in terms of the realisation of other and more ambitious cognitive and meta-cognitive goals, such as problem solving, creative thinking and other higher cognitive skills, transfer of knowledge, learning to learn.

Creemers and Hoeben (1998, 14) referred to contingency theory and Minzberg (1979) and, accordingly, assumed that '*there is no best way to make an organization effective; which one of several ways proves to be effective, is contingent upon situational and contextual factors*'.

3 Powerful School Culture

Every school is different and has its own characteristic culture which plays a powerful role in its improvement. Hargreaves (1995, 5) views school culture as the knowledge, beliefs, values, customs, morals, rituals, symbols, and language of a group. During the last twenty years or so more attention has been paid to the characteristics of the deep structure of organization culture, i.e., to the underlying assumptions (Argyris 1990; Argyris & Schön 1978; Schein 1987; Schmuck 1984; Schmuck, Runkel, Arends & Arends 1977). Assumptions include values, norms, attitudes, presumptions and various lines of action, such as development strategies, generally adopted in the organization. Basic assumptions form the unwritten operational theory that guides the behaviour of the members in the organization. For example, the work community of a school organization has a common idea about the operational theory of the school organization – a common truth.

In accordance with Schein (1987, 26) the term 'organization culture' can be defined as the *'model of basic assumptions that a group has invented, discovered or developed when learning to handle its problems related to external adaptation or internal integration. This model has worked well enough to seem justified and therefore to be taught to new group members as the way to recognize, consider and feel about problems. Moreover, because such assumptions have repeatedly proved their functionality, they have probably become self-evident and unconscious'.* School culture is tightly linked to structure.

According to Stoll and Wikeley (1998) culture and structure are in many ways interdependent. 'Culture, however, can only be affected indirectly, whereas structures can be changed. The difficulty arises, however, that in changing structures without changes in school culture, change is likely to be superficial, which is a danger with all externally generated educational reforms' (Stoll & Wikeley 1998, 5). Nikkanen (1992, 8) has tried to classify some of the differences between schools in terms of current school effectiveness and orientation to school improvement by using marine images as follows:

- *The sailing school* is a self-renewed and self-directed school with a good conversation culture. It has deeply understood the significance of inner development from the individual, the work community and the whole school point of view (Nikkanen 1992, 8). The sailing school is a

school which insists on becoming a learning organization.

- *The drifting school* is all the time searching for different currents of de-velopment without actually entering into them. It agrees to work su-perficially and quite technically and makes considerable effort to give the external image of a modern school. It is not effective nor ineffec-tive. It takes only small steps of improvement.
- *The lying at anchor school:* It is exhausted and tired of further develop-ment activities. It is ineffective. It may formerly have been active in many ways, but now it has given up trying. Its members now possess only little energy for planning and co-operation. It is declining and has come back to old practices and customs. It sticks to its positions.

Stoll and Fink (1996) make a very similar classification with five types of school culture, in which culture sits along two dimensions, effectiveness – ineffectiveness, and improving – declining:

- *The moving school* is not only effective in 'value added' terms but people within it are also actively working together to respond to their changing context and to keep developing. Teachers constantly examine their practice and ensure that it meets the differential needs of their students, who are involved in the learning process. There is a shared sense of purpose and structures, and support systems are in place to help all of the school partners work together to achieve the school's goals. In short, those involved in and with the school know where they are going and have systems and the will and the skill to get there.
  ...
- *The cruising school* is perceived as effective, or at least more than satisfactory, by teachers and the school's community. It has a carefully constructed camouflage. While it ap-pears to possess many qualities of an effective school, it is usually located in a more affluent area where students achieve in spite of teaching quality. The cruising school lacks the capacity and will to change no less than the sinking school, because of powerful underpinning norms of contentment, avoidance of commitment, goal diffu-sion, being reactive, perpetuating total top-down leadership, conformity, nostalgia, blaming others, congeniality, and denial. It is perhaps society's greatest challenge because it has not been identified as ineffective for a significant percentage of its students. Indeed, it could be described as the unidentified ineffective school.
- *The strolling school* is neither particularly effective nor ineffective. It is moving to-wards some kind of school improvement but at an inadequate rate to cope with the pace of change which therefore threatens to overrun its efforts. It has ill-defined and sometimes conflicting aims which inhibit improvement efforts. In many ways it would be considered a very average school. It is this kind of school that can benefit from an outside review, a new principal, or a school council's external eye.

- *The sinking school* is a failing school. It is not only ineffective; the staff, whether through apathy or ignorance, are not prepared or able to change. It is a school in which isolation, self-reliance, blame and loss of faith are dominating norms, and powerfully inhibit improvement. It will often, although not always, be in socially disadvantaged areas where parents are undemanding, and teachers explain away failure by blaming inadequate parenting on unprepared children.
- *The struggling school* is ineffective because its current pupil outcomes and school and classroom processes need attention, it is aware of this, and expends considerable energy to improve. There is willingness, however, to try anything that may make a difference. Ultimately it will succeed because it has the will, despite lacking the skill. Sadly, it tends to be viewed as failing or sinking, and this negative attention often acts as a demotivational force in terms of school improvement. (Stoll & Fink 1996, cited in Stoll & Wikeley 1998, 46–48)

4   Learning Organization

A learning organization tries, on the one hand, to bridge the gap between theory and practice, and on the other hand, to increase its capacity to change and adapt flexibly and bring about reforms continuously (see also Woolner 1992). Senge (1990, 5), who is frequently referred to in the literature on both organization development and school improvement, said that 'what fundamentally will distinguish learning organizations from traditional authoritarian "controlling organizations" will be the mastery of certain basic disciplines' (see also Senge, Kleiner, Roberts, Ross & Smith 1994, 6–7). They are:

a) *Personal mastery*
   Learning to expand our personal capacity to create the results we most desire, and creating an organizational environment which encourages all its members to develop themselves toward the goals and purposes they choose. Senge sees personal mastery as the spiritual ground of a learning organization.

b) *Mental models*
   Reflecting upon, continually clarifying, and improving our internal pictures of the world, and seeing how they shape our actions and decisions.

c) *Shared visions*
   Building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there.

61

d) *Team learning*
Transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual members' talents.

e) *Systems thinking*
A way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behaviour of systems. This discipline helps us see how to change systems more effectively, and to act more in tune with the larger processes of the natural and economic world.

According to Senge (1990, 377) there are distinct stages of learning that we all go through. He referred to the five disciplines of learning, which form the frame of theory and technique which every member of a work community must study and master to be able to put them into her/his practice. He also emphasized learning by doing and training (Senge 1990, 10–11). It means a lifelong task for the learning organization to follow the disciplines he has proposed (see also Dixon 1992, 29–49). These disciplines should be considered more carefully also in the quality development of school organizations.

The pictures of the future, visions, will in time change into facts of the present state. Learning organization can be characterised by continuous learning, transformation, adaptation, participating management, delegation, questioning the strategy of an organization, reflective working and collaboration amongst its members, learning by experience and history, continuous experimentation, participation, system thinking, shared visions, awareness of core competencies, commitment to work and responsibility, teamwork, diversified group working, problem solving, creativity and innovativeness, approval and appreciation of dissimilarities, self-directivity and self-assessment, effective information flow, continuous giving, getting, collecting, and acquisition of feedback data, all-win conversation culture, listening and helping each other, freedom, flatness in hierarchical terms, and an encouraging atmosphere (see also Burgoyne 1995; Coopey 1996; Garvin 1993; Jones & Hendry 1992; Nikkanen 1994; Pedler, Burgoyne & Boydell 1991; Senge 1990).

In the definitions of learning organization, which Nikkanen has introduced for concept analysis (see Nikkanen 1996; 1998), all the definitions focus on learning that takes place at the system level rather than at the individual level. They emphasize 'conscious collaborative change and objective-orient-

ed influence on the future'. Researchers have also pointed out that learning is a process, not an outcome (see also Dixon 1992). The level of generality and points of emphasis do indeed vary in the definitions. It is difficult to include all aspects of the concept even in a theoretically broad definition. However, in the following a combination of the essential elements of the definitions is proposed: *A learning organization encourages and facilitates continuously and in relevant ways the learning of all its members and their teams individually and as a group. It takes the internal and external clients into consideration and is conscious of its core competencies. Consciously it also transforms itself by structuring its policy and strategy formation, evaluation, implementation, and improvement as a good, ongoing, and participant directed learning process. It develops and activates knowledge about action outcome relationships between the organization and the environment, and expands its capacity to create its future.*

Work communities in many Finnish organizations have reported that many of the above are qualities they are striving for (Nikkanen 1992). Pedler and colleagues 'encourage people to take charge in company with others not just to earn but to learn together' (Pedler et al. 1991, 1). They (ibid., 2) point out that they cannot take anybody 'out to visit a learning company (organization) or bring a blueprint of what worked elsewhere – it is not like that. The magic of the learning company has to be realized from within. The key word is "transformation" – a radical change in the form and character of what is already there'. Through learning together and co-operation the members of a work community develop their ability to influence their own future. The learning company is a vision of what might be possible in our own organization, too (ibid., 1). In order to improve learning, it is important to pay more attention to the internal and external learning environment. De Geus (1988, 70) stated briefly that 'the key to an organization's longevity is organizational learning'. In school organizations the most essential starting point for school improvement is the teaching-learning process.

5   Organizational Learning

The field of organizational learning has been characterised by a wide diversity of opinions, definitions, and conceptualizations (Nicolini & Meznar 1995). It is easy to agree with Ouksel, Mihavics and Chalos (1997, 2) in their state-

ment that 'current literature on organizational learning tends to be theoreti-cally fragmented, drawing on analogies of individual learning or simply using organizational learning as an explanation for many different kinds of observed organizational change or adaptation'. Many researchers do not differentiate between the concepts of organizational learning and 'learning organization', although the first one actually takes place in the latter one. 'The concept of "learning organization" or "learning by organizations" has been taken from the psychological concept of "individual learning". Therefore, practically all definitions of organizational learning are based on this analogy' (Romme & Dillen 1997, 68). Organizational learning and learning organization are here contrasted in terms of process versus structure. Obviously, a better term to replace the term 'structure' is 'context'.

Kim (1993b, 37) noticed that even the word 'learning' is ill-defined: It has so many meanings that it has value only as a vague slogan. Its meaning varies widely by context. Table 1 lists definitions of organizational learning for com-parison. As Dixon (1994, 135) noted, they offer a great variety of possible meanings for the term organizational learning. Some of the more notable dif-ferences among the definitions include (Dixon 1994, 135–136):

- a focus on the organization's relationship to external environment ver-sus a more internal focus;
- a focus on adaptation versus a proactive stance of creating a desired future;
- the learning of individuals versus a focus on the learning of larger orga-nizational units, such as the team or total system;
- management as the major player in organizational learning versus a broader view that includes members at all levels of the organization;
- a focus on taking action versus a focus on the organization's underlying assumptions.

Dixon (1994, 135–136) pointed out that there appear to be common themes in some, if not all, of the definitions:

- *The expectation that increased knowledge will improve action.* Many of the definitions imply that there is a causal relationship between the quality of the knowledge that employees have and the effectiveness of an organization's actions. Quality of knowledge may relate to greater amounts of information and more accurate information, as well as to more widely shared information.

- *An acknowledgement of the pivotal relationship between the organization and its environment.* Taking an open systems view, many of the definitions foreground the environment as the major element about which the organization must learn and to which it must adapt or which it must manipulate.
- *The idea of solidarity, as in collective or shared thinking.* Central to several of the definitions is the idea that an organization's members share certain assumptions or understandings. These shared understandings may need to be uncovered, corrected or expanded to facilitate effective organizational action.
- *A proactive stance in terms of the organization changing itself.* Many of the definitions imply that learning enables the organization to self-correct in response to environmental change or to transform itself in anticipation of a desired future.

TABLE 1   *Definitions of organizational learning*

RESEARCHER(S)	DEFINITION
Argyris, C. (1977) Argyris, C. & Schön, D. A. (1978)	• a process of detecting and correcting errors. • a process in which members of an organization detect error or anomaly and correct it by restructuring organizational theory of action, embedding the results of their inquiry in organizational maps and images.
Duncan, R. & Weiss, A. (1979)	• a process by which knowledge about action outcome relationships between the organization and the environment is developed.
Fiol, M. & Lyles, M. (1985)	• a process of improving actions through better knowledge and understanding.
Marsick, V. & Watkins, K. (1990)	• an organization's capacity to create, diffuse, and use knowledge in response to non-routine events. Organizational learning consists of the intentional and unintentional processes of the formal and informal learning systems of the organization, including the organization's learned responses to environmentally induced change.
Huber, G. (1991)	• an entity learns if, through its processing of information, the range of its potential behaviours is changed.
Kim, D. (1993a)	• increasing an organization's capacity to take effective action.
Salo, P. (1993)	• a process by which organizations and their members notice, interpret and institutionalize their experiences.
Schein, E. H. (1993)	• a construct used to characterise certain processes or types of activity at one or several levels of organization.
Cook, S. & Yanow, D. (1993)	• the acquiring, sustaining, or changing of intersubjective meanings through the artifactual vehicles of their expression and transmission and through the collective actions of the group.
Dixon, N. (1994)	• intentional use of learning processes at the individual, group and system level to continuously transform the organization in a direction that is increasingly satisfying to its stakeholders.
Forss, K., Cracknell, B. & Samset, K. (1994)	• changes in what the organization knows and how it acts.
Espejo, R., Schuhman, W., Schwaninger, M. & Bilello, U. (1997)	• an increase in the organization's capability for effective action.

66

The previous text described the learning organization and organizational learning. Using all the available information, 'organizational learning' is defined here as a process through which an organization develops the characteristic features of the learning organization.

6   Organizational Learning and Individual Learning

Organizational learning is often related to individual learning. Hedberg (1981, 6) wrote that 'organizations do not have brains, but they have cognitive systems or memories. As persons develop personalities, habits, and beliefs over time, organizations develop worldviews and ideologies. Members come and go, and leadership changes, but organizations' memories preserve certain behaviours, mental maps, norms, and values over time'.

According to Kim (1993a, 57–58) organizational learning involves much more than a semantic shift from a singular to a plural reference of a generic learning process. The level of complexity increases tremendously when we go from a single individual to a collection of diverse individuals. Although individual learning is always very important, 'individual learning does not guarantee organizational learning. But – without it no organizational learning occurs' (Argyris & Schön 1978, 20; see also Senge 1990, 139; Pedler et al. 1991). Swieringa and Wierdsma (1992, 43) stated that 'individually competent people can be collectively incompetent'. Kim (1993a, 68) noticed that organizations can learn only through its members, but it is not dependent on any specific member. Individuals, however, can learn without the organization.

Espejo, Schuhmann, Schwaninger and Bilello (1997) made an attempt to integrate a number of different conceptual frameworks and models made by various authors into a single approach, drawing especially upon the following:

- the OADI-SMM model of Kim (1993b),
- the concept of organizational learning of March and Olson (1975),
- the concept of double-loop learning of Argyris and Schön (1978),
- the concept of organizational learning through mental models (Argyris & Schön 1978),
- the concept of organizational disciplines of Senge (1990), and
- the viable system model (VSM) (Beer 1979; 1981; 1985).

69

Espejo et al. (1997, 147) stated that learning by an organization means 'a process, linked to individual learning, whereby organizations acquire skills and experiences. Parts of this process may be independent of human minds; nevertheless, individual learning processes are obviously central. Ultimately, an organization learns through the learning of its individual members'. They went on to define individual learning as 'an increase in an individual's capability for effective action. It takes place by the individual repeatedly going through a learning loop described by the OADI cycle', and they referred to Kofman (1992), who described the stages of OADI cycle as follows:

- O observe (take in specific experiences),
- A assess (reflect on the observations),
- D design (form abstract concepts (models)), and
- I implement (test the concepts against reality) (Espejo et al. 1997, 147).

'In brief, OADI cycle functions as follows: the observation of events or experiences is reflected upon and conclusions or hypotheses derived; these give rise to concepts and models of individual realities. If the concepts and models are tested against reality, the learning cycle begins again with the observation of these experiments and their results' (ibid., 147). The authors stated that 'crucial to organizational learning is the transformation of individual learning into organizational learning ...' (ibid., 190).

Espejo et al. (1997, 150–151) used March and Olson's (1975, 147–171) model of organizational learning to fix organizational action in relation to individual action. In the March and Olson -cycle individual beliefs and convictions regarding an organizational problem situation lead to individual action. An individual tries to solve a problem situation by triggering the appropriate organizational response. This organizational action leads to responses and reactions in the environment. The learning cycle is completed when the environmental responses result in a change of individual beliefs and convictions. After individual mental models are integrated into shared mental models they are capable of influencing organizational action. This is how double-loop learning can take place (Espejo et al. 1997; see also Kim 1993a).

The models of both Espejo et al. (1997, 153, 210) and Kim (1993a, 84) illustrate the single-loop learning (see also Table 2), a process which uses the learning stages of the March and Olson -cycle. When the individual mental models change into shared mental models of the work community, the single-

68

loop learning changes into double-loop learning (see also Table 2) and thus the individual learning cycle changes into an organizational learning cycle.

TABLE 2   Models of organizational learning

MODELS	DESCRIPTIONS
Single-loop learning (Argyris, C. 1990, 91–94)	It is a process that attempts to find problems, mistakes or faults – i.e., development targets. When found as the result of a joint effort, they are sorted in order of priority. Then 'something is done' to them. If the operational strategy chosen gives the results desired, it will be used also next time. Even if the strategy fails to lead to such desired results, the organization is not ready to change it and act differently, but, in principle, repeats the same actions.
Double-loop learning (Argyris, C. 1990, 91–94)	The mismatch between expectations and results is fixed by analysing, questioning and changing together, first, the determining factors underlying the operations, and after that, the actual operations.
Triple-loop learning (Swieringa, J. & Wierdsma, A. 1992, 41–42)	The researchers suggested its use when essential principles on which the organization is founded are under discussion. Triple-loop learning can be described as development of new principles, with which an organization can proceed to a subsequent phase.

In an organization, the members of a work community have different qualities (knowledge, skills, attitudes and experiences). All of them have their own conception about the world. Therefore, they also make different interpretations (what they say; *espoused theories*) of the internal and external stimuli in their work or workplace. Individual members make up their own image, *theory-in-use*, of the operational theory adopted by the whole organization (Argyris 1992, 8; 1990, 12–13). In the end, an individual's subjective opinions and experiences affect his/her behaviour. According to Argyris (1976, 3–32) the world of behaviour is the artefact of our theories-in-use. We all have several theories-in-use, from which we choose one for the situation at hand, depending on the context and on our mental models (see also Senge 1990, 8–

9, 174–204). Each member of the staff forms his/her own *subjective truth*, which may then be accepted generally by the other members and become the *collective truth*. Within an organization, it is wise to think and discuss together, in a democratic and enlightened conversation, each member's subjective truth that has been expressed, e.g., in a development needs analysis. In such a conversation all are 'winners': When the conversation culture is good, information is being shared and compared with one's own knowledge and with that of others', so that the *'common truth'* gradually comes closer (see Huhta 1992, 16; Nikkanen 1983, 166; 1992, 11–12; Pedler et al. 1991, 62–63; Senge 1990, 10). Cantley (1980, 21) stated that 'where the information flows, so does the potential for learning'.

In school organizations, too, there are many things considered self-evident, which no one thinks to question, and which are preferably passed over as quickly as possible. There are often a great number of rhetorical and fluent speeches but only too rarely are the speeches related to concrete developmental deeds. Yet, it is important to a learning organization that learning is manifested as changes in the actions of members of the work community. According to Eteläpelto (1992), a reflective person is committed to his own continuous growth and learning process. Both individual learning and learning from each other in co-operation is needed.

7   Conclusions

Learning organization can be seen as one of the most prominent choices for any organization to bridge the gap between the prevailing present state and the future. It is a favourable and convenient context and environment where school improvement – 'a systematic, sustained effort aimed at change in learning conditions and other related internal conditions in one or more schools, with the ultimate aim of accomplishing educational goals more effectively' (Miles & Ekholm 1985, 48) – can best happen. Learning organization increases and helps learning by removing barriers and obstacles to learning. It increases working energy and joy experienced at work, innovativeness, and creativity. It also empowers people to act and to take on new challenges, to help members to satisfy their growth needs, and to improve the quality of their life (Nikkanen 1996). Learning organization is now appealing to people and offering an envi-

ronment where speeches are related to concrete developmental deeds. It is perceived as a promise of things which are hoped for and expected. It is also seen as a new way of thinking and viewing, as the only way to survive, as having an effect on advancing goals, and as an opportunity that joins people together and increases their commitment to work. Learning organization is considered to bring independence, liberty, well-being, creativeness, competitive advantage, and to increase our ability to manage change.

The factor that largely explains the negative tone of the evaluations of the current state of various organizations is the fact that staff members' readiness for change and readiness for the future is quite insufficient. People are incapable of questioning their operational strategies early enough (see, e.g. Argyris 1990, 91–94; Argyris & Schön 1978; Schein 1987, 26; Nikkanen 1992). Senge (1990, 7–8) writes: 'We get damn little of their energy and almost none of their spirit'. Taking a different view, from the individual to the organization, he goes on to state without hesitation that 'surprisingly few adults work to rigorously develop their own personal mastery'.

It is important to try to facilitate the learning of the members in the organizations that are striving to become learning organizations and to encourage them to take responsibility for empowering themselves to find out that a lot depends on them and also encourage them to become experts in the change and transforming process (see also Fullan 1991, 353–354). Thomas (1988, 393) said that 'careful planning of an organization's human resource needs is essential to the performance of present and future tasks and to the integration of the disparate parts which make up the whole'. Furthermore, according to Schein (1987, 30) 'in an ideal human resource planning and development system one would seek to match the organization's needs for human resources with the individual's needs for personal career development and growth'. In different organizations, quality development work aims to establish a change from haphazard and intuitive actions to more systematic and more conscious strategies. It is a question of a transition process from analysing the facts of the present state to envisioning future states. When nobody outside an organization is able to solve the internal problems of a particular organization, the problems have to be solved using the expertise (Human Resource) of those working in the organization: staff members. Human resource management is here seen as one of the most important strategies which are used in the learning processes of a learning organization.

For what purpose do we need school improvement? Our ultimate aim is to accomplish educational goals more effectively. In that great task we need the cultural norms of improving schools, proposed by Stoll and Fink (1996):

1.	Shared goals	-	we know where we are going
2.	Responsibility for success	-	we must succeed
3.	Collegiality	-	we are working on this together
4.	Continuous improvement	-	we can get better
5.	Lifelong learning	-	learning is for everyone
6.	Risk taking	-	we learn by trying something new
7.	Support	-	there is always someone there to help
8.	Mutual respect	-	everyone has something to offer
9.	Openness	-	we can discuss our differences
10.	Celebration and humour	-	we feel good about ourselves.

(Stoll & Fink 1996, cited in Stoll & Wikeley 1998, 39)

But, back to the title of this chapter. Under what preconditions can a school be termed a learning organization which is effective and demonstrates improvement? Is it possible, for instance, in a small school? Most of the Finnish lower-level comprehensive schools are quite small. Some of them have only one teacher for the six classes (1–6). In these cases, we do not usually speak about a staff or a work community. There should be more members in order to call it a learning work community, which is a synonym for learning organization. If there were more than two members, and hopefully even more, then we could naturally expect the possibility that individual learning would be changed into collective learning. One more precondition is needed: that the three or more members would work quite close to each other, in the same school building. The remoteness of the school in itself cannot be an obstacle preventing an organization from becoming a learning organization since the school should always be in an interactive relationship with the surrounding community, including its schools. The most serious obstacle to building a learning organization would be that the members do not take each other into consideration or do not take care of each other.

References

Argyris, C. 1976. Increasing leadership effectiveness. New York: John Wiley & Sons.

Argyris, C. 1977. Double-loop learning in organizations. Harvard Business Review, September-October, 115–118.

Argyris, C. 1990. Overcoming organizational defences. Facilitating organizational learning. Boston: Allyn and Bacon.

Argyris, C. 1992. On organizational learning. Cambridge, MA: Blackwell.

Argyris, C. & Schön, D. 1978. Organizational learning: a theory of action perspective. Reading, MA: Addison-Wesley.

Beer, S. 1979. The heart of enterprise. Chichester: Wiley.

Beer, S. 1981. Brain of the firm (2nd ed.). Chichester: Wiley.

Beer, S. 1985. Diagnosing the system for organizations. Chichester: Wiley.

Bratton, J. & Gold, J. 1994. Human resource management. Theory and practice. London: Macmillan.

Burgoyne, J. 1995. Creating a learning organization. Paper presented at the seminar on Learning Organization, University of Joensuu. 7 September 1995.

Cantley, M. 1980. Who learns what? A conceptual description of capability and learning in technological systems. Laxenburg, Austria: International Institute for Applied Systems Analysis.

Cook, S. & Yanow, D. 1993. Culture and organizational learning. Journal of Management Inquiry 2 (4), 373–390.

Coopey, J. 1996. Crucial gaps in the learning organization: Power, politics, and ideology. In K. Starkey (Ed.) How organizations learn. London: International Thomson Business Press, 348–367.

Creemers, B. P. M. & Hoeben, W. Th. J. G. 1998. Capacity for change and adaptation of schools: The case of effective school improvement (ESI). In W. Th. J. G. Hoeben (Ed.) Effective school improvement: State of the art. Contribution to a discussion. Gion, Netherlands: University of Groningen. Institute for Educational Research, 5–28.

de Geus, A. 1988. Planning as learning. Harvard Business Review, March-April, 70–74.

Dixon, N. 1992. Organizational learning: A review of the literature with implications for HRD professionals. Human Resource Development Quarterly 3 (1), 29–49.

Dixon, N. 1994. The organizational learning cycle. How we can learn collectively. New York: McGraw-Hill.

Duncan, R. & Weiss, A. 1979. Organizational learning: Implications for organizational design. Research in Organizational Behaviour 1, 75–123.

Espejo, R., Schuhman, W., Schwaninger, M. & Bilello, U. 1997. Organizational transformation and learning. A cybernetic approach to management. New York: John Wiley & Sons.

Eteläpelto, A. 1992. Reflektiivisyys ja itsetuntemus asiantuntijuuden kehittymisessä. (Reflectivity and self-awareness in the development of expertise.) In R. Nurminen, A. Eteläpelto, K. Mustikkamaa, T. Rantanen & H. Rousi (Eds.) Kohti uutta opettajuutta. Vocational

Teachers' Training College of Jyväskylä. Report 3, 9–18.

Fiol, C. M. & Lyles, M. A. 1985. Organizational learning. Academy of Management Review 10 (4), 803–813.

Forss, K., Cracknell, B. & Samset, K. 1994. Can evaluation help an organization to learn? Evaluation Review 18 (5), 574–591.

Fullan, M. G. 1991. The new meaning of educational change (2nd ed.). New York: Teachers College Press.

Garvin, D. 1993. Building a learning organization. Harvard Business Review, July-August, 78–91.

Hargreaves, D. 1995. School culture, school effectiveness and school improvement. School Effectiveness and School Improvement 6 (1), 23–46.

Hedberg, B. 1981. How organizations learn and unlearn? In P. C. Nyström & W. Starbuck (Eds.) Handbook of organizational design. London: Oxford University Press, 8–27.

Hoeben, W. Th. J. G. 1998. Linking different theoretical traditions: Towards a comprehensive framework for effective school improvement. In W. Th. J. G. Hoeben (Ed.) Effective school improvement: State of the art. Contribution to a discussion. Gion, Netherlands: University of Groningen. Institute for Educational Research, 147–239.

Hopkins, D., Ainscow, M. & West, M. 1994. School improvement in an era of change. London: Cassell.

Huber, G. 1991. Organizational learning. The contributing processes and the literatures. Organizational Science 2 (1), 88–115.

Huberman, M. & Miles, M. B. 1984. Innovation up close. New York: Plenum.

Huhta, S. A. 1992. Networking as a learning tool for human resource development. Thresholds in Education 18 (2–3), 12–17.

Jones, A. & Hendry, C. 1992. The learning organisation: A review of literature and practice. Warwick, RI: University of Warwick. Business School.

Kim, D. 1993a. A framework and methodology for linking individual and organizational learning: Applications in TGM and product development. Sloan School Management. Massachusetts Institute of Technology. Doctoral thesis.

Kim, D. 1993b. The link between individual and organizational learning. Sloan Management Review, Fall, 37–50.

Kofman, F. 1992. Lecture slides. Cambridge, MA: MIT Sloan School of Management. In D. Kim's paper, 39.

March, J. & Olson, J. 1975. The uncertainty of the past; organizational ambiguous learning. European Journal of Political Research 3, 147–171.

Marsick, V. & Watkins, K. 1990. Informal and incidental learning in the workplace. London: Routledge.

Miles, M. B. & Ekholm, M. 1985. What is school improvement? In W. G. van Velzen, M. B. Miles, M. Ekholm, U. Hameyer & D. Robin (Eds.) Making school improvement work. A conceptual guide to practice. Leuven, Netherlands: ACCO, 33–67.

Minzberg, H. 1979. The structuring of organizations. Englewood Cliffs, NJ: Prentice Hall.

Nicolini, D. & Meznar, M. 1995. The social construction of organizational learning: conceptual and practical issues in the field. Human Relations 48 (7), 727–746.

74

Niemi, J. A. 1992. Human resource development: definitions, scope issues, and research needs. Thresholds in Education 18 (2–3), 2–5.

Nikkanen, P. 1983. Kannustava työyhteisö. (The encouraging work community.) In P. Nikkanen, J. Kleemola & P. Kahelin (Eds.) Tuntikehysjärjestelmän hyödyntäminen peruskoulun sisäisessä kehittämistyössä. Summer University of Etelä-Pohjanmaa. Reports 6, 152–169.

Nikkanen, P. 1992. Kohti oppivaa ammattioppilaitosta. (Towards the learning vocational institute.) Vocational Teachers' Training College of Hämeenlinna. Report 9.

Nikkanen, P. 1994. Oppiva organisaatio. Yhdessä oppien yhteiseen toimintavisioon. (Learning organization. Learning together towards a shared working vision.) Odin Tiimi 2 (1), 16–20.

Nikkanen, P. 1996. Oppiva koulu – työyhteisön kestävän kehityksen strategia. (The learning school – the strategy for sustainable development of a work community.) In P. Nikkanen & H. K. Lyytinen (Eds.) Oppiva koulu ja itsearviointi. Jyväskylän yliopisto. Koulutuksen tutkimuslaitos, 9–26.

Nikkanen, P. 1998. Learning organization, organizational learning and human resource management. In W. Th. J. G. Hoeben (Ed.) Effective school improvement: State of the art. Contribution to a discussion. Gion, Netherlands: University of Groningen. Institute for Educational Research, 95–118.

Ouksel, A., Mihavics, K. & Chalos, P. 1997. Accounting information systems and organization learning: A simulation. Accounting Management and Information Technologies 7 (1), 1–19.

Pedler, M., Burgoyne, J. & Boydell, T. 1991. The learning company. A strategy for sustainable development. Berkshire: McGraw-Hill.

Reynolds, D., Bollen, R., Creemers, B., Hopkins, D., Stoll, L. & Lagerweij, N. 1996. Making good schools: Linking school effectiveness and school improvement. London: Routledge.

Romme, G. & Dillen, R. 1997. Mapping the landscape of organizational learning. European Management Journal 15 (1), 68–78.

Salo, P. 1993. Organizational learning in the context of a school organization – the case of institute of technology. Paper presented at the seminar on Learning Organization, University of Joensuu. 7 September 1993.

Schein, E. 1987. Organisaatiokulttuuri ja johtaminen. (Organizational culture and management.) Espoo: Weilin & Göös.

Schein, E. H. 1993. On dialogue, culture and organizational learning. Organizational Dynamics 22 (2), 40–51.

Schmuck, R. 1984. Rehtori koulunsa kehittäjänä. (The school principal as the developer of his school.) Course on development. University of Jyväskylä. Further Education Centre. Unpublished paper.

Schmuck, R., Runkel, P., Arends, J. & Arends, R. 1977. The second handbook of organization development in schools. Palo Alto, CA: Mayfield.

Senge, P. 1990. The fifth discipline. The art and practice of the learning organization. New York: Doubleday/Currency.

Senge, P., Kleiner, A., Roberts, C., Ross, R. & Smith, B. 1994. The fifth discipline fieldbook. Strategies and tools for building a learning organization. New York: Doubleday/Currency.

Stoll, L. & Fink, D. 1996. Changing our schools. Buckingham: Open University Press.

Stoll, L. & Wikeley, F. 1998. Issues on linking school effectiveness and school improvement. In W. Th. J. G. Hoeben (Ed.) Effective school improvement: State of the art. Contribution to a discussion. Gion, Netherlands: University of Groningen. Institute for Educational Research, 29–57.

Swieringa, J. & Wierdsma, A. 1992. Becoming a learning organization. Beyond the learning curve. Wokingham: Addison-Wesley.

Thomas, R. 1988. Review article; What is human resource management? Work, Employment & Society 2 (3), 392–402.

Woolner, P. 1992. The purposes and stages of the learning organization. Thresholds in Education 18 (2–3), 41–46.

Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two
Part
Two

EXAMINING
CURRICULUM CHANGE

Rosemary Webb and Graham Vulliamy
Department of Educational Studies
University of York

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter 4
chapter
chapter
chapter
chapter
chapter
chapter
chapter

A Decade of Curriculum Change in English Primary Schools

1   Introduction

This short chapter gives a contextual overview of recent changes in English primary schools. The twin purposes of the overview are to enable Finnish readers to appreciate the ways in which curriculum change in England is moving in opposite directions to curriculum change in Finland and to better understand the detailed case-study analysis we provide in the next chapter of curriculum change in two small English primary schools. It also illustrates the pace of change and gives an update on events occuring after the completion of the research project from which the case study is taken (Webb & Vulliamy with Häkkinen, Hämäläinen, Kimonen, Nevalainen & Nikki 1997).

The primary school age range in England is from five to eleven years. The most common pattern for this has been an infant school (for 5–7 years), followed by a junior school (7–11 years) with these two stages usually being combined within a single primary school for the 5–11 age range. Regional exceptions to this pattern operated by some Local Education Authorities (LEAs), although becoming increasingly less common, incorporate a middle school (usually 7–12 or 9–13 years) between first schools (5–9 years) and secondary schools.

2 Legislating for Change

The 1988 Education Reform Act (ERA) ushered in the most profound changes in the English educational system since the 1944 Education Act, which had first established a free national system of primary and secondary schooling. Most of the changes taking place in English primary schools in the 1990s have their origins in the ERA and subsequent legislation mainly sought to strengthen the systems and procedures that it had set in motion.

A National Curriculum and its associated programme of national testing at ages seven years and eleven years was introduced for the first time into English primary schools. Initially the National Curriculum consisted of: nine subjects including three core subjects and six other foundation subjects; programmes of study setting out the knowledge and skills to be taught; attainment targets divided into ten levels; and statements of attainment setting the learning objectives for each level. The primary age range was divided into two Key Stages – KS1 (age 5–7) and KS2 (age 7–11) – and the introduction of the National Curriculum began with the introduction of the three core subjects (mathematics, science and English) at KS1 in 1989. The other subjects were introduced in stages for different age levels – a process that was not completed until 1992. National tests in the three core subjects were first introduced at KS1 in 1991 and became statutory at KS2 in 1995. The first tests were based around practical classroom activities but were highly complex and demanding of classroom organisational skills and took six weeks to conduct (NUT 1992; Pollard, Broadfoot, Croll, Osborn & Abbott 1994). Plans to assess all the National Curriculum in this way were soon abandoned and the tests were gradually simplified into pencil and paper tests.

The introduction of the National Curriculum represented the interests of the neo-conservative wing of the New Right ideology promoting the Education Reform Act, emphasising the virtues of a centrally prescribed national curriculum. However, there was a second very different strand to the New Right ideology influencing the Act and this was a neo-liberal wing stressing the virtues of competition, diversity and choice (Ball 1990). This was exemplified in two related innovations. Firstly, the introduction of Local Management of Schools (LMS) involved the delegation by LEAs to schools and their governors of the financial management of schools, including issues of staffing.

Secondly, open enrolment was designed to encourage a competitive model between schools with parents being able to choose any school for their children, rather than as previously having to use designated local neighbourhood schools. This combination of financial delegation and market choice mechanisms led to marked changes in the roles of primary school headteachers, adding a business management role to that of professional leadership (Webb & Vulliamy 1996, ch. 6).

The Education (Schools) Act of 1992 introduced an ambitious new policy of inspecting every primary and secondary school in England every four years in a programme organized by the newly created Office for Standards in Education (OFSTED). This implied a radical overhaul of the previous inspection system, which was a mixture of national inspections carried out by Her Majesty's Inspectorate (HMI) and locally organized LEA inspections. The new inspections were to be carried out by independent inspection teams bidding in competition with each other for contracts under the auspices of OFSTED. These teams consist of a mix of education professionals (often from LEAs and universities) and at least one 'lay person', who has not been professionally involved in education, and all such inspectors are required to have undergone training by OFSTED. These inspections initially addressed all aspects of school life and more recently have focussed intensively on classroom practice. While there is little evidence that inspections have contributed to school improvement, research has shown that they have proved extremely stressful and demotivating for many teachers (see e.g. Jeffrey & Woods 1998).

Other legislative changes contributed to a further sense of pressure on English primary schools during the 1990s, including, for example, the implementation of the Code of Practice for Special Educational Needs (SEN) pupils (DfE 1994), which required classteachers to be able to identify pupils with special educational needs and implement Individual Education Plans for statemented children. As demonstrated by Lewis (1995), schools lacked the resources, expertise and suitably trained teachers to coordinate the work involved. Such SEN legislation focused further attention on the need for differentiation of work in the classroom, which was already being emphasised in OFSTED inspection reports.

3 Implementing Curriculum Change at School Level

The introduction of the National Curriculum meant that in order to meet its subject requirements primary schools needed to engage in whole school planning to produce long- (1–5 years), medium- (termly) and short-term (lesson) plans. The case study in the next chapter portrays the planning process and the issues that it raised. As a result of reviewing existing practice and sharing anxieties and ideas, research shows primary schools generally became more collegiate (Webb & Vulliamy 1996). Shortcomings in planning, especially in relation to progression in the subject content to be taught and to the relationship between learning outcomes and lesson objectives, have frequently been the subject of criticism by OFSTED which argues that inspection evidence reveals inadequate planning as a reason for weaker teaching. In the latest annual report (OFSTED 1998) further planning in the form of detailed schemes of work for each subject are cited as one of the issues that schools need to address in order to improve the quality of their teaching.

Teaching the National Curriculum (now 10 subjects) plus religious education makes heavy demands on teachers' subject knowledge. While in some schools teachers held posts of responsibility for co-ordinating and developing curriculum subjects prior to 1988 (see Campbell 1985), since the introduction of the National Curriculum subject co-ordinators have become the norm for all schools. However, as illustrated in the next chapter, in small schools teachers may agree to share co-ordination of all the subjects or to each have oversight of several subjects. Before 1988 the role mainly involved the organisation of resources and drawing up subject policies, whereas post-1988 it has become much more wide ranging with co-ordinators being held accountable by OFSTED for the quality of the organisation and teaching of their subject throughout the school. The first important task for co-ordinators in relation to the introduction of the National Curriculum was to become familiar with the requirements for their subjects and explain and disseminate these to staff. The next stage was to assist with the development of long- and medium-term plans for teaching their subject and to assist individual teachers with ideas for materials, activities and assessment tasks. Increasingly through the 1990s the role expanded to include the provision of school-based in-service training for colleagues, monitoring classroom practice and evaluating teaching and learn-

ing across the school. However, while research shows that teachers derive considerable support from co-ordinators, their role in developing their subject is limited by lack of non-contact time, subject expertise and power to implement recommendations (Webb & Vulliamy 1996).

4   Slimming Down the National Curriculum

It soon became apparent that the National Curriculum was considerably overloaded, especially for the KS2 age range (Pollard et al. 1994; Webb & Vulliamy 1996). This, together with teacher union protests at the increased workload involved in administering the new national tests, led to the government appointing Sir Ronald Dearing to mount a review of the manageability of the National Curriculum and its associated assessment procedures. The interim and final Dearing reports (Dearing 1993a; 1993b) led to a major review by the School Curriculum and Assessment authority (SCAA) of the content of the National Curriculum. This culminated in proposals for a new slimmed down National Curriculum which came into effect as law in August 1995 with the promise that there would be a moratorium on curriculum change until the year 2000. This process of producing a slimmed down new National Curriculum was mainly a technical one of achieving manageability and structural consistency between subjects. The basic subject framework of the earlier model remained intact with the exception of information technology being removed from the technology order and becoming a separate subject. The post-Dearing new National Curriculum was intended to leave 20 per cent of teacher's time free from the National Curriculum and there was also a recognition that not all programmes of study were required to be taught in the same depth. Despite this, commentators were very sceptical that the prior problems of curriculum overload had been solved (see e.g. Campbell 1994).

The Dearing reports also recommended simplifications to the assessment system, both in terms of teacher assessment, where very detailed profiles of pupils' individual achievement in a wide range of spheres had become increasingly unwieldy, and in terms of the procedures for the national tests. The government committed over £30 million for the appointment of external markers and the provision of additional teacher supply cover to enable the tests, previously boycotted by the teachers unions, to continue. The existence of

national tests and their reporting in school league tables were an important part of the government's agenda to improve school standards and to make such standards fully visible to parents as consumers.

5 Curriculum Organisation and Classroom Practice

In England the implementation of the National Curriculum and national testing, and OFSTED inspections have focussed attention more than ever before on the progress and achievements of primary pupils. When the content to be taught in primary schools was set out in the National Curriculum, the DES (1989) stressed that 'It is important to note that the way in which teaching is timetabled and how lessons are described and organised cannot be prescribed' (DES 1989, para 4.3). However, since that principle was established, approaches to classroom organisation and teaching in primary schools have increasingly been the subject of political and media attack. This intensified when findings from an evaluation of the Leeds Local Education Authority Primary Needs Project (PNP) (Alexander 1992) were used selectively to attack informal, progressive primary education.

In December 1991 Kenneth Clarke, the then Secretary of State for Education, who made his dislike of progressive child-centred education well known (see e.g. Clarke 1991), called upon Professor Robin Alexander, author of the PNP evaluation, Jim Rose, Chief Inspector for HMI and Chris Woodhead, Chief Executive of the National Curriculum Council '"to review available evidence about the delivery of education in primary schools" and "to make recommendations about curriculum organization, teaching methods and classroom practice appropriate for the successful implementation of the National Curriculum, particularly at Key Stage 2"' (Alexander, Rose & Woodhead 1992, 5). The content of the review proved contentious, especially the claim, frequently reiterated since its publication, that 'In recent decades much teaching in primary schools has suffered from highly questionable dogmas which have generated excessively complex classroom practice and have devalued the role of subjects in the curriculum' (ibid., 34). Assisted by the implementation of a subject-based National Curriculum and from September 1994 the introduction of subject-focussed primary inspections, the scene was set for the growth in importance of teacher subject knowledge and subject teaching.

While the review emphasised the need for a range of organisational strategies to be used according to 'fitness for purpose' (ibid., 35), it pointed out that 'in many schools the benefits of whole class teaching have been insufficiently exploited' (ibid., 35). More thorough planning, greater teacher-pupil interaction and 'regular assessment of pupil progress in the fundamentally important areas of literacy and numeracy' were also put on the agenda for schools' attention. The review, which was characterised by its authors as a discussion paper, was supported by some researchers in primary education who saw it as broadly in line with their findings, but many educationalists held the view that 'the debate was opened, judged and closed in the same document' (Ball 1994). As Ball (1994, 44) expressed it: 'Progressive child-centred methods and the Plowden Report were subjected to a public deconstruction, progressive teachers were disciplined and the groundwork was laid for a thoroughgoing reintroduction of traditional teaching methods'.

Increasingly, claims are being made by policy makers in England for making primary teaching more effective, particularly at KS2, by using separate subject teaching, subject specialism, ability grouping and whole class teaching (see e.g. Alexander et al. 1992; OFSTED 1995; DfEE 1997). Many of these claims are derived from brief observation, and limited knowledge of, primary schooling in other countries, especially from the Pacific Rim (see e.g. HMI 1992; Reynolds & Farrell 1996). The impact of the first three claims will be briefly considered below and the issue of whole-class teaching will be taken up in the following section on the Labour government's plans for primary education.

As children progress through primary school, the range of levels of pupil attainment within subjects increases contributing to the complexity of the curricular planning and provision required. In order to ensure that plans covered all the National Curriculum subject requirements and that attainment in these subjects for individual pupils could be assessed and recorded in sufficient detail, teachers increasingly felt pressurised to move from topic/project teaching which drew on aspects of a range of subjects to separate subject teaching particularly at KS2. OFSTED reported that 'Wide-ranging topic work dipping into several subjects continues to give way to work which is focussed on a single subject where pupils are studying, for example, a topic which is very largely science or largely history-based' (OFSTED 1998, 25). The subject-based National Curriculum, subject-focussed guidance from government agencies and the provision of ten-day or twenty-day subject-based training

courses have continually emphasised to schools the importance attached to subjects at national level.

The review referred to earlier (Alexander et al. 1992) concluded that in order to meet these requirements primary schools should be more flexible in their deployment of staff and introduce semi-specialist and specialist teaching, especially at the upper end of KS2. OFSTED (1998, 24) claim that 'teachers with specialist expertise almost always teach the given subject better than non-specialists'. In one in eight lessons at Key Stage 2, weaknesses in the teachers' subject knowledge were judged to have an adverse effect on standards (OFSTED 1998). In OFSTED's view features of the best teaching by specialists are 'a confident command of the subject, a driving pace to lessons and extremely ambitious and unusually high expectations, which are invariably met by pupils' (OFSTED 1997, 6). However, inspectors found it unusual for specialists to teach classes other than their own. In order to achieve specialist teaching OFSTED (1997, 6) considers that 'solutions are often radical and step outside the old orthodoxies of organisation: schools are prepared to move away from the "one class one teacher" model'. They found the best use of specialists in small and large schools. Small schools, as illustrated in the next chapter, have greater flexibility in the deployment of staff and specialists can more readily have an impact on the school as a whole. Large schools are more likely to have teachers without full-time class responsibilities, so providing possibilities for using specialists. However, OFSTED (1997, 9) acknowledges the constraints of lack of non-contact time and the need for schools to have 'more teachers than classes if they are to manage subject teaching effectively'. Consequently, they found that: 'The overwhelming picture is one of well-qualified teachers with subject specialist skills finding it extremely difficult to influence practice throughout their schools' (ibid., 9).

Grouping by ability for mathematics and English within the classroom has become increasingly common since 1988 and according to OFSTED 'often results in a better match of work and in higher standards' (OFSTED 1996, 38). A small but growing number of schools with classes parallel in age were reported by OFSTED to be setting pupils by ability across classes for mathematics and English, usually in KS2. OFSTED favour setting because it 'reduces the range of attainment within a teaching group and consequently can help teachers to plan work more precisely and to select appropriate teaching methods' (OFSTED 1998, 24).

6   Change Continues Under Labour

The prospect of forthcoming parliamentary elections in 1997 held the possibility of a change of government and a different direction for educational policies. However, it became increasingly apparent from Labour Party manifestos that it would maintain the main thrust of the Conservative government's policies. In May 1997 the Labour Party was elected with a massive majority. Within two weeks of taking office, the Labour government set literacy and numeracy targets for 2002 because of their perception fuelled by OFSTED criticisms and the findings of comparative surveys of literacy and numeracy in Europe and the Pacific Rim countries that there is a crisis in the achievement of basic skills in primary schools and that English pupils are falling behind in reading and number (e.g. Reynolds & Farrell 1996). In its White Paper *Excellence in Schools* (1997) the Labour Government outlined its intentions to continue to focus upon improving standards through a variety of initiatives including the introduction of literacy and numeracy hours each day in primary schools, national guidelines and training for all primary teachers on best practice in the teaching of literacy and numeracy and the introduction of target setting in school and LEAs tied in to meeting government targets. The implementation of the national literacy strategy (DfEE 1998) and numeracy strategy (NCLN 1998) is being managed by a newly created Standards and Effectiveness Unit. The literacy hour based on detailed prescribed content was introduced in September 1998 and was reinforced by 1999 being declared the National Year of Reading. The numeracy hour will be introduced in September 1999. The daily literacy hour and numeracy hour both emphasise the importance of interactive whole-class teaching 'which means using lively questioning, explanation and illustration, and expecting pupils to play an active part in lessons by explaining and demonstrating their methods to you and their classmates' (NCLN 1998, 13). Working as a whole class is valued because it increases the amount of direct contact pupils have with their teacher and also 'keeps the class working together, as far as they reasonably can, with the aim of keeping the strugglers up with the rest' (ibid., 13). Both the literacy and numeracy hour prescribe a similar lesson structure and approach consisting in the case of the literacy hour of carefully planned timed elements of direct teaching beginning with the whole class using a shared text (approxi-

mately 15 minutes) followed by word level work with the whole class – such as phonics, spelling and grammar – (approximately 15 minutes), independent and group work (approximately 20 minutes) and closing with a whole-class plenary session (approximately 10 minutes) in which the teacher reinforces the main points of the lesson, checks pupils' understanding of what has been covered and requires pupils to share their work with each other. Not only during whole-class teaching but throughout the emphasis is on the 'interactive': 'During a lesson, you should aim to spend close to 100 per cent of your time in direct teaching and questioning of either the whole class or a group of pupils' (ibid., 10).

In January 1998 David Blunkett, Secretary of State for Education, announced that the detailed statutory requirements of six non-core subjects (history, geography, design and technology, art, music and physical education) would be lifted for two years from September 1998 which, as he explained in a letter to headteachers, was to enable schools to have 'more time to deliver the challenging but essential literacy and numeracy targets' (Blunkett 1998). This move has cut through the Qualification and Curriculum Authority's (QCA) curriculum monitoring and consultation procedures, which began in September 1995 with a view to offering advice in April 1998 to the Secretary of State on the need for, and nature of, any modifications to the National Curriculum (SCAA 1997) for implementation in schools in September 2000.

7 Conclusion

In line with government and OFSTED priorities primary schools are concentrating on the development of literacy and numeracy. While plans for science teaching are adhered to in order to ensure that pupils are prepared for the tests, commitment to provision in the other foundation subjects varies from school to school. This threatens the notion of each child's entitlement to a broad and balanced curriculum on which the National Curriculum was premised and is fuelling concerns that only those in schools catering for the children of professional middle class parents and independent schools will have a rich curriculum while generally the curriculum will become an impoverished diet of the basics. Such a limited curriculum reminiscent of the elementary schools of the 19th century is regarded as inappropriate for preparing youngsters for the 21st century.

However, primary schools have always emphasised the basics and once teachers become accustomed to implementing the literacy and numeracy hour they are likely to redirect their attention to other curriculum areas. Having lifted requirements for the foundation subjects it may prove difficult for the government to reinstate more in their place. However, hopefully this will leave space for teacher creativity and innovation and encourage the re-establishment of the arts in their rightful place alongside science and technology. The development of primary science has been the undoubted success story of the National Curriculum in primary schools and this seems likely to be maintained. Information and communications technology (ICT) is rapidly changing society and must surely soon impact fundamentally on schools. At the time of writing (spring 1999) a massive training programme was about to be launched to improve the computer literacy of teachers. ICT gives children the power to control and direct the learning process and emphasises the importance of skills of independent learning. This, above all else, seems likely to determine the nature of the teaching learning process in the next decade.

References

Alexander, R. 1992. Policy and practice in primary education. London: Routledge.

Alexander, R., Rose, J. & Woodhead, C. 1992. Curriculum organisation and classroom practice in primary schools: A discussion paper. London: DES.

Ball, S. J. 1990. Politics and policy making in education. London: Routledge.

Ball, S. J. 1994. Education reform. A critical and post-structural approach. Buckingham: Open University Press.

Blunkett, D. 1998. Letter to all head teachers of Key Stage 1 and Key Stage 2 schools in England. 13 January. London: DfEE.

Campbell, R. J. 1985. Developing the primary school curriculum. London: Holt, Rinehart and Winston.

Campbell, R. J. 1994. Manageability and control of the primary curriculum. In G. Southworth (Ed.) Readings in primary school development. London: Falmer, 89–104.

Clarke, K. 1991. Primary education – A statement. Text of a statement made by the Secretary of State for Education and Science. 3 December. London: DES.

Dearing, R. 1993a. The National Curriculum and its assessment. An interim report. London: SCAA.

Dearing, R. 1993b. The National Curriculum and its assessment. Final report. London: SCAA.

DES (Department of Education and Science). 1989. National Curriculum: From policy to practice. London: DES.

DfE (Department for Education). 1994. Code of practice on the identification and assessment of special educational needs. London: DfE.

DfEE (Department for Education and Employment). 1997. Excellence in schools. Labour Government White Paper. London: DfEE.

DfEE (Department for Education and Employment). 1998. The national literacy strategy. Framework for teaching. London: DfEE.

HMI (Her Majesty's Inspectorate of Schools). 1992. Teaching and learning in Japanese elementary schools. London: DfE.

Jeffrey, B. & Woods, P. 1998. Testing teachers. London: Falmer.

Lewis, A. 1995. Special needs provision in mainstream primary schools. ASPE Paper 6. Chester: ASPE/Trentham Books.

NCLN (National Centre for Literacy and Numeracy). 1998. National numeracy project. Framework for numeracy reception to year 6. Draft March 1998. London: DfEE.

NUT (National Union of Teachers). 1992. Testing and assessing 6 and 7 year olds. The evaluation of the 1992 Key Stage 1 National Curriculum assessment. Final report. London: NUT and University of Leeds.

OFSTED (Office for Standards in Education). 1995. The Annual Report of Her Majesty's Chief Inspector of Schools Standards and Quality in Education 1993/4. London: HMSO.

OFSTED (Office for Standards in Education). 1996. The Annual Report of Her Majesty's Chief Inspector of Schools Standards and Quality in Education 1994/5. London: HMSO.

OFSTED (Office for Standards in Education). 1997. Using subject specialists to promote high standards at Key Stage 2. An illustrative survey. London: OFSTED.

OFSTED (Office for Standards in Education). 1998. The Annual Report of Her Majesty's Chief Inspector of Schools Standards and Quality in Education 1996/7. London: HMSO.

Pollard, A., Broadfoot, P., Croll, P., Osborn, M. & Abbott, D. 1994. Changing English primary schools? The impact of the Education Reform Act at Key Stage One. London: Cassell.

Reynolds, D. & Farrell, S. 1996. Worlds apart? A review of international surveys of educational achievement involving England. London: HMSO.

SCAA (School Curriculum and Assessment Authority). 1997. Developing the school curriculum: a framework January 1997. London: SCAA.

Webb, R. & Vulliamy, G. 1996. Roles and responsibilities in the primary school: Changing demands and changing practices. Buckingham: Open University Press.

Webb, R. & Vulliamy, G. with Häkkinen, K., Hämäläinen, S., Kimonen, E., Nevalainen, R. & Nikki, M. 1997. A comparative analysis of curriculum change in primary schools in England and Finland. Final report of the York-Finnish project. University of York. Department of Educational Studies.

Graham Vulliamy and Rosemary Webb
Department of Educational Studies
University of York

A Case-study Analysis of Curriculum Change in Small Primary Schools in England

1   Introduction: The Context for the Study

The findings reported in this chapter form part of a wider comparative re-search project investigating the processes of curriculum change in primary schools in England and in Finland. This comparison has a special interest because in many respects the current policies of the two countries are moving in opposite directions. Thus, whilst England has been revising its detailed and prescriptive National Curriculum, first introduced with the 1988 Education Reform Act, Finnish legislation in 1994 dismantled its national curriculum, which had been in place for over twenty years, and encouraged schools to develop curricula which were more responsive to the needs of their local communities and to individual pupils. The York-Finnish Project, based on in-depth case studies of six primary schools in each country, examined the effect of the national policy changes on the nature, planning and teaching of the curriculum and the processes involved in the management of change within schools.

Given the prevalence of small schools in Finland, the English sample included a disproportionate number of such schools, with two of the six being small rural schools with less than 50 pupils (whereas in England less than 20% of schools have fewer than 100 pupils). It is these two schools which form the

subject of this chapter. The small schools dimension to the comparative project provided an added interest in that the future of small schools is a matter of considerable debate in each country. In England, following the introduction of the National Curriculum, policy makers have increasingly questioned the ability of small primary schools to provide a sufficiently broad and in-depth curriculum, especially at Key Stage 2 (KS2, covering the juniors, age 7–11) (see e.g. Audit Commission 1990; Alexander, Rose & Woodhead 1992). Also, a combination of Local Management of Schools (LMS) and a substantial reduction in the responsibilities and resources of Local Education Authorities (LEAs) have raised questions about the financial viability of small schools (Arnold 1994).

A major limitation of many of the predictions currently being made about small schools in England and much of the ensuing discussion is that they are based either upon research conducted in small schools prior to the recent spate of government changes or they are based on necessarily limited, anecdotal accounts of the difficulties of teaching in a small school in the current climate (see e.g. Haigh 1995). Interestingly, the limited research which has taken place in small schools in the early stages of the introduction of the National Curriculum casts serious doubt on many of the assumptions implied in the predictions that they would find it difficult to implement the National Curriculum. Thus, Vulliamy and Webb (1995), using evidence from a national research project into the implementation of the National Curriculum at Key Stage 2 (KS2) (age 7–11) based upon qualitative research in 50 schools, argue that such predictions are unwarranted for two reasons. Firstly, they fail to recognise certain positive advantages for curriculum provision in small schools. These include greater opportunities for innovative curriculum and classroom organisation patterns and the likelihood of strong and realistic curriculum planning arising from headteachers who teach their own class. Secondly, they make misguided assumptions about the nature of curriculum and classroom organisation in larger schools. Two aspects of that study, however, suggest the need for further research in small schools. The data base was limited, consisting as it did of condensed fieldwork derived from day visits to nine small schools. Moreover, the major problems identified in small schools concerned the impact of increased paperwork demands – associated with policies and planning and with LMS – on a very small staff and such demands increased significantly in the years since the fieldwork was conducted (especial-

ly in the context of quality assurance mechanisms and the onset of Office for Standards in Education [OFSTED] inspections).

If the debate about small schools in England and Wales is to be a productive one, it needs to be informed by in-depth research into the manner in which such schools are coping with the rapidly changing educational context in which they are finding themselves. As a contribution to this debate, this comparative case study, based upon fieldwork conducted in two small schools between September 1994 and December 1995, looks at some of the key themes in their handling of curriculum change and of wider change more generally. In doing so, it poses the question as to whether there is anything distinctive in the response of a small school to government-initiated changes in relation to its larger school counterparts.

It is fast becoming a truism that primary schools in England are living in a period of rapid change, but this is especially the case for the period of our fieldwork for the York-Finnish Project. As detailed in the preceding chapter, such changes included the introduction of a new, revised National Curriculum, the onset of OFSTED inspections, the implementation of a nation-wide testing programme in primary schools and new legislation for the identification and teaching of children with Special Educational Needs (SEN).

2   Methodology

Two small schools within the same Local Education Authority (LEA) were selected for in-depth study (the six English schools in the York-Finnish Project were spread across four LEAs). The first, Tanglewood Church of England School, had 38 pupils (in the 1994–95 year) and is located in a small village in a rural location. The head, Jane, taught the KS1 class of 17 pupils (age 5–6) and the KS2 class of 21 pupils (age 7–11) was taught mainly by a part-time (0.8) teacher, Angela, with a second part-time (0.6) teacher, Sandra, teaching in both classes (pseudonyms are used throughout this chapter to preserve anonymity). The second, Riverside Church of England School, had 48 pupils and is located in a village situated about five miles away from a nearby city. Here the head, Valerie, shared the teaching of the KS2 class of 18 pupils with Gill, a part-time (0.5) teacher and another full-time teacher, Shona, taught the KS1 class of 30 pupils. There were also two non-teaching assistants (NTAs),

Jackie and Angela, the former working for ten hours a week and the latter for six hours.

The research strategy adopted was a qualitative case-study one, using a combination of observation, interviews and the analysis of documentation. Fieldwork began at Tanglewood with an intensive week's observation in the middle of September, 1994. The researcher spent the whole of each of the five days in one or other of the two classes and participated in other school-based activities throughout the day. A similar pattern of an initial intensive week's fieldwork occurred at Riverside at the end of September. Following this, the schools were re-visited (averaging two or three visits per term until the end of the Christmas term 1995), sometimes combining classroom observation and teacher interviews and sometimes for particular events (such as staff curriculum planning days, pupils' visits to a museum, a school's drama production in the local village hall, and the first implementation of the government's KS2 Standard Assessment Tasks [SATs]). In addition to fieldnotes and documents, the data base was supplemented by the transcriptions of tape-recorded interviews. At Tanglewood, these included interviews with all three teachers, the school secretary, the peripatetic school bursar, the caretaker, the chair of governors, a second governor and a parent; at Riverside, these included the three teachers, the two NTAs, a supply teacher, the school secretary, the peripatetic bursar, the chair of governors, a parent-governor and another parent. Analysis of the data was based on a process of category generation and saturation which we have decribed in detail in relation to our own work elsewhere (Vulliamy & Webb 1992). The aim has been faithfully to ground the analysis in the lived experiences of participants in the schools.

3   Managing Curriculum Change

Each of the two schools had a teaching staff of three (supplemented by two NTAs at Riverside) and one of the marked characteristics of each school was the collegial atmosphere amongst the teachers. Other implications of this will be developed later, but its relevance here to curriculum change is twofold. Firstly, while there were some differences within each school's staff concerning their mode of response to changes to the new National Curriculum, there was an underlying sharing among all six teachers of certain core values con-

cerning teaching and learning. These values concerned the importance of organising learning in integrated ways which assume relevance for the pupils; they stressed the importance of experiential learning for pupils and hence great emphasis was given to the possibilities of groups of pupils making field trips outside the school (such as to museums) and of visitors coming to the school to talk to, or work with, classes; while recognising certain restrictions brought about by the National Curriculum, their values showed a commitment to the need for flexibility and spontaneity in the teaching-learning process. Secondly, the small size of each school's staff enabled high levels of communication between them. Whilst much of the more formal planning (for the production of long-term [4-year] and medium-term [one term] plans) was done collaboratively on In-service Education and Training (INSET) days devoted specifically to this, informal planning and communications were conducted in one of the classrooms at different times throughout the day (Tanglewood only had the two classrooms, with no head's or secretarial office, whereas Riverside did have a small head's/secretarial office where the other teachers sometimes met for tea or coffee breaks). Unlike in larger schools, there was no need for 'working parties', 'curriculum policy development groups' and organised timetabled meetings – just as in a family (a metaphor which was sometimes explicitly used by participants during the fieldwork) communications occur continuously, but orally, and not in any pre-programmed way.

Sharing as they did certain core values, each school had started their adaptation to the National Curriculum from a very similar standpoint, namely an organisation of the curriculum into thematic topic work with an attempt to integrate all their teaching within a topic web (for accounts of such an approach, see e.g. Conner 1988). In broad terms their early response to the introduction of the National Curriculum was similar to each other and representative also of the most common response within English primary schools in general (see Webb 1993). This involved: a move towards more subject-focused topic work (based especially around science, geography and history); a far greater emphasis upon planning, both to try and ensure a broad and balanced curriculum and to ensure continuity and progression within and across Key Stages; and a greater emphasis upon assessment and recording. Some teachers' comments give the flavour of such an adaptation:

We actually start from the topics because we've all been working that way. You are supposed to start from the curriculum [the National Curriculum], I think, but we've all been at this so long that we're creatures of habit. ... So we tend to say – right, we'll choose an environment topic, we'll choose a science based topic, we'll choose a history topic. Throughout the year we'll choose three different topics which we know will cover completely different aspects of the curriculum. (Shona)

We have become more systematic in our planning and it's [the National Curriculum] probably had an influence in terms of now we are more careful in what we plan, what topic we do. (Valerie)

The whole thing [the curriculum] has been crystallised – we now look very carefully at what we are doing. The discrete areas, I think we've looked at more closely. You know, I do mine over a three-year plan [for the KS1 class, which contains 3 year groups: R, Y1 and Y2] – each topic with a subject focus ... I think we are much more careful about what we teach and recording. (Jane)

During the fieldwork, however, both schools made major changes to their planning process in response to guidance from their LEA – at Tanglewood this process had begun early in 1994, whilst at Riverside the head made a deliberate decision to postpone the change until the new National Curriculum was announced in January, 1995. An examination of this process of change reveals both the strong influence that LEAs continue to have on school's policies and practices and the manner in which a school staff's prior core values can deeply permeate an 'on paper' change.

The LEA developed an approach to long-term planning which it called the 'Building Blocks' approach. This was described at a *Management of Primary Schools* INSET course run by the LEA in the spring term of 1994, to which both school heads went. At that time the structure and content of the approach was based around the 1988–1994 version of the National Curriculum; later it was adapted for the new 1995 National Curriculum in a series of documents provided for schools under the title *Making the Whole Curriculum Work in Primary Schools*. The approach is characterised by splitting up the whole National Curriculum into blocks of work, noting which appear only once across a Key Stage (for example, history blocks) and which twice or more often (for example, maths blocks which are repeated on a yearly cycle but at different levels). Advice is then given as to how these different blocks might be put together in order to take account of different aspects of different schools (for

example, schools such as Tanglewood and Riverside with a single KS2 class spanning four year groups need to have blocks oriented to different levels operating simultaneously within a class). There is a distinction between those blocks which need to be dealt with every year (such as most maths), which are to be put 'below the line', and those blocks that only have to be dealt with in a particular year and not every year and these go 'above the line'. Jane joked that on the INSET course the LEA had claimed that this was their own unique approach but 'when I went to stay with my friend who is a deputy head in Devon, she said "oh no, it wasn't ... [name of LEA] who invented it, Jane, it was our lot in Devon and they called it 'The Wall' or something"'. Examination of the NCC's (1993) *Planning the National Curriculum at Key Stage 2* document, together with SCAA's (1995) *Planning the Curriculum at Key Stages 1 and 2* reveals that the central ingredients of the approach – designed to ensure full National Curriculum coverage in a manageable form – are an adapted form of the National Curriculum Council (NCC) and Schools Curriculum and Assessment Authority (SCAA) guidance.

Valerie summarised the change to planning and curriculum organisation implied by adoption of the Building Blocks approach as a move from starting with topics to starting with the National Curriculum. Their previous approach was 'topic led and dragging in all bits of the National Curriculum that we can'. Anticipating the change, she commented: 'In the Building Blocks approach the topics are derived from the National Curriculum rather than the other way round – they will start with the ATs [Attainment Targets] and then fit the topics around them'. The planning process then involves what Jane described as 'a big jigsaw puzzle' where 'the idea of these Building Blocks things is that the curriculum is cut up into blocks', a process vividly described by Angela, the KS2 teacher:

> Jane came back with all these bits of paper and they were all colour coded by subject. And then we crawled about on the floor – all three of us – with a very big bit of paper, cutting up all these bits. I'd already decided that I couldn't do six topics a year and that I'd only do three topics a year, so the first thing we did was to rewrite the topic names to make them as wide as possible but still having something to do with what we were doing before. Then we started sticking building blocks around this four-year pattern. We chucked the building blocks on [laughs]. The first ones to do were history – you cannot repeat the history, because it just will not be repeated, there's too much of it to repeat. So we put the history ones in place to start with. One topic each year has got a historical bias.

Detailed observation of the Riverside staff INSET day in April, 1995, at which they adopted the Building Blocks approach for the first time in devising a four-year plan (autumn 1995 – summer 1999) for the new National Curriculum, revealed how in practice the teachers' prior values concerning the centrality of topic work dominated the process. Valerie began by saying that they needed to start from the subject blocks first, since they had already recognised that the limitations of their previous approach of starting from topics was that they might not end up covering all the National Curriculum. They had cut out all the subject blocks (in a manner intended by the LEA guidance) with different subjects on coloured stickers to be attached to different parts of a four-year plan.

They agreed to start with KS2 history. Valerie began by saying 'Riverside School will be 125 years old in 1997 – would that be when we should do the Victorians?' Gill and Shona both agreed that this would be a good idea. Analysis of the fieldnotes from the entire meeting suggests that issues of timing in order to connect the teaching of subjects or topics with external events to bring them to life for the pupils were paramount – thus, for example, Ancient Greece was chosen for the summer term of 1996 because that was when the next Olympic Games was going to be. This continued a priority which had always characterised the choice and timing of whole school topics within the school (at Riverside they had for a number of years had the same topics running simultaneously in the KS1 and KS2 classes). In this sense, linking a topic to a relevant event outside the school was regarded as more important than National Curriculum coverage. For example, the topic for the spring term of 1995, which had been originally planned as the Victorians, was changed to the Second World War once it was recognised that that term coincided with the 50-year commemorations of the end of the war. The other main constraint on the timing of doing particular building blocks was maintaining a sensible sequence with their prior four-year plan in order to avoid frequent repetition – for example, science blocks are done on a two-year cycle and so, if plants had been done last year, then they had to be done next year and then two years later.

If relevant timing was one major criterion in placing particular building blocks in particular terms, the other main criterion was an attempt to link different blocks together in ways in which they might be seen as integrated by pupils. This led to many jokes and much repartee concerning possible rela-

tionships between different blocks. For example, Valerie suggested doing 'Science: Forces' together with the Olympic Games/Ancient Greece material because of 'balls'; Shona suggested 'electricity' went well with the Victorians; Gill suggested that 'structures – buildings where we live' could be in with Romans. This search for integration and relevance, to the point at which teachers themselves recognised the tenuous – and often amusing – nature of such links, appeared to be characteristic of the core values of all the teachers in each of the schools. Thus, at Tanglewood, the KS2 teacher, Angela, laughed when she explained the rationale for some of their choice of topics and related building blocks: 'You see when we get up to Christmas, you can do all your topics which are to do with light [laughs aloud] – you see all these festivals are to do with light, Christmas is one of them, so you just slot in a bit about light [science building block] coming up to Christmas'. It could also be observed in the process of teaching itself. Thus, for example, during an assembly at Riverside one morning, in which the teacher was reading extracts from the story of Swan Lake and listening to excerpts from Tschaikovsky's ballet music, she said:

> We've been in the juniors learning about the Second World War ... I was thinking – whatever is the connection between Swan Lake and the Second World War? And I thought of one – breaking promises with Sigfrid in Swan Lake and Hitler in Germany. Do you think you should never break promises? [Leads to discussion on keeping promises]

One of the consequences of going for relevant linkages as one of the main criteria for when blocks were done was that it became apparent that some terms were very much more overloaded than others. This in turn led to much good-humoured banter between, on the one hand, Shona, who took responsibility within the school for science and who taught the KS2 class this subject and the head, Valerie, who was responsible for teaching English, history and geography to the KS2 class. Shona was conscious of precisely what was in the new National Curriculum and recognised that certain parts were much more time-consuming than others; thus, for example, she joked that the 1995/1996 KS2 autumn term would prove to be a busy one (with three sizeable chunks of National Curriculum science, in addition to geography). For Valerie, on the other hand, National Curriculum coverage was less important than principles of integration and relevance:

One of the things they have forgotten in doing the National Curriculum is that this is just a peg on which to hang **learning**. We will do it the way we find it works best and motivates kids more.

These differences also reflected themselves in varying knowledge of, and priority given to, specific content from the new National Curriculum. Thus, for example, Valerie's suggestion that 'land conflicts' in geography could be done alongside 'Ancient Greece' to link with 'city state conflicts' was countered by Gill arguing that the geography angle on this was very different from the history one (followed by Shona joking that Valerie – a keen historian – was again trying to squeeze out geography!). A similar difference in emphasis characterised a later medium-term planning meeting which was observed, in which the three teachers made detailed plans for their spring term, 1995 topic work. Valerie argued that, since they had done a lot of science in the previous term and the spring topic was the Second World War, the emphasis should be mainly upon history. This led to the following interchange:

Gill: But we've got SATs coming up and there is a lot of science we could do.
Valerie: But we don't want to be governed by SATs.
Gill: Yes, but science is one of the core subjects.
Valerie: But it's only one of ten subjects ... I don't think SATs should take over the curriculum.

Later, Gill joked to me that in planning meetings there was often a tug of war between her pushing for more science time and Valerie pushing for more arts time – a reflection of a strong perception that there was far too little time to do much of the required parts of the National Curriculum in any depth.

Once all the building blocks had been allocated to the 1995/1999 four-year plan, the next task was to label an appropriate topic for each term – thus, again, emphasising the importance of an integrated topic approach. For some terms, this proved very easy because the choice of building blocks had already been made in terms of an implied topic (often a topic they had used in the past – as with, for example, the Victorians). For other terms, great ingenuity (with associated repartee) was needed. For example, the 1997/98 KS2 spring term had to link 'Places' from geography and 'Forces' from science and Gill's answer was to suggest that the link could be a great book about going around the world on a bicycle – giving a 'Travelling' topic – with 'friction' going well with bikes.

It should be clear from this account of curriculum planning that whilst in one sense Valerie's comment that their planning had moved with the Building Blocks approach from being topic-led to National Curriculum-led was valid, at a deeper level the centrality of topic integration and timing remained paramount. While, in theory, full coverage of all the building blocks in the National Curriculum would be ensured if the plans were adhered to, in practice this was not likely to be the case. This is partly because the planning process itself placed integration and relevance at a higher premium than National Curriculum coverage and partly because, the experience of past plans within the school suggests that they are likely to be altered in the future to accord with unforeseen events. Thus, ultimately, the commitment to a child-centred conception of learning took precedence over a concern fully to cover the National Curriculum. This is well illustrated by a comment from the head when she was asked early in the fieldwork period what determined the timing of different termly topics:

> Well we try to make them relevant, obviously, as we are with the war. We try to get a cross section across a year – if possible a science topic and a geography topic and a history topic. We missed out last year – we didn't do any history last year and I don't know how it happened. That was a mistake, because it has made these [current plans] a slight problem. When I say we didn't do any history, I mean we didn't do any National Curriculum history – we actually did quite a lot of other history. For example, when we were doing people at work, we did history of the post and history of the police force – that's not in the National Curriculum, but it was relevant, so we did it. So the children were doing history, even though it was not part of the National Curriculum.
> Researcher: What about Europe [one of their previous year's topics] – did you do any history in that?
> Yes, we did, but not the National Curriculum history – the official – we weren't covering the official history, but the children were doing history. Yes, they did quite a lot, because when we looked at the various countries, we looked at Spain and Italy and we did Norway and France and we jigsawed at times, and one of the projects [in the jigsaw] was the history of that country. ... We do try, if possible, to link everything because I don't think there's much point in doing a theme unless you do link everything, because one of the points of doing it is to stimulate the children and to make life exciting for them.

There were also instances of this in fieldnotes on the processes of teaching. For example, a lesson on the origins of the Second World War, which Valerie had told the researcher previously was going to be a 'geography' lesson (to fit

in with the Second World War topic that term), began with some whole class teaching based upon identifying European countries on a large map in the corner. The class then dispersed to their tables and two sets of worksheets (one for the Y3/4s and one for the Y5/6s) were given out for them to do. These contained instructions such as 'Colour in red Germany and all the countries she invaded in 1938 and 1939 (Austria, Czechoslavakia and Poland)' and 'Write about how Adolf Hitler built up the German army and invaded some countries. Can you say why?'. While they were working on these, Valerie came over to the researcher and said jokingly 'the trouble with this is I don't know whether this [Europe] is in the National Curriculum, but they really enjoy it – they're very interested in the war'. She added that, whether or not it was in the National Curriculum, it was important knowledge for them to know; she also commented that in science and maths they needed to be more aware of what was in the National Curriculum because they were tested on it in SATs.

Nias's (1989; 1991) research has testified to the importance of self-identity in the work of primary school teachers and the manner in which certain core values permeate and shape their work. Here we have argued that such core teachers' values in these two schools – notably a commitment to a child-centred and experience-based integrated curriculum – were in tension with the requirements of a new statutory National Curriculum. However, within the planning process, teachers tried as far as possible to maintain the priorities of their previous approaches. That this was becoming more difficult in practice was revealed by later observation of a September curriculum planning day at Riverside at the beginning of the autumn term, 1995 when the new revised National Curriculum was to be taught for the first time. Following participation in an LEA science curriculum course based on the building blocks approach, Gill and Shona had done some detailed medium-term planning for the term's work. Gill explained to the researcher the aim of this course, and the subsequent planning which Gill and Shona had done at home together:

> The idea was you took the whole of the new National Curriculum and you took all the blocks, all the ideas of what you thought you possibly could do and laid them out and divided them into three sections – so this is what Shona and I did for two and a half days. We'd put infants, lower juniors and upper juniors [the three sections] and then we looked at the activity and leveled it, so that in the infants you tended to get levels 1 and 2 and a few 3s, in the lower juniors it was 2s and 3s and a few 4s and 4s, 5s and

102

6s in the top juniors. Shona and I did the levelling using the back of the actual science document where the levels are plainly stated and also just experience really. [Figure 1 provides an extract from these plans, using the *Plants: Growth and Reproduction* block from the 1995 KS2 autumn term plan]

Section 1

There are different parts of a plant L1 – draw, label

There is a wide variety of living things which include plants L1/2 – sorting pictures/objects, make collections

There are lots of seeds, pips and stones which will grow into plants L2 – cut up fruit and vegetables and plant seeds

Plants grow and some are dangerous to eat L2 – pictures to be sorted, talk

Plants need light and water to grow L2 – experiments to cross seeds

Plants respond to daily change L2 – turning towards light, record rate of growth

Section 2

The root anchors the plant and takes the water and nutrients which, in turn, travel up the stem, to other parts of the plant L3 – study plants, place in coloured water, veins on leaves

Plants can be placed in groups according to their characteristics L2 – sorting classifying pictures/plants

Flowering plants grow, produce seeds which, in turn, produce new plants L3 – way seeds disperse, growing seeds and vegetables

Seeds need certain conditions to grow L3 – AT1 experiments with water/light, explore ways seeds disperse

Temperature can affect plant growth L3 – sunny windowsill fridge, experiments outside/inside

Plants respond to seasonal change L3 – observe trees, what and which cards

Section 3

The stigma, stamen and petal have an important function in the reproduction of flowering plants L4 – amarylis, dissect flower, name parts, structure of plant

All living things are made of cells L6 – use microscope, pictures

The leaves of green plants need light to help them produce food for growth L4/5 – leaf factory, how make food

The life cycle of a flowering plant includes pollination, seed production, seed dispersal and germination L4/5 – insects, importance of flowers, wind dispersal, spinners, draw diagram

FIGURE 1   *Science Planning for Growth and Reproduction block*

This was followed by going through all their equipment and resources, such as worksheets, and earmarking particular ones for different parts of the science curriculum. Through conducting this process, they came to recognise the validity of fears which had only been expressed jokingly in the earlier April long-term planning meeting – namely that following a strategy of working first from the building blocks but nevertheless trying to maintain the centrality of topic work in their planning meant that some terms had become very overloaded. Thus, for example, they had modified their earlier long-term plan by moving *Changing Materials* from autumn 1995/96 to autumn 1996/97, moving *Health, food and drugs* from autumn 1996/97 to summer 1995/96 and moving *Changing Materials* from summer 1997/98 to spring 1998/99. One implication of this was that they would be doing more separate subject teaching than previously because sections which previously had been placed because of their link with other sections no longer maintained that link. As Gill explained: 'When we're doing Victorians [in autumn 1996] the science will be purely science and not linked to the topic, so we'll be doing electricity and changing materials and so we'll have lessons on pure science'.

At the September planning meeting, Gill produced a list of design and technology topics, which in the earlier April meeting they had decided were below the line (i.e. being taught each year), saying that she was concerned that they cover them and so she had listed them and indicated which terms and topics they would best go with (i.e. effectively bringing them above the line). This neatly exemplified the tension between, on the one hand, being driven by the necessity to cover adequately the new National Curriculum and, on the other, the need for an integrating topic approach. Thus, for example, Gill had put the *Structures* part of the KS2 design and technology course down to be taught in the autumn term of 1995 because this could be linked with their work on buildings (settlements) and plants. In discussion with her later, she explained that a topic approach was the best method of teaching primary school children in general, but it was even more important for a small school since teachers are effectively teaching three classes (yr 3s, 4/5s and 6s) within one and therefore they need an integrating theme to bring it all together (for whole class discussion). Reflecting on the tension between the building blocks approach and a topic one, she commented:

I think when we get going on it [their new building block plans], it will be easier. But it may be a bit more restrictive from using your own initiative and what I don't want to do is not able to stop and do something that is happening that day that we must do. And I think we must – even if it's not National Curriculum – if something comes up that's really exciting, we've got to stop and say 'right, we're doing this today' and I suppose this is the advantage of us having our supposedly free day [she laughs – a common response from all the teachers in the two schools when referring to the Dearing proposal for 20% free from the new National Curriculum]. Children learn so much more from something that just happens instantly, don't they? But I think it will work fine. I still think we'll have a major problem getting through it. I think we'll need the free day to do the National Curriculum – we won't get a free day. *Habitats* you'd like to spend a month on – you just can't do it in a week. I'd rather do something thoroughly than skim over it, because I think children get so much more out of it. I think what I shall try and do is, we're supposed to do everything every two years and do it thoroughly and even if we only have to skimp over it the second year, so one year they'll get *habitats* really done well, the next time they'll get *food chains* really well done and the others will just be introduced or sort of revision. It [the new National Curriculum] is nice from the science point of view because it's now in detail what you have to do and so it will make it easier for schools to plan. Obviously it's much easier if you've got a larger school because you can do *habitats* in years 2/3, *food chains* in 3/4 and you can spread it out more. When you've got them all in one class at the same time, it's more ·difficult, but it's teaching the concepts that's the main thing and the skills.

Further examples of the tension occurred when detailed planning for the autumn term was made at the September meeting. Thus, for example, Shona asked 'how can we do habitats without doing animals? [because animals was now in a different term]'; they all discussed a problem whereby with *Riverside Village* as their topic for that term, any history done would be likely to overlap with *Victorians* which they had planned for another term; and they decided to leave the locks and boats material, which had traditionally been done under the *Riverside Village* topic, until they do *Water* in a later term. This meant that the brainstorming method which they had traditionally used to plan their topics in the past could no longer be applied, because they could not do sections which they had planned to do elsewhere in their long-term plan. When their detailed planning for the autumn term was almost finished, Shona commented somewhat ironically 'where has the *Riverside* gone?', which led to a general discussion of how different their planning would have been if they were being driven by the topic '*Riverside*', rather than by the National Curriculum. This represented the culmination of a process whereby the school's

planning for the National Curriculum had shifted through three broad phas-
es: from pure topic webs (pre-National Curriculum) to subject-focused topic
work (early stages of National Curriculum) to building blocks derived from
subjects where teachers try to maintain a topic integrating link, although it
was proving more difficult to (the new National Curriculum).

Previous research on the implementation of the National Curriculum sug-
gests that, whilst on the one hand its statutory nature has led to certain changes
taking place (see e.g. Pollard, Broadfoot, Croll, Osborn & Abbott 1994), on
the other hand policy changes are mediated through the prior values and
beliefs of teachers, leading both to redefinitions of aspects of the new policies
and resistance to other aspects of them (see e.g. Bowe, Ball with Gold 1992;
Vulliamy & Webb 1993). The evidence from curriculum planning from each
of these small schools points to the fact that teachers' prior beliefs and values
are even more important in this equation than is the case in larger schools
(see e.g. Webb & Vulliamy 1996). This point will be further developed in the
concluding section of this chapter, where it is argued that the ethos of small
schools insulates them from the effects of recent government directives which
have more impact in larger schools.

4   Differentiation

While the need for differentiation in English primary schools has increasingly
been stressed in government and OFSTED documents over the last few years
(see e.g. OFSTED 1995), very small schools have always been made more
acutely aware of this problem because of the fact that within one KS2 class
they have four different age groups and consequently a very wide range of
ability and experience. Thus, in an interview with Jane a couple of months
before her school's OFSTED inspection, she commented:

> I am aware of the OFSTED inspection coming up and we have to, I have to demon-
> strate, especially in the situation in which we are working with a large range of chil-
> dren, that we're aware of differentiation and that we are planning for the range. ...
> Previously you would have just differentiated out of your head, you would have known
> you could do it. Now I've got to show that's what we're doing, particularly at KS2,
> because the range there is enormous.

In order to demonstrate such differentiation at the planning level, the school had adopted a particular style of medium-term planning sheet advocated by its LEA advisors. This includes learning objectives for a term's work in a particular subject broken down into different objectives and activities for different year groups and/or ability levels within the class. Angela had transferred all the KS2 plans on to her computer because:

> I wanted to cut down the amount of handwriting I was doing and repetition I was doing. Once you've got this on a computer disk, you don't have to write the whole blasted thing out again – all the bits like, bits of the Programmes of Study or the learning objectives which more or less stay the same, they don't change that much. I like to have it written down what I'm doing.

Comparing this current emphasis on written planning with when she first started primary teaching, she commented:

> I just think this is tighter. I mean we just bumbled along [before] and you weren't kind of absolutely sure that you were going to target every child and make sure they progressed or whatever. ... It's not so much these things [pointing to her long and medium term plans], it's these then translated down into weekly and daily plans. ... By having it all written down and looked at very carefully you get more chance of every child having it delivered to them and making sure there is some progression for them, that you're not doing the same thing over and over again.

A science lesson which was observed in the KS2 class at Tanglewood provides an example of such pre-planned differentiation in practice. After a 20-minute introductory whole class discussion on science experiments, with questions asked to the class by the teacher, the class split into groups based on their year groups (the Y3s and Y4s as separate groups and the Y5/6s mixed together). The teacher explained that they were all going to make a car out of Lego first and then the different groups would do different experiments concerning the movement of this car down a ramp of varying steepness (altered by adding bricks). The teacher had prepared separate worksheets for the Y3s, the Y4s and separate ones for each of the Y5/6 groups. The initial making of the Lego cars takes about ten minutes and causes a lot of inter-pupil interaction and amusement. Mary, a Y6 pupil, complains that 'I don't know how to make a car – I've never used Lego', to which Stephen responds 'go and ask John, he's good'. John comes back a moment later and starts making his car a

supersonic one by building on a back wingspan, joking that 'this will make it faster!'. Later the teacher notices his car and says good humouredly 'take all that off, John – it's supposed to be a car, not a plane!'.

The worksheets varied in the number and complexity of the tasks required of the groups. For example, the Y3 worksheet concerned just the car running down the slope:

> Moving down a slope Y3
> Name
> Draw your slope and car
> Answer these questions:
> What makes the car move?
> How does the car move on the slope?
> What makes this happen?
> What happens if you try to get the car to go up?

The Y4s were asked to obtain a number of other objects and compare the way these went down the slope and one of the Y5/6 groups had to compare the movement of their car and a block of wood on the slope, with the following worksheet:

> Staying Put 5/6
> Name
> Draw and label what you did
> Answer these questions:
> Why do you think the block stays where it is?
> Can you think of anything that is stopping it from moving?
> How might you get the block to move on the slope?
> What makes it move in that direction?
> Is there anything stopping it moving in the opposite direction?

After the morning break the teacher, in a whole class teaching context, asked each group what they had been doing, seeking answers in terms of 'gravity' and 'friction'. During this feedback session it was also established, based on the experience of two of the groups, that the steepest slope they could have before their car crashed was four bricks high.

While this was a carefully pre-planned lesson with differentiated activities, the teaching in each of the classes in both schools was characterised by frequently setting different tasks to the different year groups. Year groups were by far the most common focus for such differentiation, but individual children

might occasionally be permanently located in another year group, if this was felt to be more suited to their ability level – for example, at Riverside, one very bright Y4 girl sat and worked with the Y6s on their table (there were two other tables in the classroom, one with Y5s and the other with a mixture of Y3/4s). Such a strategy was rarely used, however, because of parental opposition (especially where a child was working with a younger age group than their own). More frequently, particular tasks for particular pupils might be set in relation to another year group's work – for example, as with Henry, a Y4 pupil who did his spelling tests with the Y3s rather than the Y4s. Comparing her experience of teaching in a larger school, one teacher stressed that the small school context forced the teacher to differentiate in a manner which, whilst also necessary in a single age class, could more easily be avoided:

> I've found that when I've had a class of all the same children, I've tended to be a bit lazy and you would do one worksheet – you wouldn't really cater for the tops and bottoms. But with our situation you are *made* to, you have to – you are doing it properly because you have to.

Interestingly, an interview with the supply teacher who had been brought in to do much of the KS2 teaching at Riverside in the autumn term of 1994 confirmed this as a major difference between her work there and her supply work in other, larger schools. Thus, the supply teacher was teaching science to the KS2 class instead of their normal teacher, Gill, who was recovering from an accident. Gill, however, prepared the materials, including various worksheets, which she wanted the supply teacher to use. Whereas the supply teacher had found that in larger schools differentiated worksheets usually involved a single worksheet to the whole class, but containing within it extension activities for those pupils who were quicker and more able, Gill had provided her with completely different worksheets for the different year groups within the KS2 class.

The KS1 class at Riverside posed particular problems of differentiation because of its size (30 pupils) and its mixture of Reception children and Y1s and Y2s. The classroom was organised into five tables – two for Reception pupils, one for Y1s, one for Y2s and one for a mixture of Y1/2s. As an example of her approach to differentiation, Shona told the researcher that each table in maths would work on the same part of the maths book at one time, but the

faster ones then got extension work. However, she felt that this was a problem because 'really it's the less able ones who need the extension work'. She thought that the current Y2 group of ten pupils would be best split into a stronger and weaker group and was considering doing this when she introduced some new number topics. Most of Shona's teaching was structured into three levels (for R [reception – age 4/5], Y1 and Y2) with each of these groups being taught in turn – analogous to a whole class input to a particular group of pupils (followed by their working on their own), whilst the two other groups worked by themselves. This process was considerably aided by Jackie, an NTA who worked for ten hours a week in the KS1 class. Shona told the researcher that, unlike in some other schools where NTAs are only used for cleaning up, mounting displays and so on, Jackie could be regarded as another teacher in the classroom and had proved particularly effective at identifying pupils with special problems.

5 The Small School Ethos as Insulation from Government Directives

For all those working in, and connected with, these two schools, there was a strong sense of a special small school ethos pervading them. Thus, for example, the chair of Riverside's governors, the local vicar, who was a governor of at least two other schools as well, told me that Riverside school was 'very special' and that it was 'like a big happy family'. In each school there were strong links with parents and the local community. For example, when fieldwork first started at Riverside they had just finished a project whereby the school's playground had been redesigned and transformed into a landscaped garden area. Organised by a volunteer from a local agricultural college, the project had been undertaken in the six-week summer vacation and had involved large numbers of parents giving freely of their time helping, especially at weekends. The new playground was formally opened in the autumn term with a party for all the parent helpers, to which the local press and photographers were invited. Further evidence of strong community attachment to the school was provided by the researcher's attendance at the second night of the school pupils' performance of the *Pied Piper of Hamelin* in the local village hall. The hall, which seated 75, was completely full, as it had been the previ-

ous evening. Similarly, at Tanglewood, numerous accounts were heard of the ways in which parents and the local community contributed to the school – ranging from driving minibuses for field trips to a parent who owned a security business fitting a burglar alarm in the school free of charge. Parents were also regularly used both to give one-off sessions in the classroom on a specialist subject and to provide short courses for groups of pupils on practical activities, such as knitting or weaving. Tanglewood's chair of governors, also the local vicar, related the commitment of the governing body explicitly to the small school rural environment in which they lived:

> Governors are all voluntary workers and they give a hell of a lot of time. Our village doctor is on the school governors; her time is, I mean she is on call a heck of a lot of the time, but she comes. We have two or three people running their own businesses who find the time to do it. ... We are so lucky in an environment like this, that is growing up around here – well come on look out of your window – that we've got to give them [the school children] the best possible. I believe small is beautiful which is why I'm a country parson. You know, I hope we keep it that way.

Whilst only a small number of parents and governors were interviewed, they all commented on the happy, safe, family-like environment in each school. For example:

> They do seem to have a caring atmosphere here – it isn't just imaginary. It's not just put on for visitors, it happens all the time. You've probably noticed that the children are very friendly and the inspectors were interested in how in the playground because it's a little school the bigger children took care of the little ones. It's a very happy school. ... We also have the old people invited – this really is lovely because a tea party is made and the children each have one of the elderly people or a couple if they are in twos to look after, and you're met at the school gate and conducted in and they see that you're sitting down. The children give an entertainment. The elderly people love it and the children are so sweet with them. (Tanglewood governor)

> Being in a small school situation, being like an extended family, the old ones actually learn a lot by caring for the younger ones – no sort of separate playgrounds for the biggies and the littleies. If there's any bullying it's quickly spotted and dealt with, whereas in a big school, what do you do? (Chair of Riverside's governors)

> Everybody knows everybody – it's like a big family. They get a lot of personal attention. Personal contact and security. ... There's a lot of daily contact with parents, so you know how your child is getting on and parents' evenings are quite informal really.

> Somehow when it's a smaller school you feel you can approach the teachers a lot more than perhaps in a bigger school – when they've got, you know, 30 kids in a class. You wouldn't feel you'd want to bother a teacher who was so desperately busy. But if they are kind of chatting to you as you come to see them, when you come to fetch your children, the teachers are always there at the gate, chatting to the parents as the children come out, so it's very easy if there's something you are worried about. (Tanglewood parent)

A further indication of the family atmosphere in such a small school was given when one of Riverside's two NTAs told the researcher that on those occasions when she was due to work in the school when her own six-year-old daughter, from a different school with different half terms and holidays, was at home, then her daughter came with her and joined the KS1 class. The other children soon got used to her and she was treated just as one of the class.

If links with the local community and a family atmosphere characterise aspects of the small school ethos of these two schools, another concerns the informality of relationships within the school, both between teachers and between teachers and pupils. This is revealed in a lack of adherence to the more formal procedures and rituals which typify larger schools. At Tanglewood, Jane was concerned prior to the school's OFSTED inspection that the inspectors should understand and appreciate the value of this informality and was relieved to find that this was the case, because the leader of the inspection team had had prior experience of small schools. Thus, for example, in playtime, the children often stayed in the classrooms alongside the two or three teachers who might be relaxing with a cup of coffee or preparing some teaching materials. This surprised the one member of the inspection team who had not had experience of small schools and who initially had Jane worried:

> She hadn't been in small schools and was very hot at first – I thought 'Oh dear, we're going to have to work on her because she's very ...'. But certainly, I think after she'd spent just a couple of days with us, she realised that the work that's put in is different. I think the very fact that we are all around the children all the time, it doesn't bother us, OK we're here and the children are in [during playtime]. And they'd been on an inspection in Leeds and she said the teachers at coffeetime and lunchtime don't want to be anywhere near the children, want the children out and away. Well, we don't operate like that and if you don't like that sort of thing, you shouldn't be working in a small school.

Jane found that the OFSTED inspection team leader positively welcomed such an atmosphere within the school:

> At lunch time I don't force the children out – they're allowed to stay in, they get on with their own thing. I don't mind as long as they're not interfering with us. Occasionally we say 'Right, everybody out, you know'. Anybody coming in might have thought that was chaotic, but he didn't – it was something of which he approved. He sort of thought the atmosphere, he'd picked up the atmosphere that I wanted and he appreciated. Now somebody else may not have done – I'm very aware of that – but he approved of what I fundamentally believed that the village school is about. The fact that somebody will come in and say somebody came in and wanted to use the photocopier – I said 'Go on', I'm not fazed by it. Other people have said that shouldn't happen – you shouldn't have that – whereas he didn't.

She also found his attitude to the role of a small school teaching head more positive than she had anticipated:

> The fact that I don't do my own budget. I said 'Look, there's the financial documentation', but I said 'I must be quite honest – if you want to ask questions about it, the name of my peripatetic bursar is such and such and he's much more expert'. I said 'I don't deem it my responsibility to ...' and he said 'I couldn't agree with you more'. He said 'I think a small school's head should not be involved in ...'. So he agreed with me over that. But we may well have got somebody that thought that I ought to be fully involved, that I wasn't fully involved in the management of the school unless I was running it financially.

A clash between what Jane regarded as the vital spontaneity required in children's education in a small school and the adherence to guidelines, policies and planning suggested by the OFSTED (1993) *Handbook for Inspections* (which Jane admitted she hadn't looked too closely at because 'you'd be suicidal'!) is revealed in her account of how at the end of the week prior to the inspection some children, following an assembly on the theme of water, asked her if they could have a sale to contribute to the *Blue Peter* Water Appeal that was currently being publicised:

> I thought 'Oh God, an inspection next week – should I risk a sale done by infants?!' Yes, why not? It's what they want to do because they're going to get a terrific amount out of it. They organised it, they sent out notes, they invited people, they all ran the stalls in here, we got Mums to serve tea and it was excellent. They raised £85. And you know I had to say to the inspectors: 'Look – this isn't planned, but we're having a

World Water appeal on Thursday afternoon' and having something like that gives the place a buzz. That was their final day [of the inspectors in the school]. And I thought: 'Well, why not? This is the way the school's normally run, so I'm not cancelling things that the children – that's come from the children, because it's come from the children'.

Relations between the teachers within the schools were characterised, firstly, by a team-like emphasis upon collegiality and, secondly, by oral rather than written communications. Thus, for example, when Gill, the 0.5 part-time teacher at Riverside, was asked whether she acted as a co-ordinator for any subject, she replied:

Well we all co-ordinate together with it being so small – we just discuss everything. Shona actually has a responsibility post for the science, but I'll do all the planning and we just chat together. It's so simple – it's just no problem – when it's such a small school.

Similarly, Jane – Tanglewood's head – remarked that:

In a small school we are very much a team. They [the other two part-time teachers, Angela and Sandra] play key roles in the running of the school – not only those, but the non-teaching staff as well, everybody. And that's picked up that atmosphere of everybody caring, everybody being part of a team and everybody wants to know what's going on.

Comparing her work in this school with a short period previously in a larger school, Angela commented that she had found it helpful in the larger school when staff had been given a folio of all the school policies and also detailed prior teachers' records of pupils' work. However, this proved unnecessary at Tanglewood because 'being such a small school with staff who have worked together a lot' they knew what their policies were without having to have them written down. As with our prior research in other small schools, teachers in these schools 'view themselves as "doers" rather than as producers of documentation' (Vulliamy & Webb 1995, 36). Thus, whilst at Tanglewood they had to produce written policies as part of the necessary documentation prior to their OFSTED inspection, at Riverside the attitude of the head to such documentation is revealed in her comment that:

I'm not going to worry about inspections. There are all sorts of courses, almost weekly – you know, 'When the inspector calls' – courses run by Hull University, Leeds Univer-

sity, Bradford, Bretton Hall, all cashing in on this. I'm determined not to worry about it until I hear that I've got an inspection and then I hope I'll get three months' warning and then in that time I'll make sure everything is in place. Obviously we've got some documents that are not in place.

She went on to add that with some policies, especially the curriculum area ones, they tried to do them jointly amongst the three teachers, whereas:

There have been others which I've just written. The special needs one – I did a course funded by the government and they gave us a model special needs document. I just came back and changed it to what happens in this school and then gave it to them [the two other teachers] to read.

Valerie felt that rushing in to make all the most recent changes suggested by the government and by the LEA proved counterproductive, given that everything was changing so rapidly. Her views on this were fully supported by the school's Chair of Governors who told me that:

We're [the governors] are responsible for the school budget, health and safety, making sure the National Curriculum is being taught but, as I think you've gathered from Valerie, my own view was there was too much and it was pointless trying to fall over ourselves to implement every nuance of the law there and then, but to do it as and when we could and I think the transition has been much smoother that way. Nobody's been hung, shot or imprisoned!

Valerie recounted how they had deliberately postponed embarking on the new Building Blocks approach to long-term planning until the new 1995 National Curriculum had been published and how, despite waiting some time to implement new assessment records, they still ended up wasting a lot of time on a system which then had to be abandoned following the Dearing (1993a; 1993b) reports:

Now obviously in all this time one is going on courses – planning and everything is being thrust upon one and record keeping and it's all very frightening. Lots of schools had gone a long way down the road in their planning, and we didn't and I was determined not to be hurried into it. And I'm terribly glad that we didn't, because now they have had to abandon it all and change everything. But actually, annoyingly, we have got children's individual records in place, which are all defunct now – so we've got something we've got to abandon even though we were quite slow doing it.

A similar skepticism characterises her reaction to some LEA advice:

> Actually, they [the LEA advisors] are very naughty because they frighten people into thinking they've got to have all kinds of things they haven't. For example, they run assessment days at which they tell you 'you need a portfolio' and there was this one adviser who said you need two pieces of work for each level for each of your attainment targets and I think by then I'd read Dearing or whatever – you don't even have to have a portfolio any more! And so I said 'Who said you have to have two pieces of work?' Because a lot of teachers were sort of panicking, going back to their schools and saying 'we've all got to have two pieces of work'.

Jane, Tanglewood's head, also spoke of the potentially harmful effects of an over emphasis upon planning and documentation:

> Some sort of inspiration and spontaneity is lost and you have to keep that, especially with young children. ... Well today I've stuck to the plans pretty much, but on the other hand it could be a child who came in with a dead hedgehog or, you know, something happens, somebody comes in who wants to talk to the children and I'll just scrap what I was doing and do that. You have to be flexible, especially with these children. ... or just on a nice day and you want to take the kids out, that sort of thing. ... Certainly if your plan is so detailed, then you don't have the flexibility, but you have to be able to know, to have the confidence to say 'no, this is what I'll do'. Like it's snowing or the weather changes and you meant to do something on the weather. Because you carry so many ideas – so much of what you'd want to do – in your head, you would know how you were going to use that situation for the children. And also quite honestly you go on doing something here and there and you just want a change! Some of that spontaneity that went on in the past was very good – it was very inspirational.

An example of such deviation from her plans occurred during the OFSTED inspection:

> Another thing I felt with them when he [the inspector] was in, I mean we had our timetables and our daily plans and I always highlight on mine which group I'm teaching and even when they were in there were times when I didn't do what I'd written on my plan, because a child may have shown an interest in something else, or something else may have happened, and I thought ... Yes what we were doing we were doing something to do with toys, and I had organised they were making these pulley things but then the children wanted to make ... The children saw some puppets and said 'Oh can we have a go at making that?' So I organised a whole group of them to make some of that and we went on to do those in quite great detail ... Now I hadn't planned that, that wasn't in any sort of plan, so I had to go to him and say 'Look I have done this but

you won't see it in the plan but I just think it would be bad practice if I had not done it'
and he said 'I couldn't agree with you more, I agree with you ... with children this age
you often teach intuitively and spontaneously'.

Jane was conscious of her good fortune in having an OFSTED team who
responded positively to their child-centred and small school ethos. There is
an irony here in that the government's explicit intention in reforming the
inspection process by replacing Her Majesty's Inspectorate with regular in-
spections of schools by OFSTED was to use the inspection system to reduce
the influence of '1960s progressivism' in primary schools (see e.g. Clarke 1991).
Anecdotes abound concerning the fact that the ethos of the OFSTED inspec-
tion teams can be very different from each other, depending upon the prior
experience and values of team members, resulting in apparently very similar
schools being judged very differently by different teams. At Tanglewood, the
OFSTED report was extremely positive and, at least in part, Jane felt that this
was because the OFSTED team leader held very 'progressive' views. In fact,
Jane said that, in talking with the team leader, she felt that she had to counter
some of these views by pointing out that recent government reforms, includ-
ing the National Curriculum, had necessarily had to lead to some modifica-
tions of 1960s progressivism:

> He came out of college and did a lot of his early headships and training in the 1960s
> and I think that type of education, which is mainly controlled by children, is so difficult
> now simply because of the demands that are set up on us. ... Another thing he com-
> mented on was the art education. Now the art that we do, I think, is very good, but he
> suggested that we could do more individual experimentation by children. Now that's
> all right, but as a philosophy I think children need to be taught skills. True discovery
> comes through – they need to know about colour mixing and observational drawing,
> they need so many skills before they can actually do that. The days of daubing in paint,
> letting it all hang out, are gone – we can't go back to that. ... Things have changed for
> those of us in education, things have changed, and I felt he'd actually been out of
> education and was still harking on the thing when you were still experimenting with
> paint and ... do you know what I mean?

The evidence from these two case studies suggests that, on the one hand,
recent government reforms have had some influence on policy and practice.
Curriculum planning had become more structured and detailed and there
had been a move towards subject-focused topic work combined with more

separate subject teaching. An interview with the supply teacher who had had
to replace Gill in the autumn term in Riverside revealed the extent of some of
these differences. Whereas, prior to the Education Reform Act of 1988, sup-
ply teachers simply tended to 'do their own thing' in the classroom, they now
tend to be required to cover specific parts of the curriculum related to prior
planning. Other aspects of government reforms also had their influence –
open enrolment, for example, meant that more emphasis was being placed by
heads on marketing and publicity and more time was being spent by them in
responding to enquiries from prospective parents. The implications of such
marketing, when put alongside LMS in a small school, could create problems;
for example, Valerie told me that at a cluster meeting she had attended there
were jokes about whether each of the heads had had to send their school
prospectus to Anna, a girl from Denmark. They all had – at a cost of £1.70·
each. 'Do parents realise how much it cost for a school such as this?', Valerie
remarked and Shona chipped in: 'People treat it now just like buying a new
piece of furniture and collecting brochures from here, there and everywhere.'

Thus change had taken place. On the other hand, however, it is argued
here that, firstly, such changes have been strongly permeated with prior be-
liefs and values associated with a child-centred philosophy and, secondly, that
aspects of the small school ethos – including the existence of teaching heads –
has insulated the schools from the need to take on board characteristics of the
new managerialism (see Webb & Vulliamy 1996) to be found in larger schools.
All teachers in small schools – including the heads – spend most of their time
teaching; there is no need – nor is there time – to have policy working parties,
to create senior management teams, or to institute quality assurance mecha-
nisms, such as monitoring and evaluation. Moreover, those government re-
forms that have had to be implemented have been conducted in a spirit of
informality which pervades life in a small school. For example, KS2 SATs were
undertaken by a small group of Y6s and Y5s (for practice) at Tanglewood
during normal classroom lessons – the only change from the norm being that
the teacher had to request the rest of the class (Y3s and Y4s) to remain quiet
during this period. A small group of children in the infants class (the Y2s)
were given their KS1 SATs without them realising what they were – talking to
one of the pupils later she simply said that they had done their normal work
but in a different booklet.

6   Conclusion

Throughout the 1980s in England there was an increasing emphasis upon the management of whole school change in the primary school. It was argued that previously paternalistic and autocratic styles of primary headteachers should give way to more collaborative and collegial approaches to whole school management (Coulson 1980; Campbell 1985). An ideal type emerged whereby all teachers should participate actively in negotiating an agreed curriculum and contribute jointly to planning, implementing and evaluating its delivery (Wallace 1988). This can be witnessed in central and local policy documentation (see e.g. DES 1982; 1985; ILEA 1985; House of Commons 1986), in management texts (see e.g. Day, Johnston & Whitaker 1985; Spear 1987), in the literature on school effectiveness and school improvement (see e.g. Reid, Hopkins & Holly 1987; Mortimore, Sammons, Stoll, Lewis & Ecob 1988; Fullan 1992) and in ethnographic studies of 'cultures of collaboration' (Nias, Southworth & Yeomans 1989) and 'whole school curriculum development' (Nias, Southworth & Campbell 1992) in primary schools. Such aspirations for collaborative approaches to whole school change still pervade much current advice to primary schools, whether from OFSTED (see e.g. OFSTED 1994) or from academics (see e.g. Fullan & Hargreaves 1992; Whitaker 1993). However, the plethora of innovations associated with the implementation of the 1988 Education Reform Act (ERA) – including LMS, the National Curriculum and assessment, open enrolment, OFSTED inspections and the emphasis upon quality assurance – have created a climate in primary schools far removed from that of the 1980s from which the current orthodoxy for collaborative whole school development was derived. Research on the impact of recent government reforms on the culture of primary schooling suggests that ideals of collegiality are being replaced by 'contrived collegiality' (Hargreaves 1994) and by increasingly top-down and directive managerial approaches (see Pollard et al. 1994; Webb & Vulliamy 1996). However, the research reported here suggests that small schools in England remain an exception to this general trend.

Clearly with a sample of only two English schools, we would not want to suggest that any particular findings are representative of other English small schools. However, by examining in depth both teachers' values and their

practices – themes for which case-study methodology is particularly well suited – we have argued that certain underlying processes characterise the policy-practice interface. A central finding is that primary teachers' self-identities are powerful mediators in terms of their interpretations of, and responses to, imposed changes – a finding which we have argued elsewhere (Vulliamy, Kimonen, Nevalainen & Webb 1997) is supported also by a review of the theoretical literature and of other comparative analyses of primary schooling. A secondary finding – that the ethos of very small schools enables teachers to preserve their prior value systems more easily than their colleagues in larger schools – receives further confirmation by comparative analysis with the other larger school case studies in the York-Finnish Project (see Webb & Vulliamy with Häkkinen, Hämäläinen, Kimonen, Nevalainen & Nikki 1997).

Acknowledgements

References

Alexander, R., Rose, J. & Woodhead C. 1992. Curriculum organisation and classroom practice in primary schools: A discussion paper. London: DES.

Arnold, R. 1994. Small primary schools today. Slough: National Foundation for Educational Research. Education Management Information Exchange.

Audit Commission. 1990. Rationalising primary school provision. London: HMSO. Bowe, R., Ball, S. J. with Gold, A. 1992. Reforming education and changing schools. London: Routledge.

Campbell, R. J. 1985. Developing the primary school curriculum. London: Holt, Rinehart and Winston.

Clarke, K. 1991. Primary education – A statement. Text of a statement made by the Secretary of State for Education and Science. 3 December. London: DES.

Coulson, A. A. 1980. The role of the primary head. In T. Bush, R. Glatter, J. Goodey & C. Riches (Eds.) Approaches to school management. London: Harper & Row, 274–292.

Conner, C. 1988. (Ed.) Topic and thematic work in the primary and middle years. Cambridge: Cambridge Institute of Education.

Day, C., Johnston, D. & Whitaker, P. 1985. Managing primary schools: A professional development approach. London: Harper & Row.

Dearing, R. 1993a. The National Curriculum and its assessment. Final report. London: SCAA.

Dearing, R. 1993b. The National Curriculum and its assessment. An interim report. London: NCC/SEAC.

DES (Department of Education and Science). 1982. Education 5–9: An illustrative survey of 80 first schools in England. London: HMSO.

DES (Department of Education and Science). 1985. The curriculum from 5 to 16. London: HMSO.

Fullan, M. 1992. Successful school improvement. Buckingham: Open University Press.

Fullan, M. & Hargreaves, A. 1992. What's worth fighting for in your school? Buckingham: Open University Press.

Haigh, G. 1995. Small is not always beautiful. Times Educational Supplement, February 17.

Hargreaves, A. 1994. Changing teachers, changing times. Teachers' work and culture in the postmodern age. London: Cassell.

House of Commons. 1986. Education, science and arts committee. Third report: Achievement in primary schools, Vol. 1. London: HMSO.

ILEA (Inner London Education Authority). 1985. Improving primary schools. Report of the Committee on Primary Education. London: ILEA.

Mortimore, P., Sammons, P., Stoll, L., Lewis, D. & Ecob, R. 1988. School matters the junior years. Wells: Open Books.

National Curriculum Council. 1993. Planning the National Curriculum at Key Stage 2. York: NCC.

Nias, J. 1989. Primary teachers talking: A study of teaching as work. London: Routledge.

Nias, J. 1991. Changing times, changing identities: Grieving for a lost self. In R. G. Burgess (Ed.) Educational research and evaluation. London: Falmer, 139–156.

Nias, J., Southworth, G. & Campbell, P. 1992. Whole school curriculum development. London: Falmer.

Nias, J., Southworth, G. & Yeomans, R. 1989. Staff relationships in the primary school. London: Cassell.

OFSTED (Office for Standards in Education). 1993. The handbook for the inspection of schools. London: HMSO.

OFSTED (Office for Standards in Education). 1994. Improving schools. London: OFSTED.

OFSTED (Office for Standards in Education). 1995. The Annual Report of Her Majesty's Chief Inspector of Schools, Part 1. London: HMSO.

Pollard, A., Broadfoot, P., Croll, P., Osborn, M. & Abbott, D. 1994. Changing English primary schools? The impact of the Education Reform Act at Key Stage One. London: Cassell.

Reid, K., Hopkins, D. & Holly, P. 1987. Towards the effective school. Oxford: Blackwell.

SCAA (School Curriculum and Assessment Authority). 1995. Planning the curriculum at Key Stages 1 and 2. London: SCAA.

Spear, E. 1987. Corporate decision making versus headteacher autonomy: a question of style. In I. Craig (Ed.) Primary school management in action. Harlow: Longman, 41–53.

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.

Vulliamy, G. & Webb, R. 1992. Analysing and validating data in teacher research. In G. Vulliamy & R. Webb (Eds.) Teacher research and special educational needs. London: David Fulton, 215–229.

Vulliamy, G. & Webb, R. 1993. Progressive education and the National Curriculum: findings from a global education research project. Educational Review 45 (1), 21–41.

Vulliamy, G. & Webb, R. 1995. The implementation of the National Curriculum in small primary schools. Educational Review 47 (1), 25–41.

Wallace, M. 1988. Towards a collegiate approach to curriculum managment in primary and middle schools. School Organisation 8 (1), 25–34.

Webb, R. 1993. The National Curriculum and the changing nature of topic work. The Curriculum Journal 4 (2), 239–251.

Webb, R. & Vulliamy, G. 1996. Roles and responsibilities in the primary school: Changing demands, changing practices. Buckingham: Open University Press.

Webb, R. & Vulliamy, G. with Häkkinen, K., Hämäläinen, S., Kimonen, E., Nevalainen, R. & Nikki, M. 1997. A comparative analysis of curriculum change in primary schools in England and Finland. Final report of the York-Finnish project. University of York. Department of Educational Studies.

Whitaker, P. 1993. Managing change in schools. Buckingham: Open University Press.

Raimo Nevalainen, Eija Kimonen and
Seppo Hämäläinen
Department of Teacher Education
University of Jyväskylä

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter **6**
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter

Curriculum Changes in the Finnish Comprehensive School:

The Lessons of Three Decades

1   Changing Conceptions of Curriculum

Definitions of curriculum have undergone change and transformation depend-
ing on the school system in force and on the general aims of education. The
20th century has seen the publication of over 1100 curriculum books, each
with a different interpretation of 'curriculum'. After all, the notion of a curric-
ulum tries to answer three questions fundamental to formal schooling: What
knowledge, skills and values are most important? Why are they so? How should
the young acquire them? The 'whats', 'whys', and 'hows' have produced a rich
variety of responses as to the purposes, content, organization and implemen-
tation of curriculum over the ages (Cuban 1992, 221; see also Conelly &
Lantz 1991, 15–18; Goodson 1988, 25–38; Jackson 1992, 3–13; Sharpes 1988,
10–19; Wiles & Bondi 1989, 3–22).

A simplified version of the historical development of curricula would be
divided into the traditions of teacher- and subject-centred curricula and pu-
pil-centred curricula respectively. The teacher- and subject-centred curricu-
lum is closely associated with Herbart's (1776–1841) systematic syllabus con-
cept of 'Lehrplan', which emphasizes subjects and subject content. It was
Herbart early in the 19th century who developed a philosophical basis for
curriculum and distinguished the ends from the means (see Herbart [1902],

136–141). The ultimate goal of education was moral, to prepare the pupils for life in an idealized culture, and, as the means to this end, Herbart chose some basic subjects organized into large, connected units to arouse and keep alive the learner's deep interest (Leino 1995, 2–3). The concept of pupil-centred curriculum originates from Dewey's (1859–1952) aim of developing a form of teaching based on the children's own activity (Rauste-von Wright & von Wright 1995, 147–148; Malinen 1992, 11–15). According to Dewey (1950, 14, 16), curriculum refers to the planning of the child's learning experiences.

In the 1990s Finland officially abandoned the centralized Herbartian Lehrplan-type national curriculum, adopting the Deweyan curriculum line of thinking with its decentralized local school-based curricula (Rauste von Wright & von Wright 1995, 132; see also Nikkanen & Lyytinen 1996, 51–57). The teacher- and subject-centred curriculum might be termed the classical curriculum, and the child-centred curriculum the romantic. The central features of these curricula have been collated into Table 1 below based on the summary by Lawton (Lawton 1982, 22–23; see also Jarvis 1998, 196–197).

TABLE 1   The classical and romantic curricula (Lawton 1982, 22–23)

Elements of the classical curriculum	Elements of the romantic curriculum

Subject-centred
Skills
Instruction
Information
Obedience
Objectives
• acquiring knowledge
Content
• subjects
Method
• didactic instruction
• competition
Evaluation
• by tests (teacher-set)
• by examinations (public and
   competitive)
	Child-centred
	Creativity
	Experience
	Discovery
	Awareness
	Processes
	• living attitudes and values
	Experiences
	• real life topics and projects
	Method
	• involvement
	• co-operation
	Evaluation
	• self-assessment (in terms of self-
	   improvement)

Curricula are ever-changing social and cultural constructs, practical and interactive by nature. The practical aspect of curriculum is to be seen in the written curriculum in the school and the interactive component in the pupil-teacher encounter (Cornbleth 1990, 5; Hamilton 1995, 218). The curriculum aims at giving a holistic picture of the purposeful learning experience (see e.g. Marsh 1997a, 5–6; Saylor, Alexander & Lewis 1981, 8). The curriculum at the same time reflects the concepts of the human being, the world, education, learning and knowledge held by those compiling it (see e.g. Jarvis 1998, 189–192; Jauhiainen 1995, 69; Kosunen 1994, 86–96; Patrikainen 1997, 242, 255). Over the ages, there has been a wide variety in the points emphasized in the curricula and the associated guidelines (see Kari 1991, 72–73; Simola 1995, 74–95).

In this chapter we will give a short outline of curricula in the Finnish comprehensive school and of the changes in them during the last three decades of the 20th century. The comprehensive school provides a general education for the whole age group. It is intended for children from seven to sixteen, taking nine years to complete. The comprehensive school is divided into the lower level (years 1 to 6) and upper level (years 7 to 9) (Developments in education 1992–1994 Finland 1994, 21). We will next examine the curricular thinking and the core aims, principles and teaching methods outlined in the Committee Reports I and II on the National Curricular Guidelines for the Comprehensive Schools (1970) and the Framework Curricula for the Comprehensive School (1985; 1994). The features of the curricula and their implementation are also evaluated and commented on in the light of previous research. One important source, among others, in the analysis of the strengths and weaknesses of the curricula under study, are the interpretations made by Colin Marsh (1997b).

2 A Review of the Curricula of the Finnish Comprehensive School

2.1 Classical Curricula

Suggestions for reforms in education appear frequently in the literature, in particular proposals for curriculum reform. This would lead us to think that there are problems to be solved. The frequency of reform proposals would suggest that previous reforms did not remove the problems they were meant to solve (Marsh 1997a, 173). The curriculum reforms in the Finnish comprehensive school during the 1970s and 1980s were based on a centralized planning and decision-making process. The Committee Reports on the National Curricular Guidelines for the Comprehensive Schools (1970) and the Framework Curriculum for Comprehensive School (1985) are classical in nature (Peruskoulun opetussuunnitelmakomitean mietintö I 1970; Peruskoulun opetussuunnitelmakomitean mietintö II 1970; Peruskoulun opetussuunnitelman perusteet 1985). According to Malinen (1985, 44), 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 also the Framework Curriculum of 1985, was planned and developed centrally. By 'comprehensive school curriculum' Malinen (1985, 41, 44) means a document directing school education. This document sets out the aims and content of teaching, teaching methods, means of evaluation, extra-curricular activities, pupil counselling and subject syllabuses.

2.1.1 Committee Reports on the National Curricular Guidelines for Comprehensive Schools 1970

Structural planning for the comprehensive school was set in motion as early as in the 1950s, but it was not until 1965–66 that a thorough comprehensive curriculum began to be drafted. A detailed curriculum was presented in the committee report on the National Curricular Guidelines for the Comprehen-

sive Schools, published in two volumes in 1970 (Malinen 1985, 26; 1992, 15). This rather exhaustive report comprised some 700 pages. The first section set the overall objectives for the comprehensive school, whilst the second section was concerned exclusively with subject-specific syllabuses. Originally the aim was for the curriculum reform to be implemented flexibly with emphasis on the conditions prevailing locally (Peruskoulun opetussuunnitelmakomitean mietintö I 1970, 57). Due to the National Board of Education restrictive regulations (1972) this reform soon came under governmental control (Malinen 1992, 16). In practice, it was the Committee Reports of 1970 and the subsequently appended subject syllabuses published by the National Board of Education that shaped Finland's regional and school curricula.

The Curriculum Committee Reports of 1970 were somewhat ambiguous as far as the curricular thinking in them was concerned. The first volume was largely romantic in content. It stated that the primary responsibility of the school was to provide substance and stimulation to promote all-round development of pupil personality. School was to focus on the individual abilities of each pupil and his/her cultural environment. In learning situations, the pupil was not to be the object of external influence, but rather the subject of the activities. Modern principles, however, were not fulfilled, neither in the second, subject-specific section of the report nor 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, teaching for the most part remained behaviouristic and teaching methods largely teacher- and textbook-centred (see Malinen 1981, 116–117; 1985, 52; 1992, 16–17).

The Committee Reports of 1970 and particularly the teaching based upon them aimed at following Tyler's classical curriculum model of 1949. The Finnish school system reflected this model, especially throughout the 1970s and in the beginning of the 1980s. According to Tyler (1969, 1), the curriculum includes the four following 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 learning experiences.

The influence of Tyler's curricular thinking could, according to Marsh (1997b 125), be seen in the following educational features:

- The objectives were expressed in terms of pupil behaviour.
- Learning experiences required for the fulfilment of educational objectives came under ever-increasing scrutiny.
- In addition to the encouragement given to teacher-centred methods, emphasis was placed on the pupil's awareness of the aims to be pursued as well as on the acquisition of concepts and their integration.
- Evaluation was based on curricular aims, utilizing informal as well as formal methods, 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, it was easy to implement. However, the model did not offer any clear basis for the choice of objectives. It ignored unintended learning and over-emphasized the importance of measurable results. A limited number of teachers utilized the objectives or phase-by-phase teaching as the premises for curricular planning (Marsh 1997b, 125). It was obvious that these weaknesses in the model also became manifest in the Finnish curriculum and its implementation.

2.1.2 Framework Curriculum for the Comprehensive School 1985

The position of the curriculum in the activities of the school was strengthened and clarified in the new school legislation of 1985. Local government authorities now had many more opportunities than before to make decisions affecting their own curricula. At the same time, they now had an ever more clearly defined responsibility for formulating and developing the curriculum. Efforts were made to increase the educational options for the local government authorities and also for schools in the following ways, for instance:
- Flexibility would be possible in the organization of the weekly teaching load.
- Local government authorities could decide on the foreign languages to be taught in the schools.
- Elective subjects could be offered according to the pupils' wishes and the schools' resources.
- More optional subjects and pupil club activities could be offered.
- Introduction to working life and the organization of special topic weeks became possible.

- Schools could specify the total number of available hours of contact teaching, in accordance with existing regulations.
- National syllabus requirements could be supplemented or replaced by local preferences (Malinen 1985, 65–66).

The basis of the local curricula was the national Framework Curriculum for the Comprehensive School (1985) (Peruskoulun opetussuunnitelman perusteet 1985). In comparison to the Committee Reports of 1970 this curriculum was noticeably more concise, amounting to some 300 pages. The Framework Curriculum of 1985 was a national curriculum, the content of which could also be used as such within the formulation of the local curricula. The local government authorities had the opportunity to supplement the national curriculum to conform with the prevailing conditions (Malinen 1992, 34).

Local curricula varied greatly. In some municipalities, especially the contents of the curriculum were widely supplemented by local issues. Decisions previously made at a national level now became issues in which municipalities could formulate their own plans, such as languages offered and special needs education. In most municipalities, the section on curriculum objectives was, however, written exactly in line with the national guidelines (Malinen 1992, 34). Municipal curricula were approved by the Provincial Government Departments of Education. Each school also drew up its annual work plan, which was then submitted to the provincial government. The work plan outlined the school organization, for example how the pupils were to be grouped, with the size of the groups, and pupil club activities. In addition, school-specific pedagogical issues, areas of special interest and the selection of textbooks were presented (Kosunen 1994, 97).

Curricula were produced in the municipalities with great speed. According to Atjonen (1993, 175–177), almost one third of all teachers participated in constructing the local curricula. In this way the national curriculum was decentralized and replaced by local curricula reflecting the individuality of each locality. 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. This system was advantageous mainly to teachers involved in developmental work.

The greatest problems raised by the teachers involved in curriculum development and implementation were, according to Atjonen (1993, 177–181), the dearth of financial and human resources. This was evident especially in small municipalities. Teachers felt that they lacked personal experience in curriculum development, that the work was laborious and that they did not have enough time to do it. Obstacles also included the lack of local and pupil-centred teaching material and inexperience in using authentic, unedited resources in teaching and studying. More curriculum training was needed, not only from the administrative point of view, but also in pedagogical terms. Throughout this decade more attention has been paid to the pedagogical management of schools. A local curriculum offered an opportunity to take a sizeable step towards a romantic curriculum, away from the teacher-centred, behaviouristic approach towards a pupil-centred, humanistic and constructivist approach to learning.

During the 1980s, curricular work in Finland followed the tendency of adopting Walker's (1971) deliberative approach to planning. The premises for the Tyler model attempted to outline the curricular work that needed to be done. The Walker model concentrated on observing how curricular development advanced in practice, rather than how it should happen in theory (Marsh 1997b, 129). Finnish researchers (e.g. Atjonen 1993; Kosunen 1994), too, were interested in what really occurred in local curriculum work, not so much in what should occur there. To generalize, it may be said that Walker's three-step naturalistic curriculum model began to be seen in curricular work in Finland by the end of the 1980s.

According to Walker (1971, 56), curricula development involves the following three stages: platform, deliberation and design. The platform stage consists of 'conceptions', 'theories' and 'aims'. These three components are 'sophisticated products of reflections on life and education'. In Finland there was an abundance of less explicit expressions which Walker termed 'images' and 'procedures'. These components are useful, however, in the interpretation of curriculum development because they offer detailed knowledge of the process.

The platform phase of curriculum development is closely followed by the deliberation process. According to Walker (1971, 55), this phase of curriculum development is complicated and challenging. At this stage, designers must be able in practice to justify principles previously agreed upon. During the

deliberation phase the designers must also be able to recognize problems existing in the circumstances where curriculum is to be implemented. Similarly they must also become aware of how the curriculum itself could alleviate the problems (Reid 1994, 20). Applying these results in practice, Finnish researchers (e.g. Atjonen 1993; Kosunen 1994; Syrjäläinen 1994) have found evidence of the implementation of Walker's deliberation process in curricular work.

Finally, the curricular development process will lead to decisions to be made concerning school work. In this design phase, a curriculum is created which, among other things, contains subjects, teaching materials and recommended activities (Marsh 1997b, 132). In Finland, curriculum development based on the naturalistic approach varied from municipality to municipality and school to school. According to Atjonen (1993, 233), in some schools planning was, to a great extent, done for the school's own benefit, and in these cases the personal dialogue between participants was of primary importance. In some schools, their curriculum was merely a paper written to 'appease the regional authorities'.

2.1.3   The Strengths and Weaknesses of Centrally-based Curricula

Centrally-based curriculum development and classical curricula represented curricular thinking prevalent in Finland during the 1970's and 1980's. At the time, however, there was naturally also a development towards decentralized and romantic curricula. This development noticeably increased during the 1990s. In this way, a gradual move occurred away from behaviouristic thinking regarding teaching and learning towards constructivist ideas. It is worth mentioning that while Finland was moving away from centralized curricula towards decentralized and school-based planning, in many countries, such as England, the trend was quite the reverse.

In Finland, the era of centralized curricula was the period of the classical curriculum. During the creation of the Finnish comprehensive school system, there was much to be said for traditional curricular thinking. It aimed, among other things, to offer a uniform basis for the school system. Gradually however many of the recognized ontological and epistemological features associated with the nation's value system changed. As a result, concepts of the world, the human being, learning and knowledge received fresh emphasis and content.

Classical curricula could not meet the new challenges of the changing times. Marsh (1997b, 141) brings together the advantages and disadvantages of centrally-based curriculum development in the following list:

Advantages of centrally based curriculum development
1   provides a uniform delivery system:
    *   promotes uniformity;
    *   encourages standardization of curricula;
    *   enhances equity in allocation and distribution of scarce resources.
2   saves time:
    *   avoids detailed analysis of the needs of individual schools;
    *   is efficient and easy to manage;
    *   saves time, energy and funds.
3   ensures continuity:
    *   policies can be maintained over a number of years;
    *   students and parents can be assured that policies will be the same even if students move schools.
4   concentrates expertise:
    *   enables teams of experts to be used;
    *   enables sufficient funds to be provided to produce quality materials.
5   provides 'tighter coupling' between the school and the system:
    *   central office can control activities in individual schools;
    *   central office can require schools to reach certain goals.
6   provides high quality materials:
    *   up-to-date subject matter is included;
    *   technologically advanced techniques are used.

Disadvantages of centrally based curriculum development
1   focused upon a single approach/orientation:
    *   inhibits diversity and creativity;
    *   reduces learning opportunities in some subjects.
2   provides little teacher initiative:
    *   teachers are mere technicians;
    *   no scope for teacher involvement in planning.
3   often lack implementation strategies:
    *   insufficient attention is given to implentation strategies at the school level;
    *   central office personnel not involved in monitoring implementation.
4   increases standardization:
    *   can lead to narrow goals;
    *   assumes that schools are more alike than dissimilar.
5   depends on rational model:
    *   assumes that school personnel will want to implement policies developed centrally.

6 can increase problems for low-income/status schools:
* assumes a standard package will overcome all equity problems;
* doesn't allow targeting of local needs;
* sanctions and rewards are linked to whether a school achieves its target or not. Those schools failing to achieve their target will require to develop appropriate school improvement plans or risk staff removal.

2.2 Romantic Curricula

The school system does not merely seek to adapt to ongoing changes in today's world, it wants to play an active part in the development process. This was the basic principle behind the curriculum reform of the comprehensive school which took place in Finland during the autumn of 1994 (Elo 1994, 70). The aim was for the schools to lead the change, not merely adjust to it. From the beginning the goal was to change over to a new type of curriculum planning, not only to update curricula (Comprehensive school in Finland 1995, 8). The new school was described as flexible and analytical, its main objective being to encourage children to learn how to learn. Future schools were expected to produce citizens with intellectual curiosity capable of posing critical questions and finding a wide variety of answers. The reforms allowed each individual school to draw up its own curriculum on the basis of general guidelines confirmed by the National Board of Education (Elo 1994, 70).

The curriculum reform was needed in Finland because of the ongoing social change, a desire to improve educational quality and new concepts of curricular theory, learning and knowledge (Developments in education 1992–1994 Finland 1994, 65). Fundamentally, then, the Finnish curriculum approach of 1990s was in accordance with the characteristics reflecting the constructivist theories of learning and romantic views of curriculum. In the new school-based curriculum the pupil was seen as an active acquirer of information and creator of interpretations (Atjonen 1993, 238; 1994, 111–112, 118; see also Sahlberg 1997, 195; Syrjäläinen 1995, 14–15). (Table 2.)

TABLE 2   *The curriculum and learning conception in the 1990s (Atjonen 1994, 111–112)*

Teacher activity as represented by the curriculum conception	Pupil activity as represented by the learning conception
• teacher's own curriculum or work plan • meaningfulness, motivation • activeness, interpretativeness • commitment • collaboration, team spirit • utilization of teacher expertise • readiness to implement the curriculum • curriculum entity • teacher responsibility • school development plan	• individuality, nonconformity • meaningfulness, motivation • activeness, participation • experiential approach • social skills • utilization of knowledge basis • readiness to acquire knowledge • information entities • learner responsibility • learning environment

The development of curriculum reform in Finnish municipalities actually began in the middle of the 1980s, and the first curricula for individual schools were written during the early 1990s. Twelve municipalities were selected to promote the reform process. Certain schools within these twelve constituted a pilot group known as the 'aquarium experiment'. The idea of this experiment was to collate experiences of curricular planning from these schools and teachers, and to utilize this information to aid other schools across Finland in their independent curricular planning (Sahlberg 1997, 214–215). As a result of the experiment, the culture within many aquarium schools changed. School-based curriculum development, with teacher co-operation as its basis, increased communication among the teachers regarding the situation prevailing there. Increased teacher awareness aimed at a better personal understanding of the role of the teacher, consequently helping to develop the school as a whole. Teaching methods also changed to become increasingly pupil-centred. The majority of teachers involved in the experiment felt that the reforms brought positive changes due to the increased freedom and flexibility involved. The negative aspect of the experiment, however, was the time and effort required of the teachers in planning, as well as the resulting tiredness, along with a lack of resources. There were also teachers that were not interested in reform (Lahdes 1997, 74–77; Mehtäläinen 1994, 121–127; Syrjäläinen 1994, 109).

2.2.1   Framework Curriculum for the Comprehensive School 1994

The National Board of Education report 'Framework Curriculum for the Comprehensive School', some 100 pages in length, was, in outward appearance, noticeably more concise than its predecessors. The contents of the report were based on a constructivist approach to learning. Consequently the report did not create a uniform and detailed curriculum. The pedagogical implications of this approach were greater flexibility, with only minimal specifications for prescribed curricula (Rauste-von Wright & von Wright 1995, 132, 150–151; see Lahdes 1997, 66; Sahlberg 1997, 195). The concept and purpose of curriculum are defined by the Framework Curriculum of 1994 (Peruskoulun opetussuunnitelman perusteet 1994, 9, 15) as follows:

> [T]he 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 oder to come up with a curriculum which is descriptive of, develops, and directs the practical work of teaching.

According to the Framework Curriculum of 1994, which provided guidelines for curriculum development, the school's mission statement, tasks and distinctive characteristics were to be described in the local, school-based curriculum. The objectives and content of the topic units, school subjects as well as integrated subjects were to be defined according to the guidelines set out in the national curriculum. Teaching methods and ways of working were also expected to be covered. All members of the school community including pupils' parents and other people active in the functioning of the school, were encouraged to collaborate in the writing of the curriculum. The process of writing the curriculum was seen as both active and continuous. The aim was to change the school into a learning centre, in close contact with interest groups from the local community (Peruskoulun opetussuunnitelman perusteet 1994, 9–10, 12, 15–16). Therefore, it was necessary to promote active co-operation between schools, the surrounding communities, commerce and industry, as well as to develop one's own work on the basis of self-assessment (Comprehensive school in Finland 1995, 9).

2.2.2   Advantages and Disadvantages of the School-based Curriculum

From the teachers' point of view, the school-based curriculum no longer seemed to be something forced upon them by the authorities. Instead, it was a tool to be utilized by the school in specifying and realizing its own aims and the associated means and subject matter (Välijärvi 1999, 102). According to Syrjäläinen (1995, 42–43, 115–117), experiences and concepts involved in the implementation of the school-based curriculum varied considerably, depending on the school level. Lower-level school teachers largely found school-based curricula to be inspiring, offering them new opportunities. At upper levels of school, the experiences and feelings of teachers were less positive. In any case, the school-based curriculum offered the teachers opportunities for professional growth, increased awareness and development of their professional identity. It forced teacher communities to grow towards teamwork and community spirit. Notable points of development included the periodization of the school year, non-graded schools, provision of elective subjects, personal study plans, teaching methods based on pupil activity and qualitative evaluation (see also Norris, Aspland, MacDonald, Schostak & Zamorski 1996, 87–90). Marsh (1997b, 149) has collated the reasons for moving towards school-based curriculum development (SBCD) in the following list:

- 'top-down' models of curriculum development do not work (...);
- SBCD allows schools to have increased autonomy;
- schools need to be responsive to their environment and this requires the freedom, opportunity, responsibility and resources to determine and direct their affairs;
- schools are best fitted to plan and design the curriculum, and to construct the teaching and learning of specific programmes;
- teacher self-actualization, motivation and sense of achievement are integrally bound up with curriculum decision-making which is the staple of teachers' professional lives (...);
- the school is a more stable and enduring institution for curriculum development than regional and national bodies.

During school-based curriculum development, teachers also came across many difficulties which, among other things, led to teacher burn-out, alienation of some staff members along with the formation of cliques and divisions within the community. In addition, many schools remained quite isolated from the community around them (Syrjäläinen 1995, 115–117; see also Webb &

Vulliamy with Häkkinen, Hämäläinen, Kimonen, Nevalainen & Nikki 1997, 105–107; Hämäläinen, Kimonen, Nevalainen, Nikki, Vulliamy & Webb 1999, 112). According to Marsh (1997b, 149), generally recognized obstacles to independent curricular work included lack of time, expertise and resources, as well as school-climate-related problems. Problems more profound than these are, however, to be seen in obstacles to the professional development of the teacher, such as resistance to change both in the teacher and in the environment. According to Marsh (1997b, 149), these problems can include:

- if curriculum (policy planning) and action decisions (implementation) are both devolved to schools, teachers can not cope with both tasks without considerably more funds for professional development and relief teacher assistance;
- there are considerable numbers of teachers who are not interested in SBCD, seeing their roles as confined to teaching curricula devised by others;
- sometimes powerful lobby groups can bring about changes at the local level which produce curricula that are lacking in breadth, or are biased and outdated.

3   Conclusions

In Finland, curricular thinking has moved away from centralized, subject-centred and the rationalistic Lehrplan model, towards a pupil-centred curriculum model emphasizing locality. The models have overlapped from time to time, causing them to be used in a non-uniform fashion with a lack of coherence in the planning of school curricula (Malinen 1992, 27). In the 1970s centrally-based curriculum development of the comprehensive school was based on the ideology of mastery-learning. This thinking still prevailed in the 1980s, when there was a move towards the so-called pedagogical-administrative curriculum model highlighting local planning. The reform did not radically change the teachers' pedagogical planning processes (Atjonen 1993, 231; Malinen 1992, 21; Syrjäläinen 1994, 11–12). Curricular reform evoked strong criticism of the classical curriculum. The cumulative nature of the latter, its permanence and alienation from the surrounding reality was experienced as a problem in the ever-changing world. Many people were of the opinion 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. The classical curriculum was based

on a behaviourist approach, according to which reality can be split into separate studiable portions and their measurable aims and objectives (Syrjäläinen 1994, 13–14; Välijärvi 1991, 60–61).

According to Syrjäläinen (1995, 6–43, 115–117), the move to the school-based curricula in the 1990s was a huge process of transition for most schools. It included administrative, structural and pedagogical changes as well as changes in human relationships and working communities. At best, the curriculum has become a document that provides clear guidance in school affairs, a document that is read, one that contains written ideas to be put into practice. Whilst the school-based curriculum provides teachers with the opportunity for developing their school, it is possible that the required changes are not realized, the plans made remaining mere rhetoric. In reality, it may be that lack of teacher time, resources, expertise and training have prevented the realization of planned objectives. Lack of broad and effective discussion, reflection and work activities may also have been obstacles to reform. A particular threat to the success of reform has been seen in the shaping of the national evaluation system based on accountability. According to Simola (1995, 314), this system reinforces the technical-rationalistic culture of expertise, facilitating the effective supervision of the school syllabuses (see e.g. Webb, Vulliamy, Häkkinen & Hämäläinen 1998, 542–543, 548–551).

The era of school-based curricula has, despite its many advantages, proven to be a cause of difficulty for many teachers. The decision to decentralize curricular administration to the level of the individual school has often been felt to be an unsuccessful measure because teachers and head teachers have been accustomed to working in a centrally managed system. The freedom to act and to make independent decisions has been equated with rejection by the powers-that-be. Such insecurities have prevented successful reform. This being the case, the provision of support for teachers in their new situations is essential. If schools feel that they are being left on their own to work and develop, the general system is distorted (Syrjäläinen 1995, 112; see also Fullan 1993, 64; 1995, 259; Hämäläinen et al. 1999, 112). According to Norris et al. (1996, 77), it is important that existing structures and the resources with which we can support reform are harnessed, directed and utilized to maximum efficiency.

References

Atjonen, P. 1993. Kunnan opetussuunnitelma koulun hallinnollisen ja pedagogisen kehittämisen kohteena ja välineenä. Peruskoulun ala-asteen luokanopettajien kokemukset ja käsitykset kunnan opetussuunnitelman laadinnasta, toteuttamisesta ja kehittämisestä. (The local curriculum as an object and instrument in the administrative and pedagogical development of the school system.) University of Oulu. Department of Teacher Education Kajaani. Acta Universitatis Ouluensis E11.

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

Comprehensive school in Finland. 1995. Helsinki: Opetushallitus.

Connelly, F. M. & Lantz, O. C. 1991. Definitions of curriculum: An introduction. In A. Lewy (Ed.) The international encyclopedia of curriculum. Oxford: Pergamon, 15–18.

Cornbleth, C. 1990. Curriculum in context. London: Falmer.

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

Developments in education 1992–1994 Finland. 1994. Helsinki: Ministry of Education.

Dewey, J. 1950. The child and the curriculum. New York: Free Press.

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

Fullan, M. G. 1993. Change forces. Probing the depths of educational reform. London: Falmer.

Fullan M. G. 1995. The limits and the potential of professional development. In T. R. Guskey & M. Huberman (Eds.) Professional development in education. New paradigms and practices. New York: Teachers College Press, 253–267.

Goodson, I. F. 1988. The making of curriculum. London: Falmer.

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

Herbart, J. [1902.] Allgemeine Pädagogik. (General pedagogy.) Leipzig: Philipp Reclam.

Hämäläinen, S., Kimonen, E., Nevalainen, R., Nikki, M.-L., Vulliamy, G. & Webb, R. 1999. Opettaja opetussuunnitelman muutosprosessin toteuttajana: muuttuako vai ei muuttua? (The teacher as an implementer of curriculum change process: to change or not to change?) In H. Heikkinen, P. Moilanen & P. Räihä (Eds.) Opettajuutta rakentamassa. University of Jyväskylä. Department of Teacher Education. Principles and Practice of Teaching 34, 107–116.

Jackson, P. W. 1992. Conceptions of curriculum and curriculum specialists. In P. W. Jackson (Ed.) Handbook of research on curriculum. New York: Macmillan, 3–40.

Jarvis, P. 1998. Adult and continuing education. Theory and practice. London: Routledge.

Jauhiainen, P. 1995. Opetussuunnitelmatyö koulussa. Muuttuuko yläasteen opettajan työ ja ammattikuva? (Curriculum development and the changes in the profession of the secondary school teacher.) University of Helsinki. Department of Teacher Education. Research Report 154.

Kari, J. 1991. Kasvatus ja opetustavoitteet. (Goals in education and teaching.) In J. Kari (Ed.) Didaktiikka ja opetussuunnittelu. Porvoo: WSOY.

Kosunen, T. 1994. Luokanopettaja kirjoitetun opetussuunnitelman käyttäjänä ja kehittäjänä. (Primary school teachers as curriculum implementers and curriculum makers.) University of Joensuu. Publications in Education 20.

Lahdes, E. 1997. Peruskoulun uusi didaktiikka. (The new didactics for the comprehensive school.) Helsinki: Otava.

Lawton, D. 1982. Social change, educational theory and curriculum planning. London: Hodder and Stoughton.

Leino, J. 1995. The changing concept of curriculum. In D. K. Sharpes & A.-L. Leino (Eds.) The dynamic concept of curriculum. University of Helsinki. Department of Education. Research Bulletin 90, 1–6.

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. Lisse: Swets Zeitlinger.

Malinen, P. 1985. Opetussuunnitelmat nykyajan koulutuksessa. (Curricula in modern schooling.) Helsinki: Otava.

Malinen, P. 1992. Opetussuunnitelmat koulutyössä. (Curricula in school work.) Helsinki: VAPK-kustannus.

Marsh, C. 1997a. Perspectives: Key concepts for understanding curriculum 1. London: Falmer.

Marsh, C. 1997b. Planning, management and ideology: Key concepts for understanding curriculum 2. London: Falmer.

Mehtäläinen, J. 1994. Elämää akvaariossa. Kokemuksia koulukohtaisen opetussuunnitelmatyön ensivaiheista. (Life in an aquarium school. Experiences of school-school based curriculum development.) University of Jyväskylä. Institute for Educational Research. Publication Series B. Theory and Practice 88.

Nikkanen, P. & Lyytinen, H. K. 1996. Oppiva koulu ja itsearviointi. (The learning school and self-assessment.) Jyväskylän yliopisto. Koulutuksen tutkimuslaitos.

Norris, N., Aspland, R., MacDonald, B., Schostak, J. & Zamorski, B. 1996. An independent evaluation of comprehensive curriculum reform in Finland. Helsinki: National Board of Education.

Patrikainen, R. 1997. Ihmiskäsitys, tiedonkäsitys ja oppimiskäsitys luokanopettajan pedagogisessa ajattelussa. (Conceptions of man, knowledge and learning in the pedagogical thinking of class teachers.) University of Joensuu. Publications in Education 36.

Peruskoulun opetussuunnitelmakomitean mietintö I. 1970. (Committee report I on the national curricular guidelines for comprehensive schools.) Komiteanmietintö 1970:A4. Helsinki: Valtion painatuskeskus.

Peruskoulun opetussuunnitelmakomitean mietintö II. 1970. (Committee report II on the national curricular guidelines for comprehensive schools.) Komiteanmietintö 1970:A5. Helsinki: Valtion painatuskeskus.

Peruskoulun opetussuunnitelman perusteet. 1985. (The framework curriculum for the comprehensive school.) Helsinki: Kouluhallitus.

Peruskoulun opetussuunnitelman perusteet. 1994. (The framework curriculum for the comprehensive school.) Helsinki: Opetushallitus.

Rauste-von Wright, M. & von Wright, J. 1995. Oppiminen ja koulutus. (Learning and schooling.) Porvoo: WSOY.

Reid, W. A. 1994. Curriculum planning as deliberation. Universitetet i Oslo. Pedagogisk Forskningsinstitutt. Rapport 11.

Sahlberg, P. 1997. Opettajana koulun muutoksessa. (The teacher in the changing school.) Porvoo: WSOY.

Saylor, J. G., Alexander, W. M. & Lewis, A. J. 1981. Curriculum planning for better teaching and learning. New York: Holt, Rinehart and Winston.

Sharpes, D. S. 1988. Curriculum traditions and practices. London: Routledge.

Simola, H. 1995. Paljon vartijat. Suomalainen kansanopettaja valtiollisessa kouludiskurssissa 1860-luvulta 1990-luvulle. (The guards of plenty. The Finnish school teacher in educational state discourse from the 1860's to the 1990's.) University of Helsinki. Department of Education. Research Report 137.

Syrjäläinen, E. 1994. Koulukohtainen opetussuunnitelmatyö ja koulukulttuurin muutos. (School-based curriculum development and changing school culture.) Helsingin yliopisto. Opettajankoulutuslaitos. Tutkimuksia 134.

Syrjäläinen, E. 1995. Koulukohtaisen opetussuunnitelman toteutuminen: opettajan ansa vai mahdollisuus? (The implementation of school-based curriculum: a trap or an opportunity for the teacher?) University of Tampere. Reports from the Department of Teacher Education A5.

Tyler, R. W. 1969. Basic principles of curriculum and instruction. Chicago: University of Chicago Press.

Välijärvi, J. 1991. Uudistavan opetussuunnitelma-ajattelun lähtökohtia. (Starting points for the renewing thinking of curriculum.) In E. Kangasniemi & H. Saari (Eds.) Arviointia ja ajatuksia koulun kehittämisestä. University of Jyväskylä. Institute for Educational Research. Publication Series B. Theory into Practice 69, 59–69.

Välijärvi, J. 1999. Opettajan muuttuva asiantuntijuus. (The changing expertise of the teacher.) In H. Heikkinen, P. Moilanen & P. Räihä (Eds.) Opettajuutta rakentamassa. University of Jyväskylä. Department of Teacher Education. Principles and Practice of Teaching 34, 101–106.

Walker, D. F. 1971. A naturalistic model for curriculum development. School Review 80 (1), 51–65.

Webb, R., Vulliamy, G., Häkkinen, K. & Hämäläinen, S. 1998. External inspection or school self-evaluation? A comparative analysis of policy and practice in primary schools in England and Finland. British Educational Research Journal 24 (5), 539–556.

Webb, R. & Vulliamy, G. with Häkkinen, K., Hämäläinen, S., Kimonen, E., Nevalainen, R. & Nikki, M.-L. 1997. A comparative analysis of curriculum change in primary schools in England and Finland. Final report of the York-Finnish project. University of York. Department of Educational Studies.

Wiles, J. & Bondi, J. 1989. Curriculum development. A guide to practice. Columbus, OH: Merrill.

Eija Kimonen and Raimo Nevalainen
Department of Teacher Education
University of Jyväskylä

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter 7
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter

Teachers Facing the Challenges of Curriculum Change in the Small Rural School in Finland

1   Introduction

1.1   The Purpose and Aims of the Study

The purpose of this chapter is to describe curriculum change as seen in a small rural school in Finland. The aim is to study the effect of the changes on curriculum policies and pedagogical practices. The examination will exploit previously published empirical research. In-depth analysis will compare the research data to data obtained from qualitative case studies. Two small schools had been selected as the subject of the latter studies.

This chapter will present parts of three comparative research projects carried out at the University of Jyväskylä in Finland:

1. A Joint Research Project on Teacher Quality initiated by OECD/CERI;
2. A Joint Research Project on Active Learning organized by OECD/CERI; and
3. A Research Project on Curriculum Change in England and Finland jointly carried out by the Department of Educational Studies, University of York and the Department of Teacher Education, University of Jyväskylä (see Kimonen & Nevalainen 1993; 1995; 1997; 2000a).

1.2 Curriculum Reform in Finland

New curriculum guidelines for comprehensive schools were issued in the au-
tumn of 1994. They replaced the 1985 curriculum with its detailed specifica-
tion of content and central control of curriculum organization (see Norris,
Aspland, MacDonald, Schostak & Zamorski 1996, 27). To help promote greater
local flexibility in the curriculum, the National Board of Education devised a
scheme for 'aquarium schools' located throughout the country. Beginning in
1992, certain experimental schools were selected and charged with devising
their own school-based curricula according to new curricular guidelines (Webb
& Vulliamy with Häkkinen, Hämäläinen, Kimonen, Nevalainen & Nikki 1997,
10).

The Framework Curriculum for the Comprehensive School 1994 incorpo-
rated a 1993 revised allocation of lesson hours according to subject and spelt
out certain guidelines, both for curriculum development and for the organiza-
tion and management of schools. Emphasis was placed on schools developing
their own curricula and involving teachers and parents in this process. Other
innovations included an advocacy of thematic project approaches to teach-
ing, the requirement for a written school mission policy and a stress on joint
curriculum planning by teachers together with the necessity for schools to
engage in procedures for self-evaluation (Webb et al. 1997, 10; see also Webb,
Vulliamy, Häkkinen & Hämäläinen 1998, 542–543).

The 1994 curricular reforms represent, in theory at least, a very radical
departure from previous practice. They suggest a transition from teachers teach-
ing a nationally prescribed subject-based curriculum to schools devising, with
parental involvement, school-based community-oriented curricula emphasiz-
ing integrated project work and active-learning pedagogies. The reasons for
such a dramatic shift are complex. At one level, the reforms can be seen partly
as a continuation of an increasing recognition of problems of the overloaded,
centrally prescribed national curriculum introduced in the early 1970s, cou-
pled with moves toward decentralization of decision-making from the nation-
al to the municipal level. Discussion with educationalists and policy makers in
Finland also suggests that such reforms were to a considerable extent 'ideas-
driven' by progressive educators who had gained prominence at national level
in organizations such as the National Board of Education. This new genera-
tion of educational policy makers had been influenced by constructivist theo-

ries of learning and experience of progressive primary practice in countries such as England. However, educational reforms do not occur in a vacuum and it seems likely that a further influence was the changing economic and political climate in the Finland of the 1990s, in which tensions became more explicit between the desire for localized democracy and an incipient managerialism with an ethic of cost efficiency and accountability (Webb et al. 1997, 11; see also Laukkanen 1995, 24–25; Norris et al. 1996, 14–17).

1.3   Small Rural Schools in Finland

1.3.1   Quantitative Development

Small schools have traditionally existed in the sparsely-populated Finnish countryside. In the beginning of the 1990s approximately 60 per cent (= 2239) of Finnish lower-level schools (3729 in all) were small schools with 1–3 teacher posts. In the 1992–1993 school year there were 50 one-teacher lower-level schools (1.3%), 1352 (36.3%) two-teacher schools and 837 (22.4%) three-teacher schools (Tilastotietoja peruskouluasteen kouluista 1994, 8). (TABLE 1.) The number of small schools has, however, varied according to social, cultural and economic conditions. The quantitative development of schools has been connected to both social and educational policy, which regulates the number of schools (Laukkanen, Muhonen, Ruuhijärvi, Similä & Toivonen 1986, 19, 28). Since the 1960s the network of schools has clearly been growing smaller (Kivinen 1988, 265). Altogether 241 lower-level schools were closed during the 1980s (Koulutus. Education in Finland 1991, 33). The rate of school closure increased still further between 1990 and 1997, when a total of 570 lower-level comprehensive schools were closed down. The most significant reason for the closure of schools has been the dramatic decrease in the number of pupils. During recent years economic factors have also become significant in the decision to close schools (Koulutus Suomessa 1998, 14–15; Oppilaitostilastot 1998, 12–13; Tilastotietoja peruskouluasteen kouluista 1994, 3–4).

TABLE 1   Small rural schools in Finland for children under the age of twelve years in the 1994 school year

Teacher posts in school	f	%	Pupils in school
1	50	1.3	< 14
2	1352	36.3	≥ 14
3	837	22.4	≥ 36
≥ 4	1490	40.0	≥ 78
Total	3729	100.0	

The rapid decrease in the number of small rural schools is also a typical feature in other industrialized countries (see e.g. Leight & Rinehart 1992, 138, 142). The modernization of society, and a vigorous migration from the countryside have led to an increase in pupil numbers in the urban lower-level comprehensive schools (see Bell & Sigsworth 1987; Marshall 1985, 10–16; Nevalainen 1995, 83). In 1997, the average number of pupils in lower-level comprehensive schools in Finland was 111. In the beginning of the 1990s the average size of a lower-level school was less than 100 pupils. At that time the average number of pupils in rural schools was 62 and in urban schools 211. In 1997 over one half (56%) of comprehensive school pupils went to school in towns; approximately a fifth (19%) in densely populated rural areas, and over a fourth (26%) in the more outlying rural areas (Koulutus Suomessa 1998, 15, 18).

1.3.2   Qualitative Development

The qualitative development of a small rural school can be studied from the point of view of the school's context, resources, processes and products. In Finland attempts have been made to solve the contextual problems of small rural schools, for example, by enriching the life of the surrounding villages and developing their activities. An important developmental goal in the coun-

tryside is to strengthen the interaction between the school and the surrounding community. The cultural, material and economic resources of small schools have been developed by training teachers, repairing school buildings, writing teaching materials which offer differentiation in combined grades, increasing the financial support for school transport, and enhancing resources by applying the time-resource quota system in each individual school. Attempts have been made to solve the process-based problems related to teaching by developing pupils' independent working skills, applying the period system in teaching, and by implementing outdoor education. Furthermore, the curricula of combined grades have been developed, for example, by unifying the teaching of different grades and by emphasizing the use of local subject material in teaching. An important part has been played by increased co-operation between the school and the home, and through collaboration between small schools (Kalaoja 1990a, 93–110; 1990b, 1–3, 91–102). Below we will briefly describe two small rural schools in Finland, their physical, material and human resources.

Two Small Rural Schools

Suvila School

Suvila Lower-level Comprehensive School is located in Central Finland, in a municipality of some 5500 inhabitants. About half of the working population earn their living in trade, transport and other service sectors. About a quarter work in agriculture and forestry and a quarter in industry and in the building sector. There are eight lower-level comprehensive schools operating in the municipality. Six of these are two-teacher schools. One of the small schools is under threat of closure. In addition, the municipality has an upper-level comprehensive school, an upper secondary school and a special school. The village community surrounding Suvila School consists of 200 inhabitants, of whom the majority earn their livelihood in farming, forestry and in the log house building industry. The village no longer has a shop or post-office, but the municipal mobile library comes to the village once a week. The inhabitants of the village community have taken initiatives to improve their living conditions through local activities. Such activities involve regular social collabora-

tion. A village committee has also been formed. The school is the only common meeting place in the village. The inhabitants of the village community actively use the school for their hobbies and meetings. Consequently, the school often enjoys support from the local community, including maintenance of outdoor sports facilities and equipment, participation in outings and school camps, and visits to the school by specialists in various fields of work.

The case-study school building was constructed in 1922 and renovated in 1989. Teaching facilities, equipment and learning materials are both modern and appropriate. The school has three classrooms, a kitchen, dining room, staff room and a number of social facilities. Since the school has no special gymnasium, indoor sports are taught in the school's largest classroom and in the sports hall at the municipal centre. A small separate building in the vicinity of the school has been restored for the teaching of handicraft. The school grounds include a sports field, a store for games equipment and a covered space for playing. It is possible to teach, for example, nature study and outdoor sports in the school grounds.

There are two class teachers, as well as a peripatetic English teacher and a peripatetic special teacher. One class teacher is the head of the school. In addition to the teachers, currently two teacher aides and an ancillary worker acting as cook, cleaner and caretaker. The school board is composed of six members, a teacher and five parents. A public health nurse visits the school once a month. The school has 27 pupils who are divided into two basic teaching groups (spring 1995). These combined grades comprise eight pupils from grades 1–2, and nineteen pupils from grades 3–6, respectively. The teaching staff are well qualified. The headteacher of the school, Kalle, has graduated from a three-year teacher training course and subsequently he has completed his Master of Education degree. He has worked sixteen years as a teacher. The other teacher, Tiina, graduated eight years ago from a modern five-year teacher training programme, leading to the degree of Master of Education. After their basic training the teachers have regularly taken part in teachers' in-service training.

Ranta-Sointula School

Ranta-Sointula Lower-level Comprehensive School is located in a Central Finnish municipality with 5000 inhabitants. Some fifty per cent of the population are employed in the service sector. Approximately a third is in farming and forestry and a sixth in industry. There are ten lower-level schools in the municipality, eight of which employ two teachers. Two of the small schools are under threat of closure due to a decrease in the number of pupils. There is an upper-level comprehensive school, an upper secondary school, and a special school in the municipality. Ranta-Sointula School is located in a remote village with 350 inhabitants. The majority of the village people earn their livelihood in farming and forestry. In addition to the school there is a chapel and camping centre, owned by the church, and a small grocery store with postal services in the village. The village is serviced by a mobile municipal library. The members of the village community have taken initiatives to improve their living conditions through local activities. The village has a village committee chaired by the headteacher of Ranta-Sointula School. The village committee also deals with matters pertaining to the case-study school, as the school is under threat of closure, due to decreased municipal and governmental funding. The driving force behind the local activity is the concern over the possible closure of the school with its consequences to the population structure and the interaction of the villagers. Now the inhabitants of the village community use the school actively for hobbies and meetings. In fact, the school is the only rent-free venue in the village, refurbished with the help of the villagers.

The case-study school building, built in 1910, is situated on a very beautiful lake site. It has been renovated, and teaching facilities, equipment and learning materials are up-to-date and appropriate. There are two classrooms, a woodwork shop, a gymnasium, a kitchen, a staff room, and a number of social facilities in the school. The school grounds include a sports field, a playhouse, and a sheltered area for games. There is another sports field and a beach by the lakeside. Also the immediate surroundings of the school offer many possibilities for teaching biology and outdoor sports. Because of the large size of the school district, almost all pupils of Ranta-Sointula School are transported there by taxi, the daily journeys otherwise being too long.

There are two class teachers and a peripatetic English teacher in the school. Whenever necessary, the school is also visited by a peripatetic special teacher. An ancillary worker who acts as a caretaker and a cleaner is involved in the daily work of the school. The school board consists of seven members and six substitutes, the headteacher being the secretary of the board. There are 24 pupils in the school, divided into two basic teaching groups (spring 1995). These combined grades have been formed from six pupils from grades 1–2, and fourteen pupils from grades 3–6. Pre-school was attended by four children. The human resources in the school are very good from the point of view of the teachers' educational level. The headteacher of the school, Liisa, has graduated from a four-year teacher training college. She has been working as a teacher for 15 years. Both the other teacher, Olli, and his substitute teacher, Tuomo, working during the 1994–1995 school year, graduated from a modern teacher training programme lasting some five years, leading to the degree of Master of Education. Since graduation, Olli has been working for five years and Tuomo for a year.

1.3.3   Changing Financing Systems

The teachers in small schools are responsible for managing the budget of the school. At the beginning of 1993 a new financing system with an impact on the financial resources of schools was launched in Finland. According to this system, the educational and cultural sectors receive financial support in the form of project-specific state grants, the amount being determined in terms of the national total cost per a pupil. At the municipal level, the state grant is seen as a special lesson hour quota index, i.e., the lesson hour quota per pupil. At the lower level of the comprehensive school the lesson hour quota is determined according to the number of teaching posts, which in turn is determined on the basis of the school's pupil numbers (Laukkanen 1995, 25–27; Pirhonen 1993, 17; see also Nikkanen 1999, 116–124). For example, at Suvila School, 28.5 hours of the weekly lesson hour quota can be used for each teaching post, amounting to a total of 57 hours per week in the whole school. The Municipal Board of Education is given a certain amount of money and it makes a general plan for its expenditure. The board allocates the funds to the schools, which then independently decide on their particular use. It is believed that

the new system is favourable to the preservation of small schools (see also Pirhonen 1993, 13, 17, 20). The current weak economic situation in the Finnish municipalities is, however, reflected in school budgets. The teachers are required to manage on a budget that is continually being cut.

According to the budget of Suvila School (1993), the school's largest expense item consists of the wages and social security expenses of the teachers and other staff. These make up about 80 per cent of the annual expenditure. Approximately one fifth of the expenses is directed towards maintaining the premises as well as purchasing school materials and necessary services. Pupil transportation forms the greatest service cost, comprising about seven per cent of the school's annual expenditure.

2 Implementation of Curriculum Change in Rural Schools

2.1 Management of Change

Curriculum development in Finland has been successful, especially in schools with a tradition of rich innovation. Management and teachers' co-operation skills are seen as central factors contributing to a successful outcome. Additionally, teachers' personal interest in their professional development has been a prerequisite for success. It is possible that successful curriculum work has also further encouraged school development (Syrjäläinen 1994, 57; see also Atjonen 1993, 175–177; Bell & Sigsworth 1987, 156–166; Vulliamy 1996, 34–35; Webb 1996, 32). According to Fullan (1993, 20), school reform is a never-ending process of change, characterised by complexity, dynamism and unpredictability. Various phases in educational change can be distinguished (see Fullan with Stiegelbauer 1991, 47–48). For example, Suvila School has been following its own curriculum since 1992. The school-based curriculum was revised during spring 1994 to correspond to the new national curriculum. The teachers in Suvila School suggested that the process of change from a traditional school to a school applying the principles of progressive pedagogics started at the end of the 1980s. The change proceeded in phases, by means of the experiences gained by the teachers in their practice and of discussions held about these experiences. During the first phase of the change, the teach-

ers began working with topic units lasting for 1–2 weeks. At the same time, they dismantled the system of teaching based on contact hours. During the second phase, the teachers increasingly stressed the need for activity-oriented learning in their teaching. The duration of the topic units was extended, in order to allow more time for the pupils' own project work and to allow them to go into greater depth. During the third phase, the teachers extended the school day, so that school started and ended at the same time every day.

> We've been making this change bit by bit, the whole time. We've not made any sudden changes. One of the most important changes was that I broke the 45-minute teaching system and built larger systems. ... First came the construction of project units. At first, the units were shorter, a week or two. ... Then I extended the periods to make activity-oriented learning possible, and so that we could deal with things more deeply. ... Pupils were given time for their own project work. The final product is something I've tried to deepen all the time. The activity-oriented learning revealed that the Finnish school practice does not make this system possible. That's when we gave up this school day that is tied to a strict number of hours. (Kalle, male teacher)

Educational change for its part presented the teachers of Ranta-Sointula School with insurmountable problems concerning the curriculum development process. According to Syrjäläinen (1994, 50–56), Finnish teachers often experience curriculum development as problematic. In many schools the work could have been easier had the obstacles been recognized in advance. The teachers feel that seeing the general trends, as well as the reflection of the school values and the nature of general education, are quite difficult. Many teachers complain about the strenuousness of curriculum planning and the lack of time, because the work is done mainly after normal working hours. The main barrier to curriculum development is the teachers' resistance to change (see also Atjonen 1993, 177–181; Jauhiainen 1995, 152–156). For example, the teachers in Ranta-Sointula School were openly critical regarding the effective implementation of the new school-based curriculum. The headteacher felt that the construction of the school curriculum was especially hindered by the transfer of the other teacher, the prevailing lack of teacher co-operation, and the general curriculum development in the municipality. Moreover, she was no longer interested in in-service training. Some parents also expressed the wish that the school should concentrate more on the traditional teaching of basic skills. They felt that the teachers' responsibility is to

teach the pupils the three R's. In addition, the economic situation in Finland was getting worse, and, in her opinion, it made many decisions in the school more difficult.

> I have been slowed down by the fact that the previous male teacher left and we had a totally different view of the future. ... It ended right there. I was really desperate, what should I do now. ... We were getting on with the curriculum work very well. Then there was some talk about the curricula varying a lot, because other schools were not doing anything. There even were teachers who were against it. Then we decided to help the schools all together. (Liisa, female teacher)

> I personally have a certain idea about the new curriculum: I am cynical about it. I can barely do the job. ... It is only my opinion that there is no big change. ... My contribution to the curriculum in this school has been to copy the subject contents of the Vesala school curriculum from the Teacher's Journal, leaving something out. Re-writing it. And there we have it. (Tuomo, male substitute teacher)

2.2 Basic Features of Instructional Organization

The work of a teacher in a small rural school is comprehensive in nature. The teacher is required to take responsibility for administrative duties such as budgeting, the planning of activities and contacts with school administrators, attending meetings of the school board and the teaching staff. The teacher is required to be familiar with matters related to maintenance of the school building and to pupil welfare. He/she must also be capable of functioning as the head of the school. In addition to scheduled teaching, the teacher's work includes among other things morning assemblies, supervision during breaks and school meals, and collaboration between the school and the home (Kimonen & Nevalainen 1993, 94; see also Galton & Patrick 1990, 167; Gardener 1986, 117, 123; Kalaoja 1988b, 99–100; Vulliamy 1996, 26–34; Vulliamy & Webb 1995, 40). For example, the teachers at Suvila explained that they planned the activities of school together at the beginning of the semester and this plan of action was mapped out in more detail in the form of weekly plans. The headteacher presented to the school board the work plans for the school year and the budget proposals that had been drafted co-operatively. Similarly, the pupils' parents had taken part in the planning of school work.

We have a planning day in the autumn and in the spring. It has consisted of putting together the curriculum these last couple of years. ... The way we run the school, the way we organize free-time and work, that's our business. We are given a budget framework and the school head is responsible for its implementation. Before school starts in the autumn, we work for at least a day. The budget gets done when it's time for it. We make the orders for textbooks and materials together around this time in spring. ... Statutory decisions are made in a certain order. Decisions concerning practical activities are very informal. In other words, it's all very flexible and easy. (Kalle, male teacher)

2.2.1   Towards a New Organization of Teaching and Learning

One of the most powerful direct influences of the innovative visions of a school is that exerted on the organization of teaching and learning. This link can be clearly seen in the description of Suvila School (see Hopkins 1994, 93). A key policy for Suvila School is to emphasize the interaction between the school and the surrounding society, allowing pupils to learn from their own environment. The acquisition, processing and application of knowledge, as well as the production of new knowledge, are also underlined. Co-operative work and respect for pupil diversity are major elements in the school's approach. The Suvila School curriculum (1994) first describes the underlying values of the school, its modus operandi and the most central objectives of the activity. The contents of the curriculum consist of four major parts:
1. The individual curriculum of a pupil constructed together with the teacher, pupil and his/her parents, revised annually and containing the emphasis areas to which special attention is paid with this pupil;
2. The curriculum for the instrumental subjects, containing the topics in mathematics, mother tongue (Finnish) and the first foreign language (English);
3. Environment-oriented subject matter, containing the theme units of environmental and nature studies, history and religion; and
4. Syllabus for arts and crafts subjects, containing the core contents of music, art education, physical education and handicrafts.

Finally, the curriculum briefly discusses the teaching and evaluation methods used by the teachers.

The school year in Suvila School is divided into teaching periods of approximately six weeks each, according to various themes. The contents of modern subjects, such as biology, geography, religion and history, are studied as theme units. At the end of the theme unit instrumental subjects are taught intensively for one week. Part of the instruction in Finnish and in practical and aesthetic subjects takes place in the form of workshops. Every seventh week, pupils can select a workshop. Video, cookery, music, art, or computer workshops are among those offered by the school. (See Appendices 1 and 2.)

The school day begins with morning exercise in the school yard, followed by a morning assembly for all pupils held in the largest classroom. The first work period of the day lasts approximately one and a half hours. The school's lower grades (grades 1–2) work as a separate group. At the same time, pupils in the upper grades (grades 3–6) have an individual study period of mathematics, Finnish, or English. After the first work period all pupils participate in outdoor exercise and then have lunch. After lunch, the first two grades have a story-telling hour, during which they can also rest. At the same time, the pupils of the upper grades work on their projects or in different workshops. During the afternoon work period all pupils continue with their projects or study practical or aesthetic subjects. They also have a small snack in the afternoon. (See Appendix 3.)

Below we will examine the curriculum of Suvila School more closely from the point of view of policy implementation. We will focus on the process of project work within the combined grades.

2.2.1.1 The Project Method in a Combined Grade

In project work, a teacher functions primarily as an instructor and work supervisor. Pupils' skills and knowledge are based on active work and participation in problem solving (see Gutek 1992, 118–119). In the project work of Suvila School pupils study and concentrate on certain topics, which currently change every five weeks. Usually they work in groups made up of pupils of different ages. Both teachers supervise them during the work.

> Even today I have felt like 'a supply wagon'. I go around instructing where to find information, take these books. Here you have the tools for this. 'The wagon' goes

asking what they would need. That's the way I feel. In a way, I am responsible for the material, that it is available. ... The role of the pupil is to dig and to be curious, seek information, collect it, choose and modify it so that there is a product of a new kind. ... To collect information and share it with others. In a way they learn themselves, and also teach someone else. Being a responsible worker is one of the roles. In that one particular group they are responsible for their own tasks. (Tiina, female teacher)

In the following we will describe the different phases of the project work that was undertaken in Suvila School during our research period in 1994. We observed the final week of a three-week study period, when pupils were completing their final product arising from the topic of communication. The project work included three phases:
1. Motivation and orientation;
2. Co-operation: planning, practising, producing and differentiation; and
3. Evaluation.
The purpose of the week's project was for pupils to prepare co-operatively a commercial and a bulletin. The teacher introduced the pupils to the topic on Monday and then pupil groups planned and carried out their work. The outcomes of the project work were evaluated on Friday at the end of the school week.

1. Motivation and Orientation

Initially all pupils gathered in the largest classroom of the school. They were seated at their desks in groups of five, each group including pupils from different grade levels. The teacher announced to the pupils that the purpose of the final week of the communication topic was to plan and prepare, as a group, a video commercial for a product invented by the pupils themselves. Motivation for the project work was generated by looking at television commercials. After the viewing, the essential features of the commercials were discussed as a class. The teacher also explained the aims, schedule, and organization of the work and the necessary equipment.

This week we are going to compose the final product of the communication topic. It includes two tasks, which will be done in groups. ... First of all, the group creates a commercial. That commercial is recorded on video tape. The group must decide by itself what the product is that you are going to advertise. ... You must invent some product and after that make an advertisement that is suitable for the product, so that

you could get them sold, scores of them. To refresh your memory, let's see a few commercials. ... Tomorrow's lesson can be used for preparing the props. Today we'll prepare the commercial to the point where later on you don't have to do anything else except maybe bring from home some clothes you need in the performance. ... On Wednesday we'll start shooting right away. Now, what we'll do is this: three groups start with this video, since we only have one video camera. ... The two remaining groups will start with the video on Wednesday. ... Those who start with the video will think it over bit by bit. You make a plan about the plot, and the product you intend to advertise must also be seen in this plan. (Kalle, male teacher)

As a temporally differentiated final product, pupils had to draft a bulletin during the week, whose purpose was to inform future first-graders about affairs related to the school, or to offer information about the opportunities provided by the village to new inhabitants moving into the area. The text for the bulletin was to be planned as a group work task and typed out on a computer. The teacher emphasized the importance of successful task allocation in the working of the groups.

The bulletin is to be made using a publishing program ... on the computer, but empty spaces are left for the pictures, and they are drawn in pencil. When you assign duties in the group, you should decide on the division of work, so that those who write the texts and those who draw the pictures are different ones. ... On Friday everybody's work can be specified, when we look at the input of each person. (Kalle, male teacher)

Two groups of pupils started to work on the commercial and three groups on the bulletin. We observed more closely the project work of two groups involved in producing a video commercial. In the following we will examine the planning, practice, and production phases of the project work in groups A and B, as they are labelled here.

2. Co-operation

Planning

After the orientation phase, pupils started the planning of the commercial in small groups. Observation group A consisted of a pupil from the sixth grade (girl), two pupils from the fourth grade (boy and girl), and two pupils from the first grade (boy and girl). The sixth-grader acted as chairperson and she also

recorded the proposals made by group members. In addition to the chairperson, most of the ideas for planning were presented by the fourth-grade girl in the group. The youngest pupils mainly listened and gave only a few ideas. The chairperson directed the discussion and frequently went to show the outcome to the teacher. The teacher gave feedback and encouraged the pupils to continue with their work. As planning proceeded, the pupils discussed the clothes they would wear in the commercial. The teacher also gave suggestions for clothing.

> Girl, 6th grade: Do you have any summery skirt with flowers, for example?
> Girl, 1st grade: I don't, but I have flowery shorts.
> Girl, 6th grade: Well, bring the pants ... Where are we going to do it? We must solve these problems, so that we can start practising. It ought to be summer-like ... Let's show it to the teacher and say that ...

Observation group B included a pupil from the sixth grade (girl), two pupils from the third grade (boy and girl), and a pupil from the first grade (boy). In this group, too, the sixth-grader acted as leader. At first the pupils could not agree on the topic of the commercial. The third-graders of the group suggested different alternatives, which the chairperson, however, did not accept. The youngest member of the group sat rather quietly, went along with the others, and accepted ideas from the other group members. Finally, the chairperson of the group decided the topic of the commercial independently. The pupils then made a concise plan of the commercial on paper and showed their plan to the teacher.

> Boy, 3rd grade: Nothing suits you, see ... OK, everything suits us that you say. We must get this done somehow. You make a suggestion, you haven't yet proposed anything.
> Girl, 6th grade: You go on.
> Boy, 3rd grade: I already have, but nothing is good enough for you.
> Girl, 6th grade: I can't think ... Now we'll make a toothpaste commercial. Say what you like, but we'll do it about toothpaste.

Practising and producing

After the planning phase, the pupils began the practising and producing of the commercial in their groups. The pupils in observation group A first practised without the video recorder. By this stage, the group members' roles had

already become differentiated. On the second research day the pupils contin-
ued the dramatization. The older girls of the group also prepared props and
sets needed for the commercial. The youngest members, however, sat fairly
passively. When the necessary paraphernalia was ready, the group started to prac-
tise, using the video recorder. During the filming process, the teacher gave the
pupils instructions about the use of the recorder and ensured that the events were
on the video tape. After the filming, the pupils cleared up the space, dismantled
the sets and returned their role costumes to their appropriate places.

> Girl, 6th grade: I got those sodas in the picture all right. Matti, you don't have to turn
> the camera. Just film the kiosk. Now the camera is at the spot where you can start
> filming. This red starts the recording.
> Teacher: Remember now to speak up. Leena, check the distance. Remember the breaks
> between the shootings.
> Boy, 4th grade: Where does it shut off?
> Girl, 6th grade: Same place as you turned it on.
> Teacher: Leena, show a sign when the filming can start.

The pupils in observation group B also worked on their commercial. The
group leader guided the activity of her group in a dominant manner. The
youngest members participated in the rehearsal and production of the com-
mercial by taking on roles, but did not actively solve problems that emerged.
The pupils were also dependent on the teacher's guidance.

> Girl, 6th grade: You come a little closer at this point. You don't have to move. I can
> take a close-up with the camera ... The first one comes as practice and we won't film
> until the second time. This cord is not long enough. Now this thing went off ... Go and
> get the teacher.

Differentiation

The observation groups started the planning of the bulletin after the commer-
cials were completed. The pupils in group A began by voting on the subject of
the work. They then discussed the content, illustration, and method for real-
izing the bulletin. In the group they also allocated the necessary tasks. The
project work was carried out on the last day of the week, the pupils drawing
pictures and writing the text using the computer publishing program. When
problems emerged, the pupils, however, relied on the teacher's assistance.

Girl, 6th grade: Which one do we take? The one for the first-graders or the story about the village? Who wants to do it for the first-graders, put up your hand? Who wants to do the village thing, put up your hands?
Girl, 6th grade: Let's do it about the village. The majority won.
Boy, 1st grade: I could draw some pictures. Are they drawn by computer or by hand?
Girl, 6th grade: They are drawn by hand ... What are we going to write here? Let's go and ask the teacher how this is done. Wait a bit, I will go ...

The pupils in group B eagerly discussed the content and illustration of the bulletin and all group members presented their opinions. The group leader still behaved in a dominant way, but the group had the clear common objective of succeeding in their task. They did not require the teacher's help this time.

Girl, 6th grade: Hey! We must write about the school. The village has a fine small school.
Boy, 3rd grade: Write like this. The village has a good school and 50 different families. Your children will surely be happy in a small school!
Girl, 6th grade: You mustn't fool about.
Boy, 1st grade: We should get this finished, so that we can go to the computer. I thought of the idea that there are fine views in the summer and lots of other things.

3. Evaluation

On the final day of the school week, the pupils came together to evaluate the outcomes of the project work. The teacher led the discussion. First the class viewed the commercials produced by the pupils. The pupils were instructed to observe how the commercials affected them. After the viewing, the teacher enquired from the pupils which product they could especially remember. He also asked about the difficulties that had arisen from the activity and drew conclusions regarding the significance of commercials and the methods they employed. Pupils reported that it had been difficult to estimate the duration of the commercial. Also acting had been problematic. In addition, the special effects used in commercials and the truthfulness of commercials were briefly discussed.

The bulletins were also evaluated. They were posted on the blackboard and the problems that had emerged in their construction were recalled. Finally, the pictures were examined, and there was a brief discussion as to what attracts the individual's attention when he/she looks at such bulletins.

During the joint compilation of the project work, the teacher directed the discussion through questions although only the oldest pupils participated actively in the discussion. The teacher gave positive feedback to the pupils. Later on, however, he gave a more critical evaluation of the activity and outcomes of each pupil in written evaluations, which were entered into their personal study-books. Also the pupil and his/her parents were able to evaluate the pupil's working process and its results in the study-books.

> Your movie analysis was carefully done. The summary of TV-monitoring is clear. Your commercial (Chap-soda) has variety and is effective (although perhaps too long). It seems that there wasn't enough time for preparing the bulletin. On the whole, your group was successful in its work. You acted as a responsible group leader. (Teacher assessment in the study-book of a 6th grade pupil, girl)

2.2.1.2 Challenges and Obstacles in Project Work

In the above we have examined teacher and pupil roles in the orientation, co-operation and evaluation phases of the project work in Suvila School. Furthermore, we have discussed problems that emerged in the activity. The essential tasks of the teacher in the orientation phase were pupil motivation and instruction giving. During the co-operation phase he actively gave advice and patiently guided the activity of the small groups. During the evaluation phase the teacher examined the products with the pupils. Later on he also wrote feedback notes on pupil outcomes and their work (see e.g. Johnson, Johnson & Holubec 1990, 43; Olkinuora 1994, 68; Page 1990, 78–79). The project work which was carried out in small groups gave pupils the opportunity for active interaction with one another and for jointly solving problems that arose from the tasks (see e.g. Kyriacou 1992, 42). On the basis of our observation, the most problematic element in the co-operation of the groups was the scarcity of negotiation and conciliation skills in conflict situations. The passivity of the youngest group members, especially in the planning of the work, was a recurring characteristic. There was also a feeling of frustration towards the youngest, the most passive and the most dominating group members. A general feature was the occurrence of problems in the processing of information. The students selected, grouped, classified and interpreted information in a rather modest way. Futhermore, they did not form or test their hypothe-

ses, easily accepting the first solution that came up, all this resulting in a routine and conventional report (see Watts 1991, 41–42). Simultaneous mastery of the social and cognitive goals set for small group work is certainly a difficult challenge for pupils in the active learning process of project work. However, projects offer them a unique opportunity to develop skills and abilities, such as problem-solving, social and communication skills, and therefore the learning potential of projects is significant. The other teacher, Tiina, described her own experiences concerning the weaknesses and strengths of project work as follows:

> One of the weaknesses in project work I've been very worried about up till now is the chance that there's someone avoiding all work after all. Just this sense of responsibility. ... First I doubted whether the basic concepts get cleared up. Now I am wondering what the basic concepts are that should be learned. After all, how important are the contents, if they pick up the process and find the facts. This is one of my fears – maybe it's already gone. ... Then, another problem, and what I fear, is that some pupils have poor intellectual resources. We should of course keep on practising more. The problem is, as their work is so heterogeneous, the learning of note taking techniques, so that it wouldn't consist of just copying. ... Can we make progress in the acquisition of knowledge. So that they'd be able to assimilate it into their own concept map, adding it to what's been already learned. Or is it something detached, so that they cannot find the place where this and that fact belongs. ... Also I fear that this system has now been taken so far that when a co-worker comes from some other place, I feel the anxiety and pressure from the colleagues from other schools in a certain way ... It is no easy task driving in this kind of a system. ... There's no roof to knowledge, there's no limit to the load of work. You can learn as much as you like. I think that this comes very close to the real-life quest for knowledge. ... All those things come up somehow: looking for information, finding it, selecting and producing it. The same processes come up that are met in ordinary everyday life, if we are doing some studying of our own. (Tiina, female teacher)

2.2.2   Maintaining a Traditional Organization of Teaching and Learning

The significance of a curriculum as a guideline for teaching has often been proved to be rather modest. The teaching has mostly been guided by instructional materials (Atjonen 1993, 172; Kari 1988, 46; Korkeakoski 1990, 114–119; Syrjäläinen 1994, 15). With the development of school-based curricula in the 1990s, the role of the curriculum as an instrument of planning the

teaching has become more important (Jauhiainen 1995, 109; Kosunen 1994, 284). Nevertheless, in Ranta-Sointula School the textbooks still strongly directed the development of the school-based curriculum. Subject-centred aims and contents were thus based on the textbooks.

According to the curriculum of Ranta-Sointula School (1995), in-depth skills of the lower-level school syllabus are emphasized in teaching. Consolidation of the pupil's social skills, a healthy way of life and love of nature are additional aims. The goal is a good and self-disciplined life. The curriculum is clearly subject-centred. The aims and contents of each subject are presented very briefly grade by grade. Likewise, the curriculum lists superficially the teaching methods and the various operational forms of the school. The structure of subject contents is based on the national Framework Curriculum for the Comprehensive School (1994).

The teaching follows the schedule originally based on the distribution of lesson hours according to the Framework Curriculum for the Comprehensive School (1985; 1994) (Peruskoulun opetussuunnitelman perusteet 1985; 1994). In the schedule, all the subjects studied in each combined grade are clearly listed. The school day begins with a morning assembly for all pupils in the largest classroom. Subsequently the school's lower grades (grades 1–2) usually go to their own class. Then the school day generally proceeds in lessons of 45 minutes from one subject to the next, with the lessons separated by recesses of 15 minutes. After the second lesson all pupils have lunch. (See Appendices 4 and 5.)

Below we will examine more closely the combined grade curriculum of Ranta-Sointula School, from the point of view of policy implementation.

2.2.2.1 The Traditional Teaching Process in a Combined Grade

In teaching combined grades, the teacher teaches two or more grades simultaneously. In mathematics, Finnish, and English each pupil follows the syllabus set for his/her own grade level. In orientative subjects, such as history, religion, and environmental and nature studies, an alternating course system is utilized. In this system the subjects are taught in yearly alternating cycles (see Peruskoulun opetussuunnitelman perusteet 1985, 43).

In both combined grades of Ranta-Sointula School, the teaching process primarily proceeds according to a model that is based on similar, traditional pedagogics (see also Laukkanen & Muhonen 1981, 268). In the teaching of the above grades, presentation by the teacher and independent work by the pupils alternate. The teacher disseminates information, he/she supervises and controls. The most important audiovisual equipment is the blackboard and chalk. After the teacher-centred phase, which is common to the whole group, the pupils work independently according to the guidelines presented by the teacher. They are used to peaceful and diligent work. No disturbances take place, even though the teacher might go out of the classroom. It is possible that this kind of combined grade instruction based on the teacher's control will not allow real development in the learner's responsibility and initiative. Liisa, the headteacher, described teaching in her combined grade 1–2:

> In mathematics one grade practises the sums we have already dealt with, doing extra exercises and other practical applications, playing shopping or calculating with puzzle cards. During this time the other grade is instructed in a new task. They will do the sums on the blackboard and I will supervise them. When they have mastered the task, they will continue practising on their own, and I will start instructing the first group. Or they will act as teachers and they will show the examples to the others. In other subjects we will check the homework first, if there was any. Then we prepare the next topic as group work, reading or looking it up in the book. (Liisa, female teacher)

The other teacher of the school teaches the pupils of grades 3–6. The pupils of grades 3 and 4, and the pupils of grades 5 and 6, respectively, form two teaching groups. While the teacher is teaching grades 3–4, the pupils of grades 5–6 work individually. After this phase, the learning in the upper grades is teacher-directed, and the lower grades work independently, according to the instructions given by the teacher. Tuomo, working as the substitute teacher, described his teaching:

> The class is divided into two groups. One group (grades 3–4) works individually and the other (grades 5–6) is taught. In fact, we are carrying out the same principle, trying to divide the lesson into two. One half is instructed and the other studies silently. We made the division so that when grades 5–6 are being instructed in history, grades 3–4 are doing religion. It has been quite a lesson in religion for 3–4, individual reading and an extensive, too extensive, actually, making of summaries. Reading a chapter, drawing a picture based on it and making a summary. Sometimes I have helped by underlin-

ing what to write where, for instance, 'Jacob was walking in the desert', and so on. (Tuomo, male substitute teacher)

In the following we will describe the pedagogical practices that were undertaken in Ranta-Sointula School during our research period in 1995. The teaching was mostly teacher-directed and subject-centred; for example, in biology and environmental and nature studies, the focus was on one particular topic. In the environmental and nature study lesson, grades 1–2 were dealing with electricity. The pupils were seated in the classroom at their own desks. The class included two pupils from the first grade and four pupils from the second grade. In addition, the class was attended by four pre-school children. At the beginning the teacher distributed a leaflet about electricity to the pupils. Then she wrote the topic of the lesson on the blackboard, sat down and started to read while the pupils followed the text in their own leaflets.

> Let's print the title here in capital letters. Now listen to me for a while. Let's look at the electricity book from the beginning. ... Who's that singing and making a noise? ... Let me read a bit, so we'll get this book read sooner. (Liisa, female teacher)

The teacher also asked about the pupils' experiences with electricity. She told them about the new street lights to be installed on the street leading to the school, and about a recycling bin for batteries to be placed in the school yard. Only a part of the class participated in the discussion. Then the teacher announced that the pupils had to do one exercise from the book individually. Next to the electric appliances, there were pictures of traffic lights that the pupil was to colour in appropriately, depending on whether the pupil was allowed to use the appliance or not.

> Take a red, a yellow, and a green! Now work each on your own and colour with the right colour here. Hey, you weren't listening to me and now you don't know what to do. The order of colours is this. ... You can't use an electric mixer. So you've got to put red. (Liisa, female teacher)

The teacher supervised the pupils on an individual basis. At the end of the lesson the exercise was checked and homework given.

2.2.2.2 Challenges and Problems in Teaching a Combined Grade

A multiplicity of problems related to teaching arrangements, learning materials and the teacher's work have been detected in the teaching of combined grades. The simultaneous teaching of four groups of differing class levels in a lesson of 45 minutes will, according to the teachers in the research reports, result in hastiness of teaching, superficiality and disjointedness, disintegration of the teacher's personality, a jig-saw puzzle of teaching and fragmentary instruction. In addition, teachers often find differentiation difficult in combined grade teaching. Especially problematic is the individual guidance of pupils with learning disabilities. Although a peripatetic special teacher visits the small schools when necessary, the supply of special services is often insufficient (Kalaoja 1990a, 49, 99–100, 102, 108). For example, the class teachers in Ranta-Sointula School argued that the most problematic thing was the teaching of grades 3–6, where the combining and comprehensive integration of instrumental and modern subjects in particular was considered very difficult. To summarize, the teaching of combined grades presupposes that the teacher has very good organizational skills, ingenuity, flexibility, tolerance of uncertainty and the skill to attend to the individual needs of every pupil (see Kimonen & Nevalainen 1993, 97). The small pupil groups in the case-study school above would, however, provide a good starting point for this.

> It really bothered me when I looked into that broad-field teaching business and tried it out in grades 3–6. ... How on earth can I work with it in 3–6 when it is so different there? They have geography and biology and all those sorts of things there. ... I have to say that 3–6 is a difficult combination. What happens is that mathematics suffers particularly in 5–6. We should rescue mathematics ... (Liisa, female teacher)

3 Perspectives on Teacher Professional Development

In teacher education teaching in combined grades of rural schools is only briefly dealt with during the four-week practice teaching. According to Nevalainen (1995, 292), over 60 per cent of the teachers (165 in all) in small schools felt that current teacher education is better suited to the needs of big urban schools. More than half of them said that their education was not ade-

quate for the tasks of a small school teacher (see also Kalaoja 1991, 22, 77). Also current in-service training for small rural schools is considered unsuitable in content and method (Kalaoja 1991, 102–106, 113). According to Kalaoja (1991, 102–106, 113), approximately half of the teachers in small schools (56 in all) required more in-service training in teaching arts and handicraft in combined grades and about a quarter in teaching in combined grades in general. Moreover, the teachers expressed a desire to know more about the special features and evaluation of different subjects and diverse approaches to the philosophy of teaching. According to Nevalainen (1995, 294), approximately half (52%) of the teachers (165 in all) in small schools felt that they had not received sufficient in-service training for their work. For example, the teachers in Ranta-Sointula School said that among other responsibilities they have to familiarise themselves with budgeting, since hardly any attention is devoted to this area in pre-service or in-service training.

> The budget is drawn up on a trial-and-error basis because we have so little money. My school has the smallest budget of all two-teacher schools in this municipality. ... It is important that a teacher can get by with less, use all the creative talent and collect material. (Liisa, female teacher)

The headteacher in Suvila School has participated in a two-year consultant and work supervisor training programme initiated by the Continuing Education Centre of the University of Jyväskylä and has attended a curriculum seminar organized by the National Board of Education. He explained that he regularly read educational books and journals. Also other literature has inspired his work. In contrast, the materials provided by the National Board of Education have not furnished him with ideas. The teacher has also accessed information through discussion with other teachers, pupils' parents and board members. He has also been an agent of change primarily through reporting to the teachers, locally and through the whole province, about his own experiences and observations in implementing a school-based curriculum.

Curriculum change involves a remodelling of teaching materials (Fullan et al. 1991, 37). Therefore, for example, new communication technologies are being developed to provide modern educational opportunities for pupils in small rural schools (Kronlund, Kynäslahti & Meisalo 1995, 44–45). This in turn will challenge the professional development of the teacher. The peripa-

tetic English teacher of Ranta-Sointula School has participated in the development of distance education in small schools in the area, the so-called telematic teaching experiment. Since autumn 1995 English has been taught as distance education by a language teacher of the Jyväskylä Teacher Training School once a week, with the help of a computer network. The aim of the experiment is to teach other languages in addition to English later on. However, Ranta-Sointula School is not involved in this experiment.

4   Relationships with Local Communities

The small school teacher has effective opportunities for implementing the curriculum outside the school. Outdoor education presupposes many kinds of skills and knowledge on the part of the teacher. He/she has to be able to answer such questions as: why, where, what and how can we teach outside the school? The teacher should realize which natural, industrial or cultural aspects of the community he/she could exploit in his/her teaching and also be familiar with the various teaching methods of outdoor education such as study visits, study trips and school camps (see Hammerman, Hammerman & Hammerman 1985, 23, 82; Kimonen 1989, 250).

The teachers in Suvila and Ranta-Sointula are acquainted with the opportunities offered by the environment around the school. In their teaching they use different outdoor education methods and targets. The activities are also closely connected to the educational principles of the school. The teaching process in outdoor education is generally initiated by work in the classroom. When they arrive at their destination pupils usually write notes, interview specialists and collect samples. Presentations and assessments generally take place in the classroom. When studying outside the school, the pupils, however, mainly observe the environment rather than participate in the activities of the village community, for example, by helping the older people or publishing the village newspaper (see e.g. Saunders 1979, 218–224).

> They ask questions and look around. When we visited the cowshed, it was about the time they were finishing the milking and the cows were feeding and being led outside ... The pupils fed the cows. They had to be brave enough to walk along the feeding aisle. (Kalle, male teacher)

The ideal process of outdoor education proceeds according to the child's developmental level in small stages from the familiar to the unfamiliar (see Hammerman et al. 1985, 19–21, 82; Kimonen 1989, 250). The pupils in the case-study schools have made short trips into the school grounds, to their own village and their own municipality. Only rarely have the trips and school camps taken place outside the local province (see also Kalaoja 1990a, 68–69). The pupils mainly study nature, agriculture and local production plants. They usually work in groups that have been formed from pupils of different ages and, in this case, the responsibilities and study tasks related to study are differentiated according to the developmental level of the pupil.

> We go out to visit production plants and the log factory area, and a couple of small industrial halls. There is a great variety of agriculture. ... All kinds of ecotypes can be found here. We have a nature trail over there, behind the factory. ... We walk in nature rather a lot. (Kalle, male teacher)

> We went to see the neighbouring village and what happens there. ... We made visits to businesses. There was a sheep farm that we visited. They showed us how to get wool from a sheep and yarn from the wool and then sweaters. From there we went to a box factory where they made all sorts of boxes. The man in the box factory also raised dogs. He told us about raising dogs. In the neighbourhood there was also a dried flower producer and the fields were full of flowers. Then we went to the store room and we saw how they were left to dry upside down. We went to a fish smokehouse where we could see a fishing trawler. After that we went to a summer cottage to have a sauna. (Liisa, female teacher)

The aim of the new curriculum is to change the school into a learning centre which is in close contact with interest groups from the local community. The closest of these groups is the parents. According to Kalaoja (1988b, 105–106), the teachers of small schools (55 in all) most typically contact the homes by telephone, visits, or then at school festivals, village festivals, occasional encounters in the village and at parents' meetings. Almost half of the rural teachers (47 per cent) visited the homes of their pupils. Approximately a sixth of the teachers (16 per cent) said that they met parents at village community hobby clubs or societies. The headteachers were more active in making contact than the other teachers. For example, the observations on Ranta-Sointula School co-operation with the pupils' homes follow the trends in the previous studies on small schools. The various modes of co-operation

between the case-study school and the homes include weekly newsletters, discussions with parents, visits to pupils' homes and parents' meetings. Teachers meet the parents also at school in meetings, courses, festivals, theme units, hobby groups, socials and occasional encounters.

> We haven't had many parents' meetings. Everyone on the school board is a parent of a kid in our school, and so are the substitutes. They all know about these things. They get the weekly newsletter delivered. We ring each other up from time to time. If there are some visitors at the school the parents are welcome, too, to meet them. ... We spend a lot of time together. Well, I am the chairperson of the village committee. So once a month we meet with the same parents there. Some of them I meet almost daily. (Liisa, female teacher)

There has been a long tradition of collaboration between people living in the Finnish countryside. Many official and administrative districts have been formed on the basis of villages, such as school- and postal districts and districts for municipal planning and voting. Such co-operation has often centred on rural schools (Hautamäki 1989, 7–8). The school has a stimulating effect on the village community socially, culturally and intellectually. Activities arranged in schools unite the village and its inhabitants. The activeness of the village is reflected in the activeness of the school (Kalaoja 1988a, 149; Nevalainen 1995, 266–270). According to Nevalainen (1995, 224–226, 267), about 80 per cent (N=165) of small school teachers in Finland regarded the school as the centre of cultural, spare-time and community activities in the village. The school also created the identity of the village and a co-operative spirit. The activeness of the teacher was a central factor in the development of the school into the centre of the village community. For example, Ranta-Sointula School has become an important meeting place for the village community. The facilities and equipment of the school are used efficiently also in the evenings and during weekends. The diverse use of the school building for the villagers' leisure-time activities has taken place without problems, according to the teachers. Since the school has mainly been repaired with the help of voluntary work, responsibility is taken for its maintenance as well. The many activities of the parents and other inhabitants in the village presuppose that the teacher is co-operative, adaptable and open.

Yes, the school keeps this kind of a small village together. If it disappeared a lot would also change. Then there would have to be some other place to hold these village meetings and other things. Many other things would die along with the school. For example the hobbies that have been arranged in the school. (Pupil's mother)

I haven't heard of anyone complaining. Even the cleaning lady can arrange to do her work at a convenient time, when she knows the programme. And we could still fit in some stimulating activities for the older people after school. After the taxi has taken the pupils home, the senior citizens could come in to have one of their meetings. The village people have fixed up the school building precisely so that it can be used. (Liisa, female teacher)

The school is working hard for the benefit of villagers. They can come freely and they can use it for different activities. The village paper is published here. ... They think that the school is really important for them. They will do everything to keep it going. (English teacher, male)

The survival of a small rural school also during economically unstable times presupposes that the teachers have the ability to see their own work as a social task. Beyond working together in schools, teachers are sometimes called upon to contribute to their communities (see Forsythe 1983, 104–106; Forsythe & Carter 1983, 160–162; Kalaoja 1988b, 99–106; Stern 1994, 39). Finnish teachers may have an important role in community integration and activation, especially in co-operative village communities displaying their own initiative in abundant interaction among the inhabitants (Nevalainen 1995, 285). For example, the headteacher of Ranta-Sointula School has several honorary positions through which she has aimed to develop her own village and school. The head belongs to committees with the goal of decreasing the isolation of the village and of increasing the number of inhabitants. Activities have, for instance, focused on improving difficult road connections and promoting the sale of plots of land for building, thus making it easier for families with children to move to the village. At the same time, the teacher has supported the survival of the village school and her own post. In these tasks she has had many social roles, such as those of leisure-time organizer, developer of the village community and social trend-setter. The members of the village community have supported the participation of the headteacher in the development of the community.

It seems that I am getting more and more of these municipal and provincial tasks. At the village level I am in the farmers' association and the village association and I also write for the village newspaper. ... I want this village to get bigger and better. I am motivated, this is my village. Now that I am here in this village I am serving a greater cause. (Liisa, female teacher)

5   Conclusions

Above we have examined the process of curriculum change as seen in two small rural schools in Finland. We have analyzed the effect of the changes on curriculum policies and pedagogical practices. In the following section we will collect the most important results of the case studies and draw conclusions based on these.

5.1   Challenges in Managing Curriculum Change

The curriculum is a dynamic process continually reacting to the physical, material, human and economic changes in the environment. It is the basis for the planning, implementation and evaluation of school work (Peruskoulun opetussuunnitelman perusteet 1994, 9, 15). The main principles of the curriculum reform currently being implemented in Finland support a school culture which lays stress on the autonomous control of learning and encourages flexibility and interactiveness in the school. These new features in curriculum planning have created challenges for the small rural school, especially for the management of change, the organization of teaching, professional development of the teachers and the co-operation between the school and the surrounding community.

5.1.1   Difficulties in Educational Change

School reform is a never-ending process of change characterised by complexity, dynamism and conflicts (Fullan 1993, 20, 24, 37, 67). According to Hargreaves (1998, 281–282), there are many reasons why educational change is so difficult. Among them are that:

- the reason for the change is poorly conceptualized or not clearly demonstrated. It is not obvious who will benefit and how. What the change will achieve for students in particular is not spelled out;
- the change is too broad and ambitious so that teachers have to work on too many fronts, or it is too limited and specific so that little real change occurs at all;
- the change is too fast for people to cope with, or too slow so that they become impatient or bored and move on to something else;
- the change is poorly resourced or resources are withdrawn once the first flush of innovation is over. There is not enough money for materials or time for teachers to plan. The change is built on the backs of teachers, who cannot bear it for long without additional support;
- there is no long-term commitment to the change to carry people through the anxiety, frustration and despair of early experimentation and unavoidable setbacks;
- key staff who can contribute to the change, or might be affected by it, are not committed. Conversely, key staff might become over involved as an administrative or innovative elite, from which other teachers feel excluded. Resistance and resentment are the consequences in either case;
- students are not involved in the change, or do ... [not] have it explained to them, so they yearn for and cling to ways of learning that are familiar to them and become the school's most powerful protectors of the past;
- parents oppose the change because they are kept at a distance from it. Alternatively, influential groups or individuals among the parents can negotiate special deals with the school that protect their own children from the effects of innovation;
- leaders are either too controlling, too ineffectual, or cash in on the early success of the innovation to move on to higher things;
- the change is pursued in isolation and gets undermined by other unchanged structures; conversely, the change may be poorly coordinated with and engulfed by a tidal wave of parallel changes that make it hard for teachers to focus their efforts.

In like fashion, in the schools under study several similar matters slowing down the curriculum change appeared. Firstly, for example, in Ranta-Sointula school, the traditional view of the teacher, alone in the class, working with the pupils and alone responsible for the curriculum, hindered the curriculum development of the whole school (see also Nias, Southworth & Campbell 1992, 242; Syrjälä 1998, 28). Secondly, weaknesses of the teachers' in-service training and the teachers' lack of interest in professional development slowed down the curriculum change process. The shortcomings in in-service training also influenced the teachers' feeling of inadequacy regarding their knowledge and skills, as shown by previous research (see Fullan 1995, 253; Jakku-Sihvo-

nen 1998, 23; Kohonen 1997, 293; Kohonen & Kaikkonen 1998, 140–141; Norris et al. 1996, 45, 80, 84). The teachers felt that an observation of the general trends as well as the reflection of the school values and the nature of general education are quite difficult (see Syrjäläinen 1994, 50). Thirdly, in the schools under study, a particular problem arising from curriculum development has been the lack of resources in the 1990s. Teachers complained about the strenuous nature of curriculum planning and the lack of time for doing it, because the work was done mainly after normal working hours (see Syrjäläinen 1994, 52; 1995, 10). Due to the weak economical situation of the country and of the local government authority, the schools were also under threat of closure. This has in turn diminished the teachers' motivation to reform the curriculum (see Kimonen & Nevalainen 2000b, 43). Fourthly, the lack of support from the municipal school administration and the pupils' parents further weakened this motivation (see Sanders & Epstein 1998, 494–499). Fifthly, the main barrier to curriculum development was the teachers' resistance to change in Ranta-Sointula School. The change in the teacher's role had brought about so many new features that change management proved to be difficult (see e.g. Atjonen 1993, 177–181; Jauhiainen 1995, 152–156; Norris et al. 1996, 78; Slavin 1998, 1306; Syrjäläinen 1995, 106; Hämäläinen, Kimonen, Nevalainen, Nikki, Vulliamy & Webb 1999, 112). Finally, the significance of a curriculum as a guideline for teaching proved to be rather modest; for example, the teaching was mostly guided by instructional materials (see Atjonen 1993, 172; Kari 1988, 46; Korkeakoski 1990, 114–119; Syrjäläinen 1994, 15). At the same time, with the development of school-based curricula, the role of the curriculum as an instrument of planning the teaching has become more important in Finland in the 1990s (Jauhiainen 1995, 109; Kosunen 1994, 284).

5.1.2   The Prerequisites for Successful Curriculum Change

Implementation of a new curriculum may necessitate changes in learning materials, teaching approaches and belief systems of teachers. Changes in learning materials are the most obvious because they are concrete and real. Changes in pedagogical practices involve the development of new skills, behaviours, coordinated activities amongst other things. Curricula are based on certain assumptions, philosophies or beliefs about education. Changes in beliefs or

understanding lie at the very heart of what education and learning are for a particular group of pupils in a particular curricular area in a particular community and society. These beliefs are often critical to effective implementation, because they shape the teachers' thinking and subsequent actions. They are also extremely difficult to change (Fullan 1987, 214; 1988, 196–197; Fullan et al. 1991, 37).

Nias et al. (1992, 236–237) identified four sets of conditions which facilitate whole school curriculum development:
1. Appropriate institutional values: valuing such aspects as learning, interdependence and teamwork, the open expression of professional differences, mutual consideration and support, and a willingness to compromise (The last four of these are characteristic of a 'culture of collaboration'.);
2. Presence of organizational structures especially for professional interaction, communication, joint decision and policy making;
3. Resources, especially teacher commitment, time, people and materials; and
4. Leadership, both formal and informal.

As pointed out earlier, curriculum development in Finland has been successful especially in schools with a tendency to rich innovation. Co-operation among teachers and their interest in their professional development were also significant (see e.g. Atjonen 1993, 175–177; Hopkins 1998, 1045; Syrjäläinen 1994, 57; Webb et al. 1997, 103–105). The curriculum work is, as seen by Nikkanen and Lyytinen (1996, 51–52), a participatory process of change. The knowledge and new skills provided by the process are produced in social interaction in a unique school-specific ethos. Guided by individual practical ethics, the teacher interprets the knowledge and skills relevant for the pupils (see e.g. Webb et al. 1997, 102). The success of any curriculum change in small schools is very closely connected to the self-identity of the teacher (Vulliamy, Kimonen, Nevalainen & Webb 1997, 97–115; Webb et al. 1997, 102, 114). Within the culture of the small school the teacher can preserve prior value systems more easily than is the case with colleagues in larger schools (Vulliamy et al. 1997, 113). The ability to reflect the matters related to the teacher's work is crucial for the survival and development of a small school. The teacher has to be aware of the factors related to the school's functioning. In order to reform the curriculum, he/she has to be able to analyze his/her teach-

ing critically. The teacher has to be aware of the role of the school as well as his/her own role in the village community. Autonomous self-reflection is especially important in small-school work, because the work, by its very nature, offers few contacts with adults (Kimonen & Nevalainen 1993, 105; Nevalainen 1995, 292).

On the basis of our observations, the school culture of Suvila School was characterised by a family-like atmosphere, informal relationships between the staff and the pupils as well as an absence of rituals (see also Vulliamy et al. 1997, 111). The headteacher emphasized the fact that the curriculum work was a team effort of the teachers. The process of change 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, in the practices followed, and in the school environment. 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 described in the parents' meetings. The models of action were compared, and their success was evaluated. During the continuation phase, the observations and experiences gained over approximately five years, concerning the strengths and weaknesses of the process of work and learning, were thoroughly discussed at staff meetings. Finally, the new curriculum of the school was constructed. This innovation process was, of course, facilitated by the decisions of the central educational administration (see Fullan et al. 1991, 47–48; Fullan 1992, 96–97).

5.2 Challenges in Organizing Teaching

5.2.1 The Ethos of the Small Schools

Fullan (1998, 226) argues that we need to change the schools, as they are not now learning organizations:

> We need especially to 'reculture', and 'retime' as well as 'restructure' schools. Restructuring is commonplace and all it does is alter the timetable or formal roles. Reculturing as I have argued in several recent writings transforms the habits, skills and practices of

educators and others towards greater professional community which focuses on what students are learning and what actions should be taken to improve the situation. Retiming tackles the question of how time can be used more resourcefully for both teachers and students. Reculturing and retiming should drive restructuring because we already know that they make a huge difference on learning, although they are very difficult to change.

Most of the benefits of small-school working processes reflect current innovative pedagogics; for example, flexible timetabling, individual instruction, independent work by the pupils, outdoor teaching, learning by doing, and close team work between the community and the school. Due to the small size of the class, the pupils have a number of opportunities to contribute to the various activities (Kalaoja 1990a, 106–107; 1990b, 2–3; Kimonen & Nevalainen 1993, 96; 1995, 102; Norris et al. 1996, 79). The small size of the teaching groups was one of the teaching benefits at Suvila School. Teaching arrangements could be very individual-oriented. Further, the teacher had more time per pupil. Flexible changes in the teaching groups were also possible. However, group work defined according to class level was rather difficult, as there were not enough pupils of the same age (see e.g. Kalaoja 1990a, 39–40, 43–49; Nevalainen 1995, 91).

Small rural schools have, according to previous research, a unique school culture that differs from that in larger urban schools. The ethos of the small schools acts as an insulation against government directives, so it is easier for the teachers in small schools to retain their old value systems than it is for their colleagues in larger schools. In this way the school's functioning remains unchanged, despite any national curriculum reform that might be in progress (Vulliamy et al. 1997, 111–112; Webb et al. 1997, 114; see also Bell & Sigsworth 1987; Galton & Patrick 1990; Kalaoja 1990a; Kimonen & Nevalainen 1995; Nevalainen 1995; Pirhonen 1993; Vulliamy 1996; Vulliamy & Webb 1995). The work they performed on the curriculum of Suvila School made the teachers think more profoundly about the fundamental ideas underlying the school's functioning. However, the teachers did not have the same need as the teachers in larger schools to plan, manage and formally assess the way their school functioned. This was the result of informal, collegial decision-making. It was easy to be flexible in the school organization and to bring about rapid changes (see also Atjonen 1993, 175–177; Patrick & Hargreaves 1990, 104–122; Snyder, Bolin & Zumwalt 1992, 416–417; Syrjäläinen 1994, 57).

The implementation of the new curriculum requires a change in the teachers' ways of thinking and working. These changes, thus, need to be reflected in the pedagogical practices employed in the whole school culture (see Fullan 1987, 214; 1988, 196–197). In Suvila School the curriculum work influenced the teachers' views of knowledge, learning, and education in a more progressive direction. Curriculum change, however, has not brought any fundamental changes to the teaching methods of Ranta-Sointula School. During the observation period teaching was far removed from the principles of progressive pedagogics. According to Carlgren (1999, 49), the gap between the reality of teaching and the expectations directed at the teacher can be seen in a wider perspective as the difference between theory and practice, and moreover, as the difference between the thinking of the teacher and his/her actions.

5.2.2   Obstacles to Project Work in Combined Grades

Project work carried out in small groups gives pupils the opportunity for active interaction with one another and for jointly solving problems that arise from the tasks (see e.g. Kyriacou 1992, 42). Projects offer them a unique opportunity to develop skills and abilities, such as social and communication skills, and therefore the learning potential of projects is significant. However, at the same time, mastery of the social and cognitive goals set for small group work can be a difficult challenge for pupils in the active learning process of project work. For example, in Suvila School, the most problematic element in the co-operation of the groups was the lack of negotiation and conciliation skills in conflict situations and the passivity of the youngest group members, especially in the planning of the work. Problems also emerged with information processing, pupils selecting, grouping, classifying, and interpreting information at a basic level only (see Niemi 1998, 50–53; Watts 1991, 41–42). They were often satisfied with fairly routine solutions.

5.2.3   Obstacles to Traditional Pedagogy in Combined Grades

The teaching of combined grades by one teacher may involve the simultaneous teaching of pupils from as many as six different grades. According to pre-

vious research (Kalaoja 1990a, 49, 99–100, 102, 108; Laukkanen & Muhonen 1981, 225–276), a variety of process-based problems has arisen in such teaching situations. The teaching may be superficial, diffuse and disjointed. It may be difficult to integrate the different subjects. The same applies to the individual guidance of pupils with special needs. For example, the teachers at Ranta-Sointula felt that it was particularly difficult to integrate comprehensively instrumental and modern subjects in combined grades. Due to the problems associated with context and resources, the teachers of small schools are, however, often unable to implement pedagogical innovations in their work, innovations which could remove the obstacles occurring in the teaching process. According to Norris et al. (1996, 83), small rural schools

- are highly dependent on their own internal teacher resources of ideas, interests and expertise;
- have a limited range and variety of material resources available to them;
- have very limited budgets for external sources of consultancy, staff development or in-sevice training;
- experience a sense of professional isolation from local, national and international developments;
- have limited turn-over of teaching staff with fresh ideas.

Attempts have been made to solve the problems associated with the teaching processes in combined grades of small schools. These include, for instance, developing independent work by the pupils, using auxiliary teachers, periodizing the teaching and implementing outdoor instruction. Curriculum development for combined grades has often involved integrated teaching across various class levels and an increased emphasis on the immediate locality (Kalaoja 1990a, 100–110; see also Hargreaves 1990, 100–103; Kimonen & Nevalainen 1995, 53–56; 2000, 45–47).

5.3   Challenges in Professional Development

The implementation of changes in the school system involves the teacher in an active learning process. According to Fullan (1992, 87–92, 98–113), there are close links between a teacher's life-long learning, the implementation of

school reforms, and the pupils' progress (see also Kohonen 1997, 269–295; Nias et al. 1992, 235–236; Patrick & Hargreaves 1990, 107–108). If a teacher's work practices are to change, then the teacher's learning process will involve changes in his beliefs and conceptions. A teacher's readiness for cooperation and experimentation also helps to promote development (see Vulliamy 1996, 34; Webb 1996, 32). Often, a change in the school system presupposes external pressure, assistance and support (see Fullan 1995, 259). Transformation of the traditional school context requires the teacher to reflect critically on his/her own principles and practices of action and to transform them; in other words, to create a new school context. From the teacher's point of view, innovations in working and the management of change involve a comprehensive learning process, where the prevailing school culture is initially internalized and, then through externalization, transformed. According to Engeström (1995, 88–89), increased criticism of the practices of action and a rise in the number of conflict situations results in stronger externalization. Externalisation assumes a dominating position when a new model is intensively created for the activity. When the new model is implemented, its internalization again gradually assumes an ever greater significance. In this perspective, the teachers at Ranta-Sointula reacted to changes in the internal and external setting of action mainly by identifying defects and correcting them. In this way the teachers preserved the models of thinking and action sustained by the school, which were based on a behaviouristic conception of learning emphasizing the external control of learning. Thus, we may conceivably conclude that the learning process of the teachers in this kind of traditional school culture was essentially reproductive. Accordingly, such single-loop learning aims at the preservation of prevailing school practices and routines (see Argyris & Schön 1976, 19; Kauppi 1993, 79). In contrast, the modern school culture at Suvila, based on progressive pedagogics which followed the constructivist conception of learning, required transformative learning. In order to change the context of the school, the teachers needed new models of thinking and action. As a result, a change in the basis of action became a double-loop learning process for them (see Argyris & Schön 1976, 19; Kauppi 1993, 87). New models of thinking and action are applied in practice, an attempt being made to change the whole activity system. Once the new practice of action has become established and has been evaluated, a new situation is arrived at where new practices are systematically complied with (Engeström 1995, 91).

The challenges and problems of the school activity at Suvila formed the basis for the headteacher's learning motivation and encouraged him to develop his own work. Optimally, in the curriculum change process, the headteacher acted as an agent of change affecting school culture by describing his experiences and observations as an implementor of a school-based curriculum to other teachers and interest groups. The teacher's active learning consisted of the independent solving of problems arising from the everyday life of the school, and of the active accessing of knowledge and skills required in the construction of new models of thinking and action (Kimonen & Nevalainen 1995, 125–126).

The teachers at Suvila had obtained educational ideas from in-service training sessions, teachers of other schools, parents of their pupils, the pupils themselves, and also from professional journals. In particular, the significance of in-service training had been crucial because it motivated the planning work of the teachers (see also Atjonen 1993, 187–188; Fullan 1992, 113–114; Hargreaves 1994, 435–436; Jauhiainen 1995, 183–185; Kosunen 1994, 202–205, 297). In the in-service training sessions it had been possible for the teachers to sketch new ways of thinking for their own teaching. Moreover, sharing experiences with other teachers had been important. However, according to previous research, in-service training for teachers in small schools has been inadequate because the training topics have been planned mainly to meet the needs of large schools (Kalaoja 1991, 102–106, 113; Nevalainen 1995, 294).

5.4   Challenges in Co-operation of School and Community

Schools must, according to Fullan (1998, 226), radically reframe their relationships to the environment. Schools must relate very differently to parent/community, to technology, to government policy, and must engage in a variety of networks and alliances among the wider set of interest groups such as colleagues, universities and businesses (see also Crowson & Boyd 1998; Sanders & Epstein 1998). The aim of the new curriculum in Finland is to change the school into a learning centre, in close contact with interest groups from the local community (see Kinos 1994, 7–8). According to Malinen (1994, 7), the learning centre type of activity aims to:

- improve integration in the school curriculum,
- add flexibility in the school's functioning,
- facilitate learner-centred studying projects, and
- offer a greater diversity in learning environment than would be possible in traditional class teaching.

There has been a long tradition of collaboration between people living in the Finnish countryside. The activeness of the village is reflected in the activeness of the school (Kalaoja 1988a, 149; Nevalainen 1995, 266–270). Teachers may have an important role in community integration and activation especially in co-operative village communities displaying their own initiative in abundant interaction among the inhabitants (Nevalainen 1995, 285). The activeness of the teacher was a central factor also in the development of the Ranta-Sointula School into the centre of the village community. The facilities of the school were used to good effect also in the evenings and during weekends.

Small rural schools have often consciously striven to create a close relationship with the village community by supporting, for example,

- co-operation between school and home,
- use of school facilities in the spare-time activities of the villagers,
- visits from the interest groups during lessons, and
- improvement in the living standard of the community (Nevalainen 1995, 264; see also Mitchell 1987, 90).

According to Nevalainen (1995, 289–290), the methods of work based on community education have many positive influences on the school culture and the surrounding community. In order to implement these methods in the daily life of a Finnish rural school, the following areas of the school teaching and learning practices should be developed:

1. *Learning through participation.* All curricula should emphasize life-centred and environmental issues. The educational aims of the school should be planned together with the pupils and their parents. In school work, outdoor projects in small groups based on co-operative learning should be increased. The pupils must be guided to access information from various sources with various methods.

2. *School as the learning and activity centre of the community.* School facilities should be used in activities meeting the needs of all ages of community members, also in the evenings and during the weekends. The

182

activities must be based on initiative, co-operative and voluntary action.

3. *Strengthening the co-operation process of the school and the community.* School work must create organic relationships with all the interest groups in the surrounding community. Outcomes of school work must be utilized also in areas other than learning facilitation. Teachers can, if they want, act as animators in helping the residents of the community in the attainment of their common goals and in solving problems.

4. *Participation and activeness of parents and other villagers.* The activities taking place in schools and communities must be planned and evaluated in voluntary teams, so that needs can be met and compromises in problem situations can be found. Likewise, the teachers can actively work to maintain the school by co-operating with the residents of the village community and, at the same time, breathe life into the village.

5. *Arranging activities based on the needs of the villagers in the school and village.*

6. *Creating learning networks and using resources.* All human, physical and financial resources of the learning networks of the community must be used in education. With the help of the learning networks, partnerships based on co-operation must be developed with various groups of the community (Nevalainen 1995, 289–290).

The co-operation of school and village community has become more and more important in Finland in the 1990s, as the decisions concerning the schools are made locally. The role of the small rural school as the learning and activity centre of the whole village is currently being emphasized.

References

Argyris, C. & Schön, D. A. 1976. Theory in practice. Increasing professional effectiveness. San Francisco: Jossey-Bass.

Atjonen, P. 1993. Kunnan opetussuunnitelma koulun hallinnollisen ja pedagogisen kehittämisen kohteena ja välineenä: peruskoulun ala-asteen luokanopettajien kokemukset ja käsitykset kunnan opetussuunnitelman laadinnasta, toteuttamisesta ja kehittämisestä. (The local curriculum as an object and instrument in the administrative and pedagogical development of the school system.) University of Oulu. Department of Teacher Education Kajaani. Acta Universitatis Ouluensis E11.

Bell, A. & Sigsworth, A. 1987. The small rural primary school. A matter of quality. London: Falmer.

Carlgren, I. 1999. Professionalism and teachers as designers. Journal of Curriculum Studies 31 (1), 43–56.

Crowson, R. L. & Boyd, W. L. 1998. New roles for community services in educational reform. In A. Hargreaves, A. Liberman, M. Fullan & D. Hopkins (Eds.) International handbook of educational change, Part 2. Dordrecht: Kluwer Academic Publishers, 877–892.

Engeström, Y. 1995. Kehittävä työntutkimus. Perusteita, tuloksia ja haasteita. (Developmental work research.) Helsinki: Painatuskeskus.

Forsythe, D. 1983. A comparative survey. In D. Forsythe, I. Carter, G. A. Mackay, J. Nisbet, P. Sadler, J. Sewel, D. Shanks & J. Welsh (Eds.) The rural community and the small school. Aberdeen: Aberdeen University Press, 83–139.

Forsythe, D. & Carter, I. 1983. The local view: A case study approach. In D. Forsythe, I. Carter, G. A. Mackay, J. Nisbet, P. Sadler, J. Sewel, D. Shanks & J. Welsh (Eds.) The rural community and the small school. Aberdeen: Aberdeen University Press, 137–170.

Fullan, M. G. 1987. Implementing the implementation plan. In M. F. Wideen & I. Andrews (Eds.) Staff development for school improvement. A focus on the teacher. New York: Falmer, 213–222.

Fullan, M. G. 1988. Research into educational innovation. In R. Glatter, M. Preedy, C. Riches & M. Masterton (Eds.) Understanding school management. Milton Keynes: Open University Press, 195–211.

Fullan, M. G. 1992. Henkilöstön kehittäminen – oppilaitoksen kehittäminen. (Staff development – school development.) In K. Hämäläinen & A. Mikkola (Eds.) Koulun kehittämisen kansainvälisiä virtauksia. Helsinki: VAPK-kustannus, 85–118.

Fullan, M. 1993. Change forces. Probing the depths of educational reform. London: Falmer.

Fullan, M. 1995. The limits and the potential of professional development. In T. R. Guskey & M. Huberman (Eds.) Professional development in education. New York: Teachers College Press, 253–267.

Fullan, M. 1998. The meaning of educational change: A quarter of a century of learning. In A. Hargreaves, A. Liberman, M. Fullan & D. Hopkins (Eds.) International handbook of educational change, Part 1. Dordrecht: Kluwer Academic Publishers, 214–228.

Fullan, M. G. with Stiegelbauer, S. 1991. The new meaning of educational change. London: Cassell.

Galton, M. & Patrick, H. 1990. The small school: Trends and possibilities. In M. Galton & H. Patrick (Eds.) Curriculum provision in the small primary school. London: Routledge, 166–181.

Gardener, C. E. 1986. The instructional and noninstructional duties of public elementary school teachers in the very small, small and medium districts in Montana. New Mexico State University. Unpublished doctoral dissertation.

Gutek, G. L. 1992. Education and schooling in America. Boston: Allyn and Bacon.

Hammerman, D. R., Hammerman, W. M. & Hammerman, E. L. 1985. Teaching in the outdoors. Danville, IL: Interstate Printers & Publishers.

Hargreaves, A. 1994. Changing teachers, changing times. Teachers' work and culture in the postmodern age. London: Cassell.

Hargreaves, A. 1998. Pushing the boundaries of educational change. In A. Hargreaves, A. Liberman, M. Fullan & D. Hopkins (Eds.) International handbook of educational change, Part 1. Dordrecht: Kluwer Academic Publishers, 281–294.

Hargreaves, L. 1990. Teachers and pupils in small schools. In M. Galton & H. Patrick (Eds.) Curriculum provision in the small primary school. London: Routledge, 75–103.

Hautamäki, L. 1989. Elävä kylä – elävä kotiseutu – elävä Suomi. Kylätoiminnan tausta, synty ja laajeneminen kansanliikkeeksi. (Living village – living countryside – living Finland.) Kyläasian neuvottelukunta. Julkaisusarja A2.

Hopkins, D. 1994. Quality schools. In Quality in teaching. Paris: Centre for Educational Research and Innovation, 87–112.

Hopkins, D. 1998. Tensions in and prospects for school improvement. In A. Hargreaves, A. Liberman, M. Fullan & D. Hopkins (Eds.) International handbook of educational change, Part 2. Dordrecht: Kluwer Academic Publishers, 1035–1055.

Hämäläinen, S., Kimonen, E., Nevalainen, R., Nikki, M.-L., Vulliamy, G. & Webb, R. 1999. Opettaja opetussuunitelman muutosprosessin toteuttajana: muuttuako vai ei muuttua? (The teacher as an implementer of curriculum change process: to change or not to change?) In H. Heikkinen, P. Moilanen & P. Räihä (Eds.) Opettajuutta rakentamassa. University of Jyväskylä. Department of Teacher Education. Principles and Practice of Teaching 34, 107–116.

Jakku-Sihvonen, R. 1998. Koulu uudistusten paineessa. (The school under pressure to reform.) In H. Niemi (Ed.) Opettaja modernin murroksessa. Jyväskylä: Atena, 20–24.

Jauhiainen, P. 1995. Opetussuunnitelmatyö koulussa. Muuttuuko yläasteen opettajan työ ja ammattikuva? (Curriculum development and the changes in the profession of the secondary school teacher.) University of Helsinki. Department of Teacher Education. Research Report 154.

Johnson, D. W., Johnson, R. T. & Holubec, E. 1990. Circles of learning: Cooperation in the classroom. Edina, MN: Interaction Book.

Kalaoja, E. 1988a. Maaseudun pienten koulujen kehittämistutkimus. Osa 1. Koulu kyläyhteisössä. (School in the village community.) University of Oulu. Reports from the Faculty of Education 52.

Kalaoja, E. 1988b. Maaseudun pienten koulujen kehittämistutkimus. Osa 2. Opettajana kyläkoululla. (Being a village school teacher.) University of Oulu. Reports from the Faculty of Education 56.

Kalaoja, E. 1990a. Maaseudun pienten koulujen kehittämistutkimus. Osa 3. Pienten koulujen ja niiden opetuksen evaluointia. (Evaluation of small schools and their teaching.) University of Oulu. Reports from the Faculty of Education 63.

Kalaoja, E. 1990b. Maaseudun pienten koulujen kehittämistutkimus. Osa 4. Maaseudun pienten koulujen opetuksen ideointia. (Ideas for teaching in small rural schools.) University of Oulu. Reports from the Faculty of Education 64.

Kalaoja, E. 1991. Maaseudun pienten koulujen kehittämistutkimus. Osa 6. Opettajankoulutuksen kehittäminen maaseudun näkökulmasta. (Innovation of teacher training from a

rural point of view.) University of Oulu. Reports from the Faculty of Education 76.

Kari, J. 1988. Luokanopettajan oppikirjasidonnaisuus. Tutkimus ympäristöopin ja maantie-
don opetuksesta peruskoulun ala-asteella. (The class teacher's reliance on textbooks in
teaching.) University of Jyväskylä. Institute for Educational Research. Publication Series
A14.

Kauppi, A. 1993. Mistä nousee oppimisen mieli? Kontekstuaalisen oppimiskäsityksen perusteita.
(The foundations of the contextual learning conception.) In A. Kajanto (Ed.) Aikuisten
oppimisen uudet muodot. Kohti aktiivista oppimista. Helsinki: Kirjastopalvelu, 51–109.

Kimonen, E. 1989. Koulun ulkopuolinen kasvatus yhteiskunnallisesti erilaisissa maissa. His-
toriallis-hermeneuttinen vertaileva tutkimus koulun ulkopuolisesta työ- ja toimintakas-
vatuksesta Yhdysvalloissa, Neuvostoliitossa, Kiinassa ja Intiassa. (Outdoor education in
socially different countries. A historico-hermeneutical comparative study on outdoor work
and activity education in the United States, the Soviet Union, China and India.) Univer-
sity of Turku. Unpublished licentiate thesis in education.

Kimonen, E. & Nevalainen, R. 1993. The teacher in a small rural school implementing the
local curriculum. A case study of the Sointula Lower Level Comprehensive School, Cen-
tral Finland. In S. Hämäläinen & J. Jokela (Eds.) OECD/CERI: Teacher quality in Fin-
land. Policy and practice in five primary schools. University of Jyväskylä. Department of
Teacher Education. Research 54, 85–112.

Kimonen, E. & Nevalainen, R. 1995. Towards active learning. A case study on active learning
in a small rural school in Finland. University of Jyväskylä. Department of Teacher Educa-
tion. Research 57.

Kimonen, E. & Nevalainen, R. 2000a. Curriculum change: Policies and practices. A case
study on curriculum change in small rural schools in Finland. University of Jyväskylä.
Department of Teacher Education. Research. Prepublication version.

Kimonen, E. & Nevalainen, R. 2000b. Curriculum changes and school culture in a small
rural school: Which way forward? A case study of curriculum change in the Lahdelma
Lower-level Comprehensive School. In S. Hämäläinen, E. Kimonen, R. Nevalainen &
M.-L. Nikki (Eds.) Consensus or compromise: Making the school-based curricula in low-
er-level comprehensive schools in Finland. University of Jyväskylä. Department of Teach-
er Education. Research 68.

Kinos, S. 1994. Uudistuksen lähtökohtia. (Premises for reform.) In S. Kinos (Ed.) Uudistuva
peruskoulu. Peruskoulun opetussuunnitelmien laadinta. Helsinki: Opetushallitus, 7–10.

Kivinen, O. 1988. Koulutuksen järjestelmäkehitys. Peruskoulutus ja valtiollinen kouludok-
triini Suomessa 1800- ja 1900-luvuilla. (The systematisation of education.) University of
Turku. Annales Universitatis Turkuensis C67.

Kohonen, V. 1997. Koulun muutosprosessit ja opettajan ammatillinen kasvu. (The process of
change in the school and the teacher's professional development.) In P. Kaikkonen & V.
Kohonen (Eds.) Elävä opetussuunnitelma 1. Koulujen ja yliopiston yhteinen toimintatut-
kimus opettajuuden ja opetussuunnitelman kehittymisestä. University of Tampere. Re-
ports from the Department of Teacher Education A9, 269–295.

Kohonen, V. & Kaikkonen, P. 1998. Uudistuva opettajuus muutosten ja vaatimusten risti-
paineessa. (The changing professional identity of the teacher under the pressure of re-

forms and requirements.) In H. Niemi (Ed.) Opettaja modernin murroksessa. Jyväskylä: Atena, 130–143.

Korkeakoski, E. 1990. Opetussuunnitelma opettajan näkökulmasta peruskoulun ala-asteella. (Curriculum from the viewpoint of the primary school teacher.) Tampereen yliopisto. Kasvatustieteen laitos. Tutkimusraportti A45.

Kosunen, T. 1994. Luokanopettaja kirjoitetun opetussuunnitelman käyttäjänä ja kehittäjänä. (Primary school teachers as curriculum implementors and curriculum makers.) University of Joensuu. Publications in Education 20.

Koulutus. Education in Finland. 1991. Statistics Finland. Education and Research 11.

Koulutus Suomessa. 1998. (Education in Finland.) Helsinki: Tilastokeskus.

Kronlund, T., Kynäslahti, H. & Meisalo, V. 1995. Modern distance education technology and the problem of small rural schools in Finland. Life and Education in Finland 4, 43–49.

Kyriacou, C. 1992. Essential teaching skills. Herts, Great Britain: Simon & Schuster.

Laukkanen, R. 1995. The formation of evaluation policies in education in Finland. In Y. Yrjönsuuri (Ed.) Evaluating education in Finland. Helsinki: National Board of Education, 17–40.

Laukkanen, R. & Muhonen, L. 1981. Finland's small schools and combined grades: An overview with special reference to the Kuusamo District. In J. P. Sher (Ed.) Rural education in urbanized nations: Issues and innovations. An OECD/CERI Report. Boulder, CO: Westview, 255–276.

Laukkanen, R., Muhonen, L., Ruuhijärvi, P., Similä, K. & Toivonen, E. 1986. Pieni koulu. (The small school.) Vantaa: Kunnallispaino.

Leight, R. L. & Rinehart, A. D. 1992. Revisiting Americana: One-room school in retrospect. Educational Forum 56 (2), 133–151.

Malinen, P. 1994. Opiskeluympäristön muodostuminen oppimisympäristöön. (The transformation of the school environment to the learning environment.) Helsinki: Opetushallitus.

Marshall, D. G. 1985. Closing small schools. Or when is small too small? Education Canada 25 (3), 10–16.

Mitchell, G. 1987. Community education and school: a commentary. In G. Allen, J. Bastiani, I. Martin & K. Richards (Eds.) Community education. An agenda for educational reform. Milton Keynes: Open University Press, 83–99.

Nevalainen, R. 1995. Opettajan sosiaalinen osallistuminen yhdyskuntakasvatus-prosessiin. Tutkimus maaseudun pienten koulujen opettajien toiminnasta kyläyhdyskunnassa. (Social participation of rural small school teachers in the process of community education.) University of Turku. Unpublished licenciate thesis in education.

Nias, J., Southworth, G. & Campbell, P. 1992. Whole school curriculum development in the primary school. London: Falmer.

Niemi, H. 1998. Jos sulla on halu oppia ... (If you want to learn ...) In H. Niemi (Ed.) Opettaja modernin murroksessa. Jyväskylä: Atena, 39–55.

Nikkanen, P. 1999. Koulun johtajien talousvastuu ja talousosaaminen – haaste opettajankoulutukselle ja koulun kehittämiselle. (The financial responsibilities and the financial skills of head masters – a challenge to teacher training and school development.) In H. Heik-

kinen, P. Moilanen & P. Räihä (Eds.) Opettajuutta rakentamassa. University of Jyväskylä. Department of Teacher Education. Principles and Practice of Teaching 34, 117–124.

Nikkanen, P. & Lyytinen, H. 1996. Oppiva koulu ja itsearviointi. (The learning school and self-evaluation.) Jyväskylän yliopisto. Koulutuksen tutkimuslaitos.

Norris, N., Aspland, R., MacDonald, B., Schostak, J. & Zamorski, B. 1996. An independent evaluation of comprehensive curriculum reform in Finland. Helsinki: National Board of Education.

Olkinuora, E. 1994. Oppimis-, tieto- ja opetuskäsitykset toimintaa koulussa ohjaavina taustatekijöinä. (Concepts of learning, knowledge and teaching as guiding factors in school work.) In J. Tähtinen (Ed.) Opettajaksi kasvaminen. Turun yliopisto. Kasvatustieteiden tiedekunta. Julkaisusarja B46, 54–73.

Oppilaitostilastot. 1998. (School statistics.) Helsinki: Tilastokeskus.

Page, M. 1990. Active learning. Historical and contemporary perspectives. University of Massachusetts. Unpublished doctoral dissertation.

Patrick, H. & Hargreaves, L. 1990. Small and large schools: some comparisons. In M. Galton & H. Patrick (Eds.) Curriculum provision in the small primary school. London: Routledge, 104–122.

Peruskoulun opetussuunnitelman perusteet. 1985. (The framework curriculum for the comprehensive school.) Helsinki: Kouluhallitus.

Peruskoulun opetussuunnitelman perusteet. 1994. (The framework curriculum for the comprehensive school.) Helsinki: Opetushallitus.

Pirhonen, S. 1993. Koulu kyläyhteisössä. (The school in the village community.) Helsinki: Sisäasiainministeriö.

Sanders, M. & Epstein, J. 1998. School-family-community partnerships and educational change: International perspectives. In A. Hargreaves, A. Liberman, M. Fullan & D. Hopkins (Eds.) International handbook of educational change, Part 1. Dordrecht: Kluwer Academic Publishers, 482–502.

Saunders, M. S. 1979. Locality and the curriculum: Towards a positive critique. Comparative Education 15 (2), 217–230.

Slavin, R. 1998. Sands, bricks, and seeds: School change strategies and readiness for reform. In A. Hargreaves, A. Liberman, M. Fullan & D. Hopkins (Eds.) International handbook of educational change, Part 2. Dordrecht: Kluwer Academic Publishers, 1299–1313.

Snyder, J., Bolin, F. & Zumwalt, K. 1992. Curriculum implementation. In P. W. Jackson (Ed.) Handbook of research on curriculum. New York: Macmillan, 402–435.

Stern, D. 1994. Quality in teachers and teaching. In Quality in teaching. Paris: Centre for Educational Research and Innovation, 35–71.

Syrjälä, L. 1998. Onko koulun kello myöhässä? (Is the school clock running late?) In H. Niemi (Ed.) Opettaja modernin murroksessa. Jyväskylä: Atena, 25–38.

Syrjäläinen, E. 1994. Koulukohtainen opetussuunnitelmatyö ja koulukulttuurin muutos. (School-based curriculum development and changing school culture.) Helsingin yliopisto. Opettajankoulutuslaitos. Tutkimuksia 134.

Syrjäläinen, E. 1995. Koulukohtaisen opetussuunnitelman toteutuminen: opettajan ansa vai mahdollisuus. (The implementation of school-based curriculum: a trap or an opportunity

for a teacher.) University of Tampere. Reports from the Department of Teacher Education A5.

Tilastotietoja peruskouluasteen kouluista. 1994. (Comprehensive school statistics.) Helsinki: Opetushallitus.

Vulliamy, G. 1996. Managing curriculum change in small primary schools. University of York. Department of Educational Studies. Qualitative Research Papers in Education 1.

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.

Vulliamy, G. & Webb, R. 1995. The implementation of the National Curriculum in small primary schools. Educational Review 47 (1), 25–41.

Watts, M. 1991. The science of problem-solving. London: Cassell.

Webb, R. 1996. Changing primary policy and practice: A case study of one school's response to external pressure. University of York. Department of Educational Studies. Qualitative Research Papers in Educational Studies 3.

Webb, R., Vulliamy, G., Häkkinen, K. & Hämäläinen, S. 1998. External inspection or school self-evaluation? A comparative analysis of policy and practice in primary schools in England and Finland. British Educational Research Journal 24 (5), 539–556.

Webb, R. & Vulliamy, G. with Häkkinen, K., Hämäläinen, S., Kimonen, E., Nevalainen, R. & Nikki, M.-L. 1997. A comparative analysis of curriculum change in primary schools in England and Finland. Final report of the York-Finnish project. University of York. Department of Educational Studies.

APPENDIX 1   *Theme units organization at Suvila School*

First year	Second year	Third year
1. The forest - forest biology, cycle of organisms in nature, forest use, forest industry, combustion 2. History - courses according to the theme list 3. Geography - courses according to the theme list 4. Me - human biology, human developmental history, nutrition 5. The Bible - central content, connections with the present day 6. Trade - consumer information, commerce yesterday and today, money arithmetic, occupations in trade, entrepreneurship	1. The farm - assimilation, animals and plants on the farm, mammals, plants in the yard and garden, farming yesterday and today, importance of farming to man, global nutrition problem 2. Hospital - health education, factors affecting health, infectious diseases, accidents and first aid, occupations in hospital, chronic illnesses 3. Geography 4. History 5. Lakes and wetlands - lake and wetland biology, structure of animal population, states of water, importance of water routes yesterday and today	1. The road - traffic importance of road in society, the roadside as an ecosystem, road construction yesterday and today 2. Matter and energy - states of matter energy, electricity and electrical devices, magnetism 3. Jesus - life and central teachings, connections with the present day 4. The earth and space - the earth in space, celestial bodies, constellations, origins 5. Geography 6. History

APPENDIX 2   *Periods, theme units and workshops in Suvila School*

Period	Theme unit	Workshop
Period 1 22.8.94–30.9.94	House and garden Finnish: writing	Music/Art Computer Video Cookery
Period 2 30.10.94–11.11.94	Geography Mathematics: measurement	Travelling in English Handicraft Computer Video Art
Period 3 14.11.94–22.12.94	The life of Jesus Finnish: drama	Music/Art Cookery Glass painting Christmas decorations
Period 4 9.1.95–17.2.95	Earth and space Mathematics: geometry	Winter sport Handicraft Computer Video Art
Period 5 6.3.95–12.4.95	History (grades 4–6) The biology of the seasons Finnish: writing	Cookery Drama Easter decorations Art
Period 6 18.4.95–26.5.95	Matter and energy Finnish: communication	Music/Art Nature Cookery

191

APPENDIX 3   *Schedule for grades 1–6 in Suvila School*

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8.50-	Finnish/ Maths	Maths/ Finnish	Topic work	Maths/ English/ Finnish	Maths/ English/ Maths
-10.20	Music/ Maths	Finnish/ Maths	Topic work	Finnish/ Maths and Finnish/ English	Finnish/ Maths/ English
	Outdoor exercise	Outdoor exercise	Outdoor exercise	Outdoor exercise	Outdoor exercise
	Lunch	Lunch	Lunch	Lunch	Lunch
11.30-	Story-telling/ Finnish	Story-telling/ Handicraft	Story-telling/ Topic work	Workshop	Story-telling/ Topic work
	Topic work/ Finnish/ English	Club/ Handicraft	Topic work	Workshop	Art
-14.15	Topic work Mobile library	Club/ Music	Handicraft/ Physical Education	Workshop	Art

ERIC
Full Text Provided by ERIC

APPENDIX 4   Schedule for grades 1–2 in Ranta-Sointula School

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8.30 -9.15	Religion*/ Religion**	Finnish/ Finnish	Finnish/ Finnish	Finnish/ Finnish	Religion/ Religion
9.30 -10.15	Maths/ Maths	Finnish/ Finnish	Finnish/ Finnish	Finnish/ Finnish	Maths/ Maths
	Lunch	Lunch	Lunch	Lunch	Lunch
11.00 -11.45	Handicraft/ Handicraft	Physical Education/ Physical Education	Environmental and Nature Studies/ Environmental and Nature Studies	Maths/ Maths	
12.00 -12.45 .	Handicraft/ Handicraft		Music or Physical Education/ Music or Physical Education	Environ- mental and Nature Studies/ Environ- mental and Nature Studies	
13.00 -13.45	Finnish/ Finnish Mobile library		Music/ Music	Art/ Art	

Grade 1* Grade 2 **

APPENDIX 5   *Schedule for grades 3–6 in Ranta-Sointula School*

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8.30- -9.15	Religion*/ Religion**	Finnish/ Finnish	Finnish/ History	Maths/ Maths	Religion/ History
9.30 -10.15	Maths/ Maths	Maths/ Maths	Finnish/ Finnish	Finnish/ Finnish	Finnish/ Finnish
	Lunch	Lunch	Lunch	Lunch	Lunch
11.00 -11.45	Civics/ Civics	Physical Education/ Physical Education	Biology or Geography/ Biology or Geography	Biology or Geography/ Biology or Geography	Physical Education/ Physical Education
12.00 -12.45	Finnish/ English	Handicraft/ Handicraft	Maths/ English	Art/ Art	Music/ Music
13.00 -13.45	English/ Finnish Mobile library	Handicraft/ Handicraft	English/ Maths	Art or Music/ Art or Music	

Grades 3–4* Grades 5–6 **

Part
Three
Part
Three
Part
Three
Part
Three
Part
Three
Part
Three

FOCUSING ON
REFLECTION

Part
Three
Part
Three
Part
Three
Part
Three
Part
Three
Part
Three
Part
Three
Part

Anne Räsänen
Language Centre
University of Jyväskylä

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter 8
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter

Integrating Content and Language in FL-medium Instruction[1]

ORIENTATION TASKS:

1. What do you know about teaching content through a foreign language?
2. In what ways does it differ from giving instruction in the mother tongue and in what is required from the learner and the teacher? Prepare a list of possible differences and requirements and share your list with a partner or in a small group.

1   Introduction

Learning academic (i.e. subject-specific) content through a foreign language has become an increasingly common exercise for today's learners at all educational levels – not unlike the situation that prevailed during the early history of schooling. While European integration and the internationalisation efforts of institutions now enable mobility and contact in many directions, and new technologies bring about new learning and teaching environments, the prep-

---

[1] The article is adapted from Räsänen, A. 1999. Teaching and learning through a foreign language in tertiary settings. In S. Tella, A. Räsänen & A. Vähäpassi (Eds.) Teaching through a foreign language: from tool to empowering mediator. Publications of Higher Education Evaluation Council 5:1999. Helsinki: Edita, 15–25.

aration of bilingual and multilingual European citizens often starts at a very early age, even before primary education, to be continued throughout their educational career. The main rationale for this development is the belief that supporting foreign and second language learning in this way is an efficient and economically viable way of enabling learners to attain high-level proficiency in various languages in their home countries already.

Making active use of foreign language (hereafter, FL) -mediated content instruction presupposes the development of new areas of academic competence for the learner. The same is true of the teacher involved in either giving instruction in his/her mother tongue to learners whose proficiency in the language of instruction is still at a developmental stage or giving instruction in a language that is foreign to both him/her and to the learners. Assuming that the subject specialists who provide their teaching in these kinds of situations always aim at delivering the content at its fullest potential, the key question is, then, what *new* elements are brought to the teaching situation by the fact that the language used is new to the learners, and sometimes also to the teachers (in the sense that they are not native speakers of the language; hence the reference to a 'foreign' rather than 'second' language – i.e. 'vieraskielinen opetus' in Finland). It is this question – and the issues, principles and problems related to it – that will be explored in this article.

A brief account of the principles and 'prototype' models of content teaching through a foreign language is given first, along with explanations of some of the diverse terminology used in the field. Since the main focus is on foreign rather than second language learning, immersion programmes and minority language programmes are excluded here. Secondly, the study skills (or academic competence) required from learners are described, followed by what the teacher can do to facilitate the development of these skills and to enhance learning in this way. In conclusion, some key areas requiring extra attention are listed as prerequisites for successful FL-mediated instruction from the point of view of integrated content and target language learning.

2 Models and Pedagogical Principles of FL-medium Instruction

The theoretical and pedagogical foundations of teaching academic content through a foreign language have in the past decade become a phenomenon of considerable interest particularly in Europe and in North America. There is a wealth of documented research (started in the late 1960's) into early language immersion and bilingual programmes in both Canada and the U.S. (for a review, see e.g. Cummins & Swain 1986; Genesee 1987; Snow & Brinton 1997). European solutions have, unfortunately, not been so well documented (see e.g. Baetens-Beardsmore 1993). Along with increased European integration efforts, however, the use of foreign languages as the medium of content education, and as a supporting measure for formal language studies, has now become an important focus of development in European education. The main purpose is to facilitate the attainment of functional multilingualism at proficiency levels that are determined by the European Commission (White Paper on education and training: towards the learning society 1995) as the prerequisite levels for mobility. With these aims in mind, integrated content and language instruction (also called 'teaching non-language subjects through a foreign language', 'CLIL (content and language integrated learning)', 'bilingual education', 'content-based instruction', 'FL-medium instruction', and 'discipline-based instruction') and related research and experimentation have increased substantially over the past few years in Europe (in Finland since the amendments to school laws in 1992; for details, see e.g. Laurén 1991; Räsänen 1993; Marsh, Oksman-Rinkinen & Takala 1996; Nikula & Marsh 1996; 1997).

Both school-level and tertiary level research into the practice and research of teaching content through a foreign language indicates that the solutions taken in teaching are very much constrained by the situation and context in which this instruction is given, and that the 'best' or 'most suitable' model cannot – and should not – be presented. There are so many factors involved in the process of selecting the approach that countries, institutions, and even individual teachers must make their own plans and set their own specific aims within the framework in which they operate. This view was also suggested by, for instance, the Council of Europe workshops on bilingual teaching and bilingual teacher education, organised within the programme 'Language Learn-

ing for European Citizenship' (1993–1996; Council of Europe Report 12B 1996, 47). Thus, perhaps the only area in which there is consensus concerning the different approaches and solutions is that the ultimate aim is for both content learning and language learning to take place during the educational endeavour. In addition, from the point of view of target language learning, we can list certain features which are shared by most of the models and solutions that have been successful. These include the following (see also Brinton, Snow & Wesche 1989; Baetens-Beardsmore 1993; Wesche 1993):

- *Content* /subject matter is used *as the curriculum organising principle* and framework (i.e. language used and taught is authentic and relevant to learners).
- Instruction has *two objectives*: content mastery and target language development (i.e. double aims).
- Learning *materials and tasks are authentic* (i.e. not created for language teaching purposes; 'real-life' tasks).
- *Learner proficiency and needs* in the target language are *taken into account* in the teaching situation (i.e. learner-centred pedagogy).
- The *target language* is *also taught as a subject* (i.e. FL teaching supports content teaching and learning).

When analysed, the above features suggest a view according to which language proficiency in this context is developed through a continuous interaction between knowing about language and how it operates as the mediator of the subject matter in question (declarative knowledge) and knowing how to use the language for one's own purposes in relevant and meaningful situations (procedural knowledge), i.e. at both analytical and experiential level. From the pedagogical point of view, the list suggests that the curriculum is implemented in such a way that the learners are able to develop their language knowledge and skills to the level required by the content in question and potentially also, by their future use of the content (i.e. study purposes, workplace, profession etc.). Since functional or communicative proficiency in the target language is the most typical aim (in addition to content learning, of course) for FL-medium instruction, the implementation in practice usually means adopting a learner-centred approach with more individualised aims-setting and interactive methodology. This is particularly relevant for multilingual and multicultural teaching contexts.

Content instruction through a foreign language is often characterised by three 'prototype' models, which differ from one another particularly as regards the consideration given to the role of language and language learning in their pedagogical planning, implementation, and assessment, as well as who is involved in these processes. Table 1 presents a summary of these three models. The starting-point is the description given by Brinton, Snow and Wesche (1989, 19), which has been adapted to reflect the approaches taken in European and Finnish content instruction through a foreign language. The main purpose is to illustrate how each model might promote the learning of the study skills and language, and to offer a pedagogical framework for the various solutions adopted by institutions. In practice, there are of course many combinations of the models presented, both due to the educational level at which the instruction is given and to the special characteristics of different subjects and disciplines. Also, 'pure' immersion programmes and bilingual programmes are special cases that are not fully accounted for by this type of categorization. What, then, is selected as the approach in each case is dependent on many factors, including the following:

1. The subject or content in question and which language conventions are typical of it (e.g. degree of exactness in terminology and concepts, academic practice and discourse in the subject matter, extent of vocabulary needed, etc.);
2. Aims set for the teaching and the aims set for learners (e.g. skills focus, level of accuracy in e.g. writing and phonology, significance of presentation and team working skills, etc.);
3. Target language proficiency of teachers vs. proficiency level of learners (e.g. teaching styles, learning styles, level of knowledge of learners in the content matter, language and cultural background of teachers and learners, etc.);
4. Development aims of the institution (e.g. preferred image to be given, future prospects, specialization efforts, etc.); and
5. Resources and support systems available (e.g. time, financial resources, staff, administrative support, library resources, learning environments and support in their use, language advisory services, tutoring, willingness to co-operate, etc.).

TABLE 1   Alternatives for content and language integration (Adapted from Brinton, Snow & Wesche 1989, 19)

Alternatives/ Main features and views	Theme-based (or discipline-based instruction – any group)	Sheltered instruction (double aims – no native speakers)	Adjunct model (FL teaching as a support module – mixed group)
Main aim	Content mastery; FL learning incidental – separate aims not specified	Content mastery and FL learning; double focus and aims	Content mastery, the development of which is supported by tailored FL modules
Target group	Any group, both native and non-native learners	Typically non-native learners	Mixed group, but FL module aimed at non-native learners
Pedagogical approach	Often lecture-type, transmission of information, expert-centred; one teacher	Multi-modal, learner-centred; approaches support FL learning aims, learner-centred, interactive; one or two teachers	Lecture-type or learner-centred FL module constructed in co-operation with content specialist to develop skills needed in content mastery; i.e. two teachers
Language skills expected of learners	Dependent on the pedagogical approach; e.g. listening/reading comprehension, key terminology, note-taking on main points, academic writing	Integrated language skills; developed systematically through learning tasks; main emphasis on production and interactive skills	FL module focuses on skills needed for content mastery; e.g. academic writing, key terminology, seminar skills
Assessment	Content mastery assessed in whatever way is typical; language learning not assessed separately	Assessment of content and language according to aims set; often continuous assessment and monitoring	Each teacher assesses his/her share; usually double credits
Typical approach in	Higher education	Primary & secondary levels	Secondary level & higher education

The decision about what approach to take and what aims to set is the most difficult step for an institution or a group of teachers to make, because it is the basis of implementation. Different factors come to play a role here. For instance, if the instruction is given at the primary level, the learners need to develop many other skills in addition to language. Also, as has been shown by language learning research, they have a great potential to develop native-like pronunciation in the foreign language, which places additional demands on the phonological accuracy of the teacher. On the other hand, if the instruction is given at the tertiary level, the learners need to develop skills and knowledge needed for professional, discipline-specific discourse. All these factors need to be considered when specifying the aims of the instruction.

TASKS:

1. *Prepare a list of English terms used to refer to the various types of content-based / bilingual instruction in different parts of the world and clarify the meanings of these terms for yourself. Notice that you will have to account for both EFL (English as a foreign language) and ESL (English as a second language) contexts.*
2. *Select some school subjects and consider what kind of language and classroom practice is typical of them in general. What skills are needed to learn these subjects through e.g. English at different educational levels? You might also want to take one 'theoretical' subject and one 'hands-on' subject and compare them in this respect.*
3. *Study the table presented above and consider the subject(s) you selected from the point of view of each model. Compare and discuss with other students.*

3 Prerequisites for Successful Learning through a Foreign Language

Regardless of the approach taken, the learners involved in the endeavour need to possess or develop certain specific abilities and skills required for efficient learning through a foreign language. Adamson (1993, 106–113) has identified four basic abilities that form what he calls the 'academic competence'

('academic' here used to refer to subject matter discourse, not to tertiary level) needed in content-based learning at all levels. These include
- the ability to use a combination of linguistic, pragmatic, and background knowledge to reach a basic understanding of the content material;
- the ability to use appropriate strategies to enhance knowledge of content material;
- the ability to use appropriate strategies to complete academic assignments with less than full understanding of the content material; and
- the ability to assess and monitor one's learning and achievement, and re-direct and focus one's learning when needed.

Furthermore, he proposes that the necessary prerequisite knowledge and skills required in learning through a foreign language fall into five categories: 1) universal pragmatic knowledge (e.g. conceptualisation, schemas), 2) background knowledge (e.g. scripts, subject-specific knowledge, experience), 3) higher-order cognitive skills (e.g. reasoning, inferencing, problem-solving, critical thinking, analysing, synthesising), 4) efficient study skills and strategies and well-developed metacognitive skills (for assessment and self-directed learning purposes), and 5) (sufficient) language proficiency (e.g. for academic reading, note-taking, preparing for exams, speaking in class, writing reports and theses, etc.).

It is the teachers' first task to consider and analyse their learners' linguistic and educational needs and match these to subject-specific content demands. They need to determine objectives for the kinds of language knowledge and skills that are absolutely necessary for learning the subjects they intend to teach through a foreign language (i.e. content-obligatory language), as well as the 'supporting' or content-compatible language which facilitates both content learning and language learning in classrooms. In order to be able to do this, they need to have a clear idea of the ratio between FL and mother tongue use in their instruction, something which requires knowledge and understanding of how different solutions about the language use affect the learning of other subjects and academic skills in general (e.g. immersion vs. ten percent of the curriculum in the FL). These decisions, and actual implementation forms of the curriculum, then, depend largely on what aims have been set for FL learning by the teachers and the institution.

As regards upper secondary level and tertiary-level instruction through a foreign language, the last two categories (study skills and sufficient language proficiency) proposed by Adamson have a more prominent role, because high levels of knowledge and skills in these areas are presupposed in learning at abstract conceptual levels. In academic reading and in note-taking, for instance, the learners are expected to know how to distinguish between factual and non-factual information, important and less important items, explicit and implicit information, and relevant and redundant items, as well as how to summarise, draw inferences and conclusions, and work out the meanings of unknown words and culturally loaded concepts. In academic writing they are expected to be able to distinguish between academic genres and to write according to the discipline-based conventions (e.g. essay conventions in Finland vs. in Anglo-American countries) (see e.g. Mauranen & Markkanen 1994). It is particularly in students' written production, e.g. in examination and thesis writing situations, that the distinction between poor content mastery proper and poor content mastery resulting from inadequate language expression is extremely difficult to make in assessing student achievement. Regardless of the fact that the quality of written expression might not be evaluated, it is bound to affect assessment particularly in cases where the assessing subject specialist is a native speaker of the language used in instruction.

The integral connection between language and culture has only been mentioned in passing in the above lists. However, the mere fact of delivering content in a foreign language also means integrating the inherent cultural content within the language itself into this type of teaching. This is particularly true of native-speaker instruction. In addition, there are subjects which are particularly 'vulnerable' to cultural values and embeddings. For instance, if we are dealing with World War 2 in a foreign language and use authentic materials, the accounts given of the events, causes, and even winners, might be different in different languages. Depending on the learner group (i.e. monocultural vs. multicultural), then, the treatment of these kinds of subjects often requires a cross-cultural approach to be followed, which, in turn, makes considerable demands on both the teacher's and the learner's language proficiency and body of knowledge. On the other hand, subjects such as these are also extremely rewarding in terms of profound understanding and the quality of the learning experience.

Both content and language learning can be facilitated by structuring the content pedagogically in an appropriate way which is compatible with the language skills of the teacher and the learner, and by giving tailored learning tasks. The crucial issue is, however, that the aims have been specified in such a way that curriculum planning becomes possible and that there is enough background information to implement the curriculum in the best possible way. In making decisions about the instructional and curriculum development approach to be adopted, therefore, the following inter-related areas need special attention and consideration on the part of the teacher and curriculum developer, and also the institution.

- *Identification of learner skills and needs*, including
  - cultural and educational background of learners and their previous experiences
  - present language skills vs. required skills
  - requirements for intercultural communication (e.g. by the subject, by future studies and profession)
  - critical thinking and information processing needs
- *Interface of language and content* (subject/discipline-specific)
  - Language - contextually embedded or context-reduced (i.e. linguistically demanding)
  - Content - cognitively undemanding or demanding (i.e. conceptually difficult)
  - content-obligatory vs. content-compatible language (i.e. terminology, concepts)
  - cultural presuppositions and value systems embedded in the content (e.g. history, religion, home economics, health sciences)
- *Instructional methods and curriculum design principles*
  - level of specificity of aims-setting
  - conceptual level of operation in instruction
  - language knowledge and use required (teacher and learner)
  - study skills and strategies, learning styles and level of self-directiveness required
  - forms of assessment
- *Support systems necessary for implementation*
  - co-operation and collaboration needed
  - quality assurance system followed

   – reference systems available (teacher and learner; e.g. dictionaries, language advice)
   – learning environments and support for their use.

TASKS:

1. *Individually or with a partner, design a 30-hour course outline in some subject area for a learner group of your own choice integrating language and content in a systematic way. You may choose your own approach, but remember to state what criteria you have followed and what the rationale for your decisions is. Consider as many areas as possible. Present your course outline to others for peer feedback and assessment.*
2. *Design one lesson to suit the framework of your course and prepare materials that could be used, i.e. that have been adapted to suit the subject and learner group in question. You might benefit here from observing some authentic lessons given in English.*

4 Conclusion – Characteristics of Successful Programmes and Teachers

As is clear from all that has been said above, evaluating programmes taught through a foreign language is an extremely complex and difficult task. The number of factors involved and issues to be addressed in each individual situation is such that external assessment unavoidably becomes rather limited, which is why the providers of such education should themselves be involved in a continuous self-assessment process. Clarification of both institutional and individual aims will decrease their vulnerability to criticism from the part of the various stakeholders involved (i.e. parents, learners, authorities, colleagues, etc.), and enable informed decision-making. This is particularly important because both subject areas and language and communication are involved in content and language integrated instruction, and finding a proper balance can be problematic. There are, however, some research findings – both Finnish and international – which indicate which factors tend to cause problems and conflict in implementing FL-medium programmes and which characteris-

tics are typical of successful programmes (for more details, see e.g. Brinton, Snow & Wesche 1989; Krueger & Ryan 1993; Räsänen 1993; 1996; Baetens-Beardsmore 1996; Nikula & Marsh 1997).

The *areas of potential conflict* among the participants in the FL-medium teaching and learning process include at least the following:

- mismatch between aims, implementation forms, and expectations;
- mismatch between pedagogical (interactional) approach and learner beliefs and experiences;
- mismatch between learner skills and requirements;
- inadequate language proficiency of teachers (and inadequate compensatory strategies);
- lack of collegial co-operation and administrative support;
- unsatisfactory information flow within the institution;
- disregard of cultural matters;
- lack of staff training and development; and
- lack or inadequacy of support systems available.

The Council of Europe Workshop 12 (CofE Report 12b 1996) on teaching non-language subjects through a foreign language summarised its three-year work by presenting general *guidelines for bilingual education in Europe*. The areas relevant in this context include the following:

Learners and learning. Attention should be given to continuous monitoring of the learning process, facilitation of the development of learner autonomy, introduction of flexible curricula to provide a language-across-the-curriculum approach, intensive co-operation between teachers and crossing of subject boundaries, networking between institutions, levels, and countries, as well as systematic action research to facilitate decision-making.

School / institutional development. One prerequisite for a successful implementation of a bilingual programme is establishment of an institutional ethos and a supportive learning and collaboration atmosphere. Bilingualism and multilingualism should be seen as a natural phenomenon and a logical aim for education at all levels.

Materials should reflect both the target culture and learners' cultures in a balanced way. Learner-centredness is important.

Bilingual education should be *available at all educational levels and in several foreign languages*. Aims can vary from partial to fully functional bi-

lingualism, depending on the local and national circumstances and policies.

Quality of bilingual education should be systematically monitored, particularly in terms of institutional development, selection of subjects, pedagogical approach, materials, assessment, participation in international exchange programmes, and teacher education and in-service development. National and international *collaboration and systematic action research* and coordination are essential.

Three kinds of *teacher education programmes* are needed (often for both content teachers and language teachers): 'emergency' courses, in-service programmes, and pre-service programmes. Language teacher education should also include preparation of teachers to support content teaching in a foreign language. An 'ideal' teacher giving content-based instruction through a foreign language would be

a) an expert in the subject matter or discipline,
b) proficient in the language of instruction, including subject-specific language and communication,
c) confident in the use of the target language for communicative purposes,
d) knowledgeable in the process of language learning and acquisition under different circumstances, and in how language learning can be monitored and facilitated,
e) able to analyse and solve problems in the bilingual classroom,
f) trained in bilingual pedagogy, assessment, and course and materials development, and
g) willing to cross institutional and subject borders and engage in efficient co-operation.

In addition to these guidelines, *successful implementation* of programmes and instruction offered in a foreign language *seems to have the following characteristics*:

• Content delivery through a foreign language is also seen as an important factor in facilitating target language learning, and is supported accordingly.
• Clarified, specific, and mutually accepted aims have been determined.
• The programme (including FL) is overtly promoted by institutional policies.

- There is a balance between cultures; a healthy self-concept and identity are promoted.
- An interactive and learner-centred pedagogical approach is followed.
- The learning tasks are authentic and relevant both for content and for language.
- The instructional approach
  - offers rich input, and uses alternative ways of expression to ensure understanding
  - offers multiple opportunities to process the same information (i.e. at various proficiency levels)
  - pays attention to cultural differences and learner experiences
  - includes systematic attention to learning styles and study skills
  - includes tailored input to fit different levels of proficiency
  - uses routines and patterns to call attention to recurring discourse patterns and structural regularities, as well as terminology and vocabulary of the subject matter in question.
- Multiple forms of assessment to monitor both learning process and achievement, as well as to develop skills for self-directed learning, are in use.
- Continuous development and programme assessment, as well as teacher in-service development and cross-curricular co-operation, are attended to systematically.

On the basis of what has been listed above, we can now summarize the skills a training course or programme for teachers involved in teaching through a foreign language should address. In addition to language and communication skills and content expertise, then, the pedagogical training of teachers (Brewster 1999) needs to develop:

- the ability to analyse the linguistic and cognitive demands of lessons, to survey learners' needs and to match these with the learning aims set;
- an understanding of the language requirements of each subject to be taught;
- the capacity to analyse language use required for different learning tasks and to provide language practice in purposeful contexts in order to enable accomplishment of these tasks;

- the ability to draw upon the learners' knowledge about language and to use this knowledge when designing activities and tasks;
- an understanding of the principles and practice of using a wide variety of approaches and activities which support learning at appropriate levels;
- an understanding of how tasks can be graded in terms of their degree of difficulty;
- an understanding of the management, assessment, and monitoring of learning.

Finally, because the above considerations do not address the specific situation of a non-native subject specialist giving instruction in a foreign language to a non-native learner group – as is often the case in Finland, with English as the lingua franca of instruction – it is perhaps necessary to add a comment on this type of situation from the teacher development point of view. Although, admittedly, English is spoken in many ways and with many accents throughout the world, this fact should not be taken as an excuse for not making an effort to develop the teachers' English proficiency to a level at which they feel comfortable and confident in delivering instruction in their own fields of expertise. One component of this expertise is, for instance, knowing how to pronounce and write the terminology of the field accurately, in order to ensure credibility as an expert (and in order for the learners to adopt appropriate forms). In addition, particular care should be taken to avoid a situation in which the subject matter is watered down and treated at a conceptual level that is not what is generally required at the educational level in question or in the field in general. Finally, although it is clear that increased exposure to English (or any other foreign language) will greatly improve the learners' fluency in the language, the development of accuracy (particularly in phonology and written expression) requires conscious attention and language teaching (see e.g. Genesee 1994; Baetens-Beardsmore 1996). Therefore, appropriate collaboration and support systems should be established and designed for these purposes at the institutional level, as the demand for teaching through a foreign language in Finnish education is continuously growing.

TASKS:

1. Find out about what official regulations exist in Finland about teaching through a foreign language (vieraskielinen opetus). Familiarize yourself with the research and survey evidence available about our particular context.
2. Write a 10–15 page paper on integrated content and language instruction from the perspective of your own choice. Make use of the wealth of documentation available in the field (you will need your terminology list here) both in the literature and on the Internet.

References

Adamson, H. D. 1993. Academic competence. Theory and classroom practice: preparing ESL students for content courses. London & N.Y.: Longman.

Baetens-Beardsmore, H. 1993. European models of bilingual education. Clevedon: Multilingual Matters.

Baetens-Beardsmore, H. 1996. Bilingual education. Plenary speech at the European Language Council Conference. Lille, France.

Brinton, D. M., Snow, M. A. & Wesche, M. B. 1989. Content-based second language instruction. New York: Newbury House.

Brewster, J. 1999. Teaching English through content: Supporting good practice. In C. Kennedy (Ed.) Innovation and best practice. London: Longman & Pearson Education, 83–95.

Council of Europe Report on Workshop 12B. 1996. Bilingual education in secondary schools: learning and teaching non-language subjects through a foreign language. Strasbourg: Council of Europe.

Cummins, J. & Swain, M. 1986. Bilingualism in education. New York: Longman.

European Commission's White Paper on education and training: towards the learning society. 1995. Strasbourg.

Genesee, F. 1987. Learning through two languages. Studies in immersion and bilingual education. Cambridge, MA: Newbury House.

Genesee, F. 1994. Integrating language and content: lessons from immersion. Educational Practice Report 14. Washington, DC: Center for Applied Linguistics. National Center for Research on Cultural Diversity and Second Language Learning.

Krueger, M. & Ryan, R. 1993. Resituating foreign languages in the curriculum. In M. Krueger & R. Ryan (Eds.) Language and content. Discipline- and content-based approaches to language Study. Lexington, MA: D. C. Heath and Company, 3–24.

Laurén, C. 1991. (Ed.) Kielikylpymenetelmä: kielen käyttö mielekkääksi. (Language immersion: meaningful use of language.) Vaasan yliopiston täydennyskoulutuskeskuksen julkaisuja 1.

Marsh, D., Oksman-Rinkinen, P. & Takala, S. 1996. Mainstream bilingual education in the Finnish vocational sector. Helsinki: National Board of Education.

Mauranen, A. & Markkanen, R. 1994. (Eds.) Students abroad. Aspects of exchange students' language. FINLANCE, Vol. 13. University of Jyväskylä. Language Centre for Finnish Universities.

Nikula, T. & Marsh, D. 1996. Language and content integrated instruction in the Finnish primary and secondary sectors: A national survey. University of Jyväskylä. Continuing Education Centre.

Nikula, T. & Marsh, D. 1997. Vieraskielisen opetuksen tavoitteet ja toteuttaminen. (Content and language integrated instruction in Finnish schools: from aims to implementation.) Helsinki: Opetushallitus.

Räsänen, A. 1993. Language learning and bilingual education: theoretical considerations and practical experiences. In A. Räsänen & D. Marsh (Eds.) Content instruction through a foreign language. A report on the 1992–1993 TCE programme. University of Jyväskylä. Continuing Education Centre. Research and Field Reports 18, 9–31.

Räsänen, A. 1996. Educating teachers for integrated language and content instruction. Teacher qualifications. Paper presented at the AILA 1996 World Conference. August 1996. Jyväskylä.

Snow, M. & Brinton, D. 1997. (Eds.) The content-based classroom: Perspectives on integrating language and content. New York: Addison-Wesley Longman.

Wesche, M. B. 1993. Discipline-based approaches to language study: research issues and outcomes. In M. Krueger & R. Ryan (Eds.) Language and content. Discipline- and content-based approaches to language study. Lexington, MA: D. C. Heath and Company, 57–79.

Viljo Kohonen
Department of Teacher Education
University of Tampere

New Teacher Professionalism and Collegial School Culture:

Empirical Findings of an Action Research Project

1   New Professionalism and School Culture: Teachers' Voices

As discussed in chapter two of this book (Kohonen 2000b), the central goals of the OK school development project (1994–98) were to enhance the teacher's professional growth as part of fostering a collegial school culture and developing student learning in a broad experiential learning orientation. The purpose of this study is to analyse the teachers' developmental essays and interview data in order to elucidate the processes of professional growth and school development in the six participating schools at the end of the OK project. I was the co-director of the project with my colleague Pauli Kaikkonen at the Department of Teacher Education, who was in charge of analyzing the data on student learning (see Kaikkonen & Kohonen 1999).

I encouraged the teachers to write open-ended developmental essays at the end of each year to review and reflect on their professional growth during the past school year. They could choose the way they wrote and organized the essays according to their own views. About half of the participating teachers submitted their essays to me towards the end of the project (15 teachers in

215

spring 1997, 11 in spring 1998). Additionally, two teachers from each school were interviewed at the end of each year for further research data, using a loosely structured thematic interview. The head teachers were included in the interviews at the end of the two last years of the project. I undertook the qualitative analysis of the teacher essays (from 1997 and 1998) and the interviews (from 1998; see Kohonen 1997; 1999).

The major themes that emerged in the analyses were as follows: 1) the importance of autobiography for teacher growth, 2) the changes in the professional role of the teacher, 3) the development of collegial school culture, 4) the emerging new professionalism, 5) the teachers' experiences and feelings about the change processes, and 6) the pressure of time and resources for renewal (see Kohonen 1997; 1999). I discuss these themes in this section.

1.1   Teacher Growth as Autobiographical Self-reflection

The participating teachers were developing an increasing understanding of themselves as educators through sustained self-reflection in their personal diaries and the developmental essays. They noted that the opportunities for sharing the experiences with others and listening to their discoveries in the various collegial groups provided a valuable source for exploring their educational beliefs and assumptions. Some teachers were already familiar with self-reflection prior to the project, while for most it was a new experience, at least when done in such a systematic way of keeping the diary, writing the essays and sharing the findings regularly with the colleagues. As a result of the intensive reflective work over the years, the teachers were sensitized to their personal and professional growth.

The reflections and the discussions increased the teachers' awareness of their educational thinking about the classroom practices, helping them to develop new possibilities for organizing their students' work and solving problems. As a secondary teacher notes:

> Making notes on my lessons was really illuminating. I had several problematic events with restless boys and reticent girls. Writing clarified my thoughts and I was able to plan ways of solving the problems. I noticed that when writing about two boys I understood their situation far clearer than during the lesson. On the following day I discussed the problem with one of them and was glad to realize that my interpretation

was right. ... I have learned to make notes about the events during my lessons, the relationships between the students, and note my own feelings, ideas, disappointments and successes.

The teacher also notes that it is important for her to write down her experiences and feelings immediately as the opportunity arises during the lesson while her students are working on their own. Even short notes help her recall the event more vividly and revive the emotional climate which she feels soon gets lost during the busy days. The notes help her recognize the life world of her students and the way they make sense of her teaching.

Self-reflection developed gradually as a natural part of the teachers' professional orientation and provided them with a significant tool for exploring their professional growth. Towards the end of the project (in 1997) I asked the teachers to outline the developments in their teaching careers over the years as a professional autobiography. The teachers who undertook this task found it a rewarding experience. One teacher put it in her essay as follows, 'self-understanding is possible only in the context of my autobiography'.

1.2   From the Transmitter of Knowledge to the Facilitator of Learning

The developmental essays provided significant research material for tracing the development of the participating teachers' professional careers. The data show the shift from the traditional orientation of seeing teaching as knowledge transmission towards facilitating of student learning. For most teachers, this process also involved a clear attitudinal change from working alone to realizing the importance of collegial collaboration for their professional growth. This change was connected with a restructuring of the teacher's conceptions of man and learning, in other words, assuming a new professional identity as a teacher. As one teacher put it, 'teachership will not change unless the teacher changes her values and her conception of man'.

The life stories showed that the process of the paradigm shift extended over a long span of years and often had some critical incidents or events that had helped the teachers to extend their professional identity. The teachers mentioned the following incidents: 1) active participation and commitment

in long-term coursework that included both theoretical and practical work in the teacher's own classes as well as reflection on the experiences; 2) a long-term collaboration with the Department of Teacher Education as a mentor of student teaching with a component of inservice education for this; 3) undertaking further (advanced) pedagogical studies at the Department of Teacher Education, and 4) being actively involved in pedagogical research and development projects lasting several years. A significant component in such incidents was close collaboration with another teacher or a group of teachers. This provided them with opportunities for reflecting on the processes in an atmosphere of mutual trust and caring.

A secondary math teacher completed a two-year course on Steiner pedagogy with her friend, using the ideas in her own classes during the course. The new conception of learning 'clicked' as a result of intensive reflective work on the course and informal talks with her colleague. After this experience the teacher established a collegial study circle consisting of a small number of math teachers. They met regularly in weekly seminars to discuss their experiences with the others. She then resumed her pedagogical studies at the university in order to enhance her theoretical understanding of the curriculum and conceptions of learning. She notes, however, that 'reading theoretical literature alone is not enough for developing practical know-how'. Equally important for her was the exploratory work in her classes, giving her 'direct touch with learning in class'. As a result of joining the OK project her school started developing collegial collaboration and she assumed an informal leadership in this process, supported by the head teacher. The positive experiences of the emerging new culture in her work place strengthened her views so that she felt she no longer could 'return to the transmission of knowledge behind closed doors'.

A secondary language teacher analyses her developments noting that 'knowledge transmission and authority were not the basic idea of being a teacher. What then? Could it be that the teacher is also a human being in class, someone who can also make mistakes and admit them?' Important for her were a two-year intensive course on counselling and long-term work as a mentor of student teachers. After a thirty-year career, her current view of teachership consists of elements of guiding her students, talking and negotiating with them, giving space for student questions and being an adult person in the class. Portfolio assessment gave her essential tools for this orientation. She notes

that all the experiences and formative incidents had been necessary for her development during her long professional career: 'When looking at myself in retrospect, I notice that each turn was, in fact, a choice of my own. All the successes and failures were necessary for my progress. There is no shortcut [to professional growth]'.

1.3   Collegial School Culture

As teachers were developing new practices of collegial collaboration they noted that something was clearly moving ahead in their school: 'There has been a manifest change in our school culture: we have learned to work together, plan together and give collegial support to each other.' Through collegial collaboration they find better ways of tackling the problems of student motivation, discipline and bullying. They gain rewarding experiences from working together and discover that joint planning can also be fun: 'We had a really good time together during the brainstorming session. We found each other and it was energizing to laugh at everything that had been irritating before.' The processes in this school were summarized by the school's coordinating teacher as follows:

> Collaboration in various teacher teams has become an everyday matter in our staff room. I have come to understand each of my colleagues as a resource which is in my reach every day. Our talk in the staff room deals mostly with professional questions of teaching, and most teachers take part in it ... collaboration with my colleagues on new techniques of teaching has personally given me new joy and inspiration in my work.

Teachers find that collaboration is mutually beneficial to the teachers who teach the same subjects and thus face similar problems in their work. At the same time they note that cooperation across the curriculum is also useful, providing new perspectives on thinking. Colleagues can give, as it were, a mirror for the teacher to reflect on her own teaching and thus provide new elements for developing her views of teachership. Teachers find collegial feedback important, but they note that giving feedback is a new and somewhat scary culture in their schools. Positive comments and appreciation of work feel good, and critical comments are also helpful for thinking. Teachers realize that they need to reach out to give feedback to each other, taking the risk of

openness. Working together improves personal relationships and makes it easier to give and receive feedback.

The working community of teachers can thus support and encourage teachers in many ways. However, it can also be stressing and discouraging. The teachers taking part in the OK project also face silence, resistance and suspicions from those colleagues who did not wish to join the project. They notice that conflicts between the teachers in the community can take up unbelievable amounts of mental energy and cause feelings of stress. An innovative teacher gets tired with the slow progress of the new culture in her community and considers giving up, withdrawing to her own classes only: 'Let the others do what they wish'. She realizes, however, that school renewal does not proceed in this way. So one has to be patient and think of possible ways of coping with the resistance.

1.4 Enhanced Professional Identity

The participating teachers' views of their professional identity were expanding: 'I am interested in developing our school and worried about the appreciation of the teacher's work ... I want to promote my professional growth both as a subject teacher and as an educator'. The new identity contained different elements for different teachers, going beyond the notion of teaching their subjects. A language teacher finds that she is more than just a teacher of the languages in her school. At times she feels like 'a social educator, a psychologist, a family therapist, a listener, a referee, someone who comforts ...'. Increased collaboration with the parents in short personal meetings also gave the teachers a better knowledge and understanding of their students' family backgrounds. While giving new possibilities, however, the parent meetings also raised the question of where to get the time for them, particularly as they need to be organized in the evenings.

As the teachers were getting more aware of their personal growth as educators they were also becoming increasingly sensitive to their students' individuality and growth. They note that silent and reticent students easily escape their attention, being difficult to get in touch with:

These students work silently and diligently on their own, but it is difficult to get close to them as they never express their opinions, never have any questions to ask and don't answer the questions.

Another difficult group of students are those who have low self-esteem and typically comment that they 'don't know, don't understand' anything. How to help a student who does not believe in his or her own abilities as a learner? How to enhance such students' self-esteem and self-confidence? A secondary teacher writes that she has an important mission to help her students to realize that they learn and work for themselves, not for her. She is determined to encourage them to get interested in their own life and future.

Many teachers thus considered possibilities and ways of promoting autonomy in their students. They found that the portfolio provided new important ways of guiding learning. The portfolio clearly helped them in getting to know their students better as individuals with their own interests, hobbies and hopes for the future. For an upper secondary school language teacher, the language portfolio opened a new world of professional growth and student guidance and tutoring. She used her personal diary as a vehicle for advancing her own growth while developing the student portfolio as a tool for guiding student development. The whole concept of 'teaching' was unfolding for her in a new way:

I still 'teach', of course, and am still a certain authority and adult in my class, ... but I have also become a counsellor of my students' learning. I attempt to create a positive climate in my classes and I also have the courage to take risks. I have become an observer of learning and I continuously encourage my students by giving them positive and still honest feedback, both orally and in writing.

Tutoring students' portfolios required a great deal of time for designing and guiding the work, negotiating the groundrules and deadlines, answering questions, reading the student documents and giving feedback about the work. It also required a new kind of firmness in setting the tone of the work, negotiating the processes and demanding that the students also observe the agreed deadlines. Encountering the students on a more personal basis in an open negotiation was a new experience for many teachers. The process also entailed explicit teaching of what it means to be a self-directed and socially responsible student who is increasingly in charge of his or her learning and

who also takes responsibility for supporting fellow students' learning. Teachers found that teaching these lessons to their students was changing their role in a fundamental way.

The teachers' reflections suggest an enhanced notion of the teacher's professional competence. This competence consists of the following dimensions of expertise (Kohonen 1997; 1999; 2000a):

a) *Subject-matter expertise*: knowledge of the subject(s) taught and discipline-based theoretical understanding of them. This is, of course, the traditional role identity of secondary teachers.

b) *Pedagogical expertise*: knowledge of the students and individuals, how to encounter and guide them individually, how to facilitate their learning and teach them to be more competent and skilful learners; how to make the curriculum contents more readily accessible to them.

c) *Expertise in school development*: understanding of the change processes and becoming an 'agent of change' in school; taking a responsible role in developing the school as a collegial work place; assuming a commitment to the ethical dimensions of the teacher's work.

These dimensions suggest a significant enhancement particularly in the secondary school teacher's traditional role as the subject specialist working in isolation within the transmission model of teaching. The emerging new professionalism poses a huge challenge for the teacher and teacher education.

1.5   Teachers' Experiences of Their Professional Growth

Facing change is not just an intellectual matter of learning the necessary factual information. It is very much also a question of undertaking the emotional work inherent in any major change processes. Changes imply that part of the teacher's professional competence becomes obsolete and needs to be replaced by new attitudes, skills and understandings. All this requires deep modifications in the beliefs and assumptions of the role identity. Teachers relate differently to such demands. On the one hand, the new discoveries are rewarding and entail feelings of increased competence and professional empowerment. On the other hand, the process is also bound to contain feelings of ambiguity, insufficiency and even powerlessness. It is thus inevitable that the changes pose threats to the teacher's professional self-understanding and belief sys-

222

tems (Kemmis 1995; Kohonen 1997; 1999). In the present material both of these ways of encountering the changes were evident.

1.5.1   Feelings of Professional Empowerment

Professional growth was a personally enriching experience for many teachers. They learn to accept their limitations and imperfections and realize that they are still good teachers. Not having to be perfect was a liberating experience. Teachers assume the courage to bring up their thoughts more openly in the community and do not get discouraged when facing resistance. They learn to reflect on their work and the community as if from a distance, discovering new features in themselves, their colleagues and the culture in the work place.

Teachers also realize that they need to look after their own well-being and mental resources by taking the time for rest, privacy and self-reflection. They note that an exhausted teacher cannot be helpful to anyone. Increased self-understanding encourages them to give presentations about their work to colleagues at various professional meetings, but it also entails the courage to say 'no' when necessary. Teachers feel that they have gained more faith in the significance of their work: they believe that they can make a difference to their students' lives. They find that they can live their professional lives at an emotionally deeper level and in more meaningful and rewarding ways than previously. While the work has become more complex it has also become intellectually and emotionally more challenging and rewarding, providing potential for further growth.

Teachers felt a strong need to learn more, to increase their understanding of work. They attended further professional courses to acquire new inspiration for their thinking. Some schools were buying recent professional research literature for their library for the teachers to read, and the books were in frequent use among an increasing number of staff members. As a lower secondary teacher puts it, she feels like a bird who has discovered that her wings have begun to carry her now:

> When I have got high enough I notice that flying does not take energy any longer. I can just glide up there and let the currents in the air (that is, the new ideas and projects) carry me further. Now that I have learned to fly I also have the courage to visit new lands and enhance my experiential world.

She reminds herself, however, of the danger of becoming blind to the speed, and the consequent need to stop and reflect on where she is and where she ought to go. She also says she feels humble gratitude for the support and advice that she has received at the important moments from colleagues and others close to her.

For another secondary teacher, the project meant going through a considerable process of thinking. She feels that her self-knowledge has increased and she has learnt to examine things from different perspectives. She finds that she now gets along better with her work and the students, and the positive feedback encourages her to pursue the process further. Her students take her as an ordinary person whom they can approach also with their worries. She aims to be worth their trust as an adult educator. Relating to the students on an equal basis still does not imply the role of a peer; as the teacher she also needs to maintain a certain distance to her students, not crossing a certain threshold. She feels that her role as an educator satisfies her inner needs for growth and gives her a feeling of professional competence. She notes that she has assumed a new kind of courage and faith in her work and she wants to foster also her students' trust in their abilities to learn.

1.5.2 Feelings of Ambiguity and Discomfort

Professional growth also entailed encountering feelings of uncertainty and insufficiency. In addition to her own uncertainty, the innovative teacher had to face suspicion and resistance from a number of colleagues and students, sometimes even from parents. Many teachers were asking themselves how they could behave in their classes in a confident way while having inner doubts about the sufficiency of their own professional understanding and skills. How to give an impression of being a competent and encouraging teacher while feeling uncertain and confused? This paradox of being an innovative teacher was causing stress and anxiety to many teachers. Changing professional beliefs and assumptions in the middle of a full work load was thus felt to be emotionally heavy, at times even overwhelming.

A lower secondary teacher found it helpful for her to realize that new learnings necessary entail feelings of insufficiency. She discovered that she had to learn to proceed in small enough steps and also allow herself to make mistakes. Failures and mistakes are part of life, and they may contain seeds for

growth. It is therefore good to be merciful to oneself and avoid excessive perfectionism. When the teacher encounters her own insufficiencies it is also easier for her to understand and appreciate deficiencies in others: 'We touch others through our insufficiency, not through our impeccability and excellence'. For her, facing the changes was thus a question of humility, endurance, maturation and personal growth. Sharing feelings with a colleague was a significant help for her in the process.

The concerns of their students brought hard times particularly to upper secondary teachers who were developing portfolio assessment with their students. A number of students were worried about their success in the national matriculation examination in foreign languages: would they learn sufficient grammar and vocabulary to pass the exams well enough to be admitted to further university studies according to their plans? Would the project jeopardize some of their options for the future? The teachers found these doubts of their students hard to bear and were worried about how they might encourage their students to pursue their work with confidence. How to convince them that they would do as well as their fellow students who were studying with other colleagues using more traditional types of language examinations? A teacher asks herself whether she was after all struggling in vain:

> Will the things I am doing have any bigger significance? ... I feel that while gliding among the clouds I have been a too hopeful idealist ... I hope I will gain a balance between my doubts and experience and become certain of my importance. My former self-confidence cannot have disappeared altogether.

She finds, however, that it is important for her as an educator to believe in the worth of her work, not losing her hope. Thereby she can also foster her students' self-confidence better. These teachers found that writing the professional diary and sharing the experiences with the colleague was extremely beneficial, helping them to cope with the difficulties.

1.6 Time for Professional Renewal

Over and over again, the problem of lack of time for professional learning, reflection and student guidance came up in the teachers' essays and inter-

225

views. While the portfolios clearly created new possibilities for getting to know the student as an individual learner, they were laborious to read carefully for thoughtful comments, and the tutoring sessions also took up a great deal of time. This was particularly a problem in the upper secondary schools where the group sizes could be as big as 36 students. A language teacher wrote about her concern with time in her essay:

> If only I had time! Time to discuss with my students, to listen to them, negotiate, plan, make agreements and follow them up, time to get to know each student better as a person!

The head teachers found it important that the OK project increased collegial collaboration and openness in their schools. However, facilitating cooperation amongst teachers in various teams and discussion of their experiences created an acute problem of where to find the time for the new developments as the teachers' school duties were being increased all the time:

> ... we are in a great hurry and the administration constantly gives us new tasks. We have ongoing pressure of time and the rate of work has tightened up ... to the very limits of what teachers can manage. We have no time to stop to think about things that we feel would be important ...

> ... when the amount of work to be done is being increased all the time it is no longer possible to keep up the previous quality of work ... at least I suffer from this situation that I cannot do my work as well as I would like to do it.

> ... with the increase in the tasks I have a feeling of racing against time ... the school years pass by at an increasing tempo ... and we have less and less time to think of our everyday work routines ...

Feelings of lack of time were connected with the rapid rate of changes in Finnish society and schools. The context of the teacher's work has changed radically as a result of the recent (and ongoing) economic recession whereby the schools' resources have been reduced. At the same time, the site-based curricula and the new obligation for assessing quality in school have brought up new tasks. The prospect of competing for students and resources while helping students to do well in the national matriculation examinations was felt to be particularly stressing in the upper secondary schools.

In addition to maintaining mastery of the subjects taught, the teachers felt that they had to undertake new duties continuously and expand their professional skills under pressure of time. Understanding the new ideas thoroughly was already a big challenge, and bringing them to the classroom level as practical pedagogical decisions and procedures needed a further effort. Thus a primary school teacher notes that he was not able to pursue his ideas of self-assessment at the practical level as much as he would have liked. The new culture was strange and difficult for his students. The young learners would have needed more time and support than he was able to provide under the time constraints imposed by the need to progress in the curriculum.

2 Perspectives on the Teacher's Professional Growth

As the data indicate, the OK project was clearly able to foster the participating teachers' professional understanding in many ways. It enhanced their knowledge base of learning, action research, professional growth and school development. They were increasingly able to gear these concepts to improving the quality of student learning. Conducting action research and reporting on the findings was a new orientation for most teachers. The project shows that teacher-conducted research is possible and fruitful to the teachers and the schools when properly supported. The dissemination of the project findings has resulted in a large number of professional presentations in conferences and seminars, locally, nationally and internationally, as well as in three collections of papers by the participants (see Kaikkonen & Kohonen 1999; Kohonen 2000b).

The teachers encounter changes in different ways, according to their situations in life, their resources and their personal autobiographies. They relate to the new demands differently in their personal life contexts, within the constraints of their personal resources and possibilities and the culture of the working community. There is consequently no one way for professional growth; rather, there are different paths and choices. The situation or demand that one teacher experiences as challenging may be felt as overwhelming by another teacher in his or her current life situation. Teachers should therefore have means to adjust their work to their life situation in order to avoid overwhelming demands. They also need explicit support to come to terms with conflicting demands.

I have interpreted my data in terms of two major themes: 1) the new teacher professionalism and 2) the question of time and resources for professional renewal and the reculturing of schools.

2.1 New Professionalism and Educational Hope

Professionalism essentially includes an element of ethical commitment to promoting the good of the student and advancing one's professional understanding as well as contributing to the whole profession. What this 'good' means for the members of the school staff and the different students is a question that requires recurrent ethical deliberation in school, among the participants and the stakeholders.

The project schools aimed at enhancing student learning in a broad experiential learning orientation emphasizing socially responsible self-directed learning. This raised the question of what are the learning outcomes and the desirable practices that the teachers ought to aim at. The school needs to develop a community culture that supports an ongoing open discussion on the different possibilities and options. The discussions and joint decisions also need to lead to concrete groundrules and educational action.

In the current context of site-based curricula and school-wide evaluation, the emerging teacher's professionalism entails an active participation in the development of the school as a collegial community. With a number of students in compulsory education, the teacher's work also includes features of social work. Evaluation needs to be developed so as to provide context-sensitive information for guiding learning processes and pedagogical decisions. An essential part of such formative evaluation needs to be conducted as an interactive process among the participants and the stakeholders. This requires new kinds of communicative skills in the encounter situations.

The teacher's work identity is thus developing into a complex profession which requires a wider range of communicative, collegial and participatory skills than previously. Moving from professional work in isolation into an interactive professionalism is a great challenge particularly to secondary teachers. In the teachers' experience, the process entails, on the one hand, a rewarding new identity which increases the meaningfulness of work. The data have ample evidence of the strengthening of the teachers' professional com-

petence connected with the growth processes. This involves a kind of professional empowerment which the teachers experience as personally satisfying (see Antola Robinson 1994; Siitonen 1999).

On the other hand, the change processes also entail the need to come to terms, one way or another, with the uncertainties and ambiguities inherent in any major changes in professional beliefs and assumptions. Encountering the dissonances with deep-rooted meanings involved feelings of professional conflict for a number of teachers. If the stressing feelings cannot be discussed in the community in an open and safe atmosphere teachers may develop various defensive mechanisms to protect themselves. Unlocking restricting images, attitudes and communication in working communities requires a great deal of emotional work from the participants. While conflicts open significant opportunities for personal and community developments, the participants need to learn to deal with them in constructive ways. Instead of blaming and scapegoating, they need to develop open dialogue in an atmoshpere of mutual respect. Human growth is a complex inner process which can hardly be dictated or imposed from outside.

Christopher Day and Ruth Leitch (1998; 1999) also point out that change is more than just an intellectual question. It also involves an element of emotional work that is often characterised by considerable confusion as new learning incubates and existing meanings are adjusted. Emotional work is necessary for deepening one's self-understanding and the ability to relate to others, respecting their identity and otherness. They suggest the notion of *complex professionalism* to include such aspects of professional growth.

Daniel Goleman (1995; 1998) similarly discusses the emotional side of human learning using the well-known concept of *emotional intelligence*: the capacity to recognize feelings and express them appropriately and to engage in a critical reflection on the ways of feeling and knowing. It involves managing one's emotions and recognizing them in others, developing thus a social competence and becoming skilled in human relationships.

Juha Suoranta (1997) emphasizes the need for the educator to reflect on the ethical values in education and develop a personal philosophy of education to guide the pedagogical choices that must be made in this time. He notes that the educator should learn to understand and appreciate his or her change processes and thereby develop a respect for similar processes in others. In this way the teacher can become an educationally thoughtful profes-

sional. He also notes that education aims fundamentally at change and should therefore involve hope as a basic element. Education is based on hope and this element should be manifest in educational acts: 'Education consists essentially of educational deeds, and words are also deeds in education.' An educator should therefore have a sufficient firmness of mind and courage to go beyond conventional ways of thinking and acting (Suoranta 1997, 125).

Moral deliberation is essential for teachers in renewing their educational practices and reculturing their schools as professional work places. While the process of developing complex professionalism may seem demanding, I wish to emphasize the significance of hope evident in my data. Caring teachers may have to accept uncertainty and anxiety as part of their lives, as the data show. However, the growth processes also entail significant rewarding experiences and thus elements of hope and encouragement. A collegial sharing of such experiences is essential for growth processes.

Michael Fullan (1997) points out that there is a two-way link between emotion and hope. Understanding this link is a powerful insight. Hope is not a naive, sunny view of life. It is the capacity not to panic in tight situations, to find ways and resources of addressing difficult problems. Hopeful people have a greater capacity to deal with interpersonal discomfort and persist in what they wish to do. Hope is thus a powerful resource in its own right. It can be amplified in communities of teachers working together and sharing the big picture of their professional efforts (Kohonen 1999; 2000c).

2.2 Need to Increase Support and Reduce the Rate of Changes

Teachers need support that relates to their personal life situations. While pressure may be helpful for some teachers to realize the need for a serious consideration of the change demands, any major change is always a personal journey of discovery that the teacher should be able to undertake voluntarily, from where he or she is. Coercions, sanctions and elements of threat are not likely to lead to any real changes in the professional beliefs and meanings – and besides, using such means is ethically questionable. Any pressures must therefore be counterbalanced with explicit support that enables the teachers and other school staff, as well as the students, to cope with the demands for change. Encountering the uncertainties of the change processes needs an environ-

ment that the participants can experience as psychologically safe and supportive (Fullan 1993; 1996; Kohonen 1997; 1999; 2000a).

Educational authorities have launched large-scale structural reforms in Finnish schooling during the past few years. In addition to the site-based curricula and collegial school culture linked to the reform, several themes have been introduced in schools recently, such as the use of new information technology, supporting students' self-esteem and working against the risk of marginalization. Coupled with economic depression and the dramatic changes in the life situations of a large number of students (see Kohonen 2000b), the recent budget cuts in the municipalities have worsened teachers' working conditions to a great extent. The latest innovation, entailed in the new school laws (1999), requires a new culture of self-assessment and evaluation of quality in schooling.

Well-intentioned innovations may become counter-productive if they are introduced at such a rate that the teachers cannot cope with them properly. Encountering inner conflicts and dissonance in deep-rooted personal values, images, beliefs and assumptions and doing the necessary emotional work consumes a great deal of mental energy (Sahlberg 1997). The uncertainties of how to deal with the innovations and what their outcomes will entail for the participants further consume resources. The teacher needs time and peace for this mental and emotional work to proceed.

Innovations easily lead to the well-known phenomenon of work overload if they are introduced at too fast a rate and with too little support. Increasing pressures without appropriate support can entail feelings of powerlessness and severe frustration and can lead to withdrawal, fatigue and a professional crisis (Fullan 1993; Heikkinen 1998; Haikonen 1999). This is what has been happening to a number of teachers in our schools during the 1990s. Many teachers feel that they have to work under undue stress because of the innovation overload and change resistance (Syrjäläinen 1995; Kohonen 1997; 1999).

Central educational administration is responsible for developing educational policies, preparing legislation and national guidelines and supervising implementation as well as evaluating outcomes. At the moment the principles and practices of the market economy are transferred far too crudely from business life to education. What may be applicable in a factory context should not automatically be imposed on education, since education is a far more complex 'business' than e.g. managing a shoe factory. As far as I can understand, the

controlling mechanisms of a market economy do not promote such an education that is aimed at fostering human growth and respect for diversity. The present fashionable policy is to have schools 'compete' against each other, which is assumed to improve the quality of their work. Instead of competition, what is needed is collaboration and networking of schools and teachers for the benefit of all participants and learning (Syrjäläinen 1995; Kohonen & Kaikkonen 1998; Kohonen 1999).

The university-school partnership that we developed in the OK project is a good example of the kind of support that needs to be expanded further. Bringing the two worlds together was a synergistic process where the whole was increasingly more than the sum of its parts alone. Such a relationship was a matter of shared professional growth: enhancing each other's understanding and skills through open dialogue. The pedagogical solutions of inservice teacher education that we developed in the project provide promising possibilities for promoting reflective, transformative learning for professional growth (see Kohonen 1999; 2000a; 2000b; Kaikkonen & Kohonen 1999).

The schools are in need of support at the moment, not additional external pressures (or threats of them) evident in some views of quality control. Long-term inservice teacher education including a built-in element of collegial reflection is essential for the changes to progress. The lack of time and professional inservice education are the biggest obstacles to renewal. This point is also emphasized by David Hargreaves (1994, 435–36) who notes that 'there is little significant school development without teacher development. This is obvious enough to teachers, but has rarely been accepted by politicians and educational bureaucrats, who impose reforms on schools in order to improve them but without being willing to engage with the necessity of professional development.'

Michael Fullan (1996) similarly emphasizes the importance of time for real changes to take place in school. If there is not enough time for collegial discussions the innovative work easily remains superficial and gets fragmented. He quotes the report of a recent American national commission underscoring the importance of time as follows:

> Teachers, principals and administrators need *time* for reform ... *time* to come to grips with new assessment systems, and *time* to make productive and effective use of greater professional autonomy ... Adding school reform to the list of things schools must ac-

complish, without realizing that time in the current calendar is a limited resource, trivializes the effort. It sends a powerful message to teachers: don't take this reform business too seriously. Squeeze it in on your own time. (Prisoners of Time 1994, cited in Fullan 1996, 220; italics in original)

To sum up my argument, the chances for real educational renewal are increased only when there is a shared understanding among the teachers about the common goals and a clear commitment to collegial action to aim at them seriously. What schools need now is time, support and resources for carrying out and evaluating the ongoing processes without undue haste. There is an urgent need for national measures and recommendations in order to improve the conditions for school renewal.

TASKS:

For reflection – an individual and group activity:

A. *Individual part.*
1. *After reading the chapter, set aside some quiet time for personal reflection on your own teacher identity.*
2. *Think of your motives for wishing to become a teacher, and your beliefs and assumptions about what teachership means for you personally. When did you decide that you wanted to be a teacher? What other options or plans did you consider? What reasons can you identify for your career decision? What important models and images of being a teacher can you discover for yourself? What expectations do you have for the profession?*
3. *Write a short life story of how you see your own teachership at the moment, being as honest as you can.*

B. *Group part.*
1. *Meet with your supervision (home) group (2–4 students) and share your personal stories with the other participants.*
2. *What similarities and differences can you find between your stories? What common elements of the teacher's professional identity emerge in your group? Compare your own findings with the ideas discussed in sections 1.4 ('En-*

hanced professional identity') and 2.1 ('New professionalism and educatio-
nal hope'). What challenges can you identify for your professional growth?
What ideas do you find problematic? What kind of action guidelines might
you suggest for yourselves on the basis of your discussion?

3. Write a critical report on your group findings, integrating your own ideas
with those discussed in the chapter.

References

Antola Robinson, H. 1994. The ethnography of empowerment: the transformative power of
classroom interaction. London: Falmer.

Day, C. & Leitch, R. 1998. Reflective processes in action: mapping personal and professional
contexts for learning and change. Paper presented at the European Conference on Educa-
tional Research (ECER98). September 1998. Ljubljana, Slovenia.

Day, C. & Leitch, R. 1999. The role of emotion in stories of narrative and change. Paper
presented at the European Conference on Educational Research (ECER99). September
1999. Lahti.

Fullan, M. 1993. Change forces. Probing the depths of educational reform. London: Falmer.

Fullan, M. 1996. The school as a learning organization: distant dreams. In P. Ruohotie & P.
Grimmett (Eds.) Professional growth and development. University of Tampere and Simon
Fraser University: Career Education Books, 215–226.

Fullan, M. 1997. Emotion and hope: constructive concepts for complex times. In A. Har-
greaves (Ed.) Rethinking educational change with heart and mind. Alexandria, VA: As-
sociation for Supervision and Curriculum Development (ASCD), 216–223.

Goleman, D. 1995. Emotional intelligence. New York: Bantam.

Goleman, D. 1998. Working with emotional intelligence. New York: Bantam.

Haikonen, M. 1999. Ammattiminää horjuttava konflikti stressaa. (Conflicts of professional
self are stressful.) Opettaja 42, 26–28.

Heikkinen, H. 1998. Kriisi opettaa. (Crises teach.) In H. Niemi (Ed.) Opettaja modernin
murroksessa. Helsinki: WSOY, 93–109.

Hargreaves, D. H. 1994. The new professionalism: Synthesis of professional and institutional
development. Teaching and Teacher Education 10 (4), 423–438.

Kaikkonen, P. & Kohonen, V. 1999. OK-projekti vaikuttajana koulukulttuurin muutoksessa.
(The OK project as an influence in school culture change.) In P. Kaikkonen & V. Ko-
honen (Eds.) Elävä opetussuunnitelma 3. University of Tampere. Reports from the De-
partment of Teacher Education A19, 7–21.

Kemmis, S. 1995. Action research and communicative action. Manuscript of the address
given in Melbourne. 26 May 1995.

Kohonen, V. 1997. Koulun muutosprosessit ja opettajan ammatillinen kasvu. OK-projektin
opettajien näkökulmia. (Change processes in school and the teacher's professional growth.)

In P. Kaikkonen & V. Kohonen (Eds.) Elävä opetussuunnitelma 1. University of Tampere. Reports from the Department of Teacher Education A9, 269–295.

Kohonen, V. 1999. Uudistuva opettajuus ja koulukulttuurin muutos OK-projektin päätös-vaiheessa. (Renewing teachership and changing school culture at the end of the OK project.) In P. Kaikkonen & V. Kohonen (Eds.) Elävä opetussuunnitelma 3. University of Tampere. Reports from the Department of Teacher Education A19, 37–63.

Kohonen, V. 2000a. Aineenopettajan uudistuva asiantuntijuus ja sen tukeminen. (Enhancing the subject teacher's professionalism.) In K. Harra (Ed.) Opettajan professiosta. Helsinki: OKKA-Säätiö (in press).

Kohonen, V. 2000b. Teacher growth and site-based curriculum development: Developing inservice teacher education (in this volume).

Kohonen, V. 2000c. Towards experiential learning in foreign language education. In V. Kohonen, R. Jaatinen, P. Kaikkonen & J. Lehtovaara, Experiential learning in foreign language education. Harlow, Essex: Pearson Education, 8–60.

Kohonen, V. & Kaikkonen, K. 1998. Uudistuva opettajuus muutosten ja vaatimusten risti-paineissa. (Renewing teachership amidst conflicting changes and demands.) In H. Niemi (Ed.) Opettaja modernin murroksessa. Helsinki: WSOY, 130–143.

Sahlberg, P. 1997. Opettajana koulun muutoksessa. (The teacher in the changing school.) Helsinki: WSOY.

Siitonen, J. 1999. Voimaantumisteorian perusteiden hahmottelua. (Outlining the foundations of empowerment theory.) University of Oulu. Acta Universitatis Ouluensis E37.

Suoranta, J. 1997. Kasvatuksellisesti näkeväksi. (Becoming educationally mindful.) [Tampereen yliopisto.]

Syrjäläinen, E. 1995. Koulukohtaisen opetussuunnitelman toteutuminen: opettajan ansa vai mahdollisuus? (The implementation of school-based curriculum: a trap or an opportunity for the teacher?) University of Tampere. Reports from the Department of Teacher Education A5.

Pentti Nikkanen
Institute for Educational Research
University of Jyväskylä

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter **10**
chapter
chapter
chapter
chapter
chapter
chapter

The Atmosphere of a Learning School

ORIENTATION TASK:

1. *What is the atmosphere of a learning organization like? Create a mind map of the factors you think are important from the point of view of school atmosphere.*

1   The Core Factor: Interaction between Members

As stipulated in its definition, a learning school pays attention to its internal and external customers as well as facilitating, continuously and by all possible means, learning by its members and teams. In the case of a learning school the focus is on dynamic processes, not only on outcomes. A prerequisite for shared learning is co-operation of a high standard and collaboration, linked with 'Everyone is a winner' discussions, listening to and helping one another. If there are problems in interaction, communication and collaboration between the members of the work community, there will be problems also in learning by individuals, groups and by the school as a whole.

Learning needs favourable conditions and certain prerequisites. One important prerequisite is an individual's learning process. If the processes of many members of a learning personnel (work community) are not active, little organizational learning happens. Basically, if an individual lacks an internal feeling of power (empowerment; see Siitonen 1999), he is not capable of doing

his best in his work and tasks and has problems with his work committment. Siitonen (1999, 99–108) argues that the better the internal feeling of power, the stronger is the individual's commitment to his work. Additionally, Siitonen has noticed that 'empowerment is an inherently human and individual process. It is a personal and social process, in which the inner power is non-transferable to another'. Organizational learning is a process in the context of the learning school (organization). Good conditions and secure learning environment can facilitate individual learning. Therefore another important prerequisite of a learning school is the atmosphere, and it is on this aspect that this chapter tries to concentrate.

Learning teams learn how they can learn together. However, as regards learning, there may be great differences between teams (see Nikkanen & Lyytinen 1996). Senge (1990, 25) refers to differences in learning when discussing the phenomenon of 'skilled competence'. According to him, teams are full of people who are incredibly skilful in preventing themselves from learning. Either the individuals themselves, the team, the work community as a whole, or the school environment prevent people from learning and achieving their goals. Literature on developing school reveals that the researchers are quite unanimous that work communities have a great deal of unused resources that could be drawn on in developing each member of the school, the work of each member, and in developing the school as a whole. As a rule personnel members wish to satisfy also their growth needs, but there may not be any opportunities for growth or the work community fails to provide them.

A frequently cited hindrance to learning is a tense atmosphere. The atmosphere prevailing in a school, its administration, its members' job motivation and the level of their job performance are linked together in a process-like way (see Ruohotie 1992, 5–30). Accordingly, atmosphere has begun to receive more attention, including conscious attempts to change it in ways that would improve enthusiasm for work and job performance among the members of the work community.

2   The Concept of Atmosphere

An extensive literature review on organizational atmosphere compiled by
Anderson (1982) reveals that atmosphere is a problematic concept. Accord-
ing to him, attempts to justify definitions of atmosphere presented in the liter-
ature have been intuitive rather than empirical. In sociological and psycho-
logical literature, the concept of climate is used alongside that of atmosphere.
The terms social, socioemotional and emotional atmosphere are also in evi-
dence. These different appellations foreground different aspects of the single
phenomenon of atmosphere. The perspective chosen in any one study is re-
flected in different ways of delimiting the concept of atmosphere. According
to Johnson (1970), the atmosphere of an organization may be divided into the
organizational and the social atmosphere. It is also possible to distinguish a
psychological atmosphere, discussed for example by Ruohotie (1997; 1993)
and James and James (1992). Johnson's organizational atmosphere refers largely
to the administrative and structural features of the organization under study.
As a rule, the social atmosphere covers only the purely interactive processes.
From the perspective of the psychological atmosphere the social atmosphere
is seen as an observable individual phenomenon where what is important from
the point of view of an individual is how they themselves perceive their envi-
ronment, rather than how the members of the organization happen to de-
scribe it (Ruohotie 1977; 1993). According to Ruohotie (1993), perceptions
of the psychological atmosphere are emotionally relevant cognitions. Togeth-
er they make up a general atmosphere; that is, the individual's perceptions
about how much their working environment benefits or impedes them per-
sonally and thus also their organizational well-being. Like James and James
(1992), Ruohotie defines the psychological atmosphere as a reflection of how
far the events of the working environment are perceived to coincide with
standards based on the values linked with the work. Ruohotie emphasizes
that job motivation and continuous growth depend crucially on an individu-
al's own perceptions and interpretations of their work and working environ-
ment. Below is a summary of the features foregrounded in an analysis of the
concept of atmosphere (Nikkanen 1994c, 24–29; 1995):

1. Organizational atmosphere may be defined as comprising its members' individual and communal observations about and experiences of their organization.
2. An atmosphere may be analysed both on an individual and on a group level. Definitions of atmosphere always involve perceptions, experiences and interpretations of individuals and groups.
3. An organizational atmosphere reflects, as 'personal truths', its members' subjective views, the ways in which its members and groups observe and see things, their reflective monitoring of their own behaviour, and their personal interaction and co-operation.
4. An atmosphere is determined by the chosen goals and the cultural context: organizational atmosphere is one possible perspective on the culture of an organization. The atmosphere informs the members of an organization about the norms, customs and values that are part of the organization's culture. It also expresses the developmental stage of the organization and its work community.
5. An atmosphere is a relatively stable condition prevailing in an organization that is perceptible to its members and that affects their behaviour.

Definitions of the concept of atmosphere differ according to the fields subsumed into the theoretical extension of the given concept. Factors that explain an atmosphere, that is factors that causally determine an atmosphere, have become an increasingly frequent component. This chapter attempts, on the basis of previous analyses (Nikkanen 1994b; 1995), to limit such broad scope by excluding atmospheric factors that some researchers have included in the concept's theoretical extension (e.g. the features and structure of the organization). Instead, it restricts itself to interactional relationships and processes between the organization's members (social atmosphere) and their individual and communal perceptions and experiences of it (psychological atmosphere).

Below, the concept of the general atmosphere of an organization will be used in the same sense as that of the sociopsychological atmosphere, a term coined here to emphasize the interactional relationships and processes between the organization's members that are experienced and perceived by them. A classification by Charpentier (1979) is useful in delimiting the fields to be subsumed into the theoretical extension of the concept of the sociopsycho-

logical atmosphere. According to Charpentier, in every work community it is possible to distinguish between the following five partly overlapping structures of human and group relationships: 1) job structure, 2) communication or interaction structure, 3) power structure, 4) norm structure, and 5) emotional structure.

3   Observations on Atmospheres in Educational Establishments

The following section is a compilation of descriptions of school atmospheres from the writer's own research. The examples are from vocational education institutions and upper secondary schools. However, the subject of the chapter is social interaction between people and people's perceptions and experiences of it (social and psychological atmosphere); thus the school level is no obstacle to an examination of the phenomenon. The first example is from the development meeting of a school where it was decided, after the discussion had been faltering, to pass the baton of 'How I Feel Just Now' round among the participants. Everyone who received the baton had to describe, in their own words, how they themselves saw the school's atmosphere just then. Below is a collage of the answers given:

> We cannot make a tulip grow into a rose, but we may help it to grow. These paths I'll tread, I suppose, to the last ... alone. I long to hear your views. There are threats. The direction things are taking is good. You are a part of it, you contribute to it. I'm living in the midst of change. I have been able to express my opinions. Uncertainty gnaws you. The students are strong and stirring. Your own example is important, in being flexible and in displaying a sense of humour. I like it here. Now when I have come back I see that the place has grown from a small school to a large one. Even if everyone is hard pressed, there's more support available now. The pressure of work has grown. The atmosphere is good as long as you are able to laugh at yourself. There's a certain straightforwardness now. There's a positive attitude. I'm burnt out. Everyone can contribute to the atmosphere a great deal. What's important is retaining the primary task. There are always some good days every now and then. Your own mood varies, there's uncertainty. It's quite OK, you don't reach a paradise, but every now and then ... There are many developmental projects, there's not enough time. I'm new here, I think there's no coherent atmosphere here, no shared visions; when I talk with people it's always a new [discussion] ... The values. There's so many other things to do that it eats up the time needed for the primary tasks. We are often back to back, this social form alone

241

shows ... Organization, decision-making; where do the decisions come from? One's fellow workers are very good, one must not throw the baby out with the bathwater now. Centralization, more bureaucracy. Who is taking responsibility? There's more pressures and uncertainty; I no longer have any precise idea about what my job is all about; there's no clear boundary. It's as if you were a ball being bounced up and down in a game between blind people. The basic atmosphere is good; there's hurry, but the others take you into account. The primary task is becoming blurred, we must have support. There's empathy. I find change exciting and think that it offers new opportunities. It's good that we notice when someone else is upset. When you are doing new things you are allowed to make some mistakes, too. The atmosphere, well, there's a sincere aspiration to work for the good of the students. A teacher's job description has changed. There's an atmosphere of security; you can voice your opinions. A time management diagram. It's the turn of judo; the gentle way. Growing together has become something concrete; the teaching staff has always given support when you have known how to ask for it. We students know how to use our elbows. Sometimes a 'teacher versus the students' situation comes up, even though it should be a situation where everyone is growing together. Pressure of work – taking a good look at yourself ... Workplace harassment. Doing things in order of urgency. Freedom to make suggestions. When it's time to leave, will you long to stay ... The atmosphere is good and refreshing; the normal way of things in a big work community. If a wind blows up, we always stand up ... There's always need for self-education. It's a positive environment. We are facing new challenges. It's a fairly good atmosphere; taking a good look at yourself. If only we could take things a little more light-heartedly. The ability to stand changes; pressures. We are farmers; we put a seed in the ground and count the minutes and seconds to find out what happens. I'm trying to draw some kind of line between privacy and communality. Peeling to uncover the most important thing. I'm here as a novice; for me it has been a time of learning to stand uncertainty.

Generally speaking, as compared to their colleagues, every respondent considered the atmosphere from a different perspective, as well as paying attention to different things. The method of asking people to speak out seemed to work well from the first. It was obvious that the whole personnel with its student representatives had a great need to openly express their views on the atmosphere of their organization. The participants seemed to find the discussion rewarding and refreshing. After it the rest of the developmental meeting went on in a more jovial mood. Looking back, it was round about the time of the developmental meeting that the personnel began to perceive that their establishment's atmosphere had improved. Reading between the lines, like the collage of remarks on a good work community, these answers reveal not only references to many important aspects of a learning organization but also

a quite many-sided picture of the sociopsychological atmosphere that educational establishments attempt to create as they work their way towards a learning educational establishment.

Some of the findings illustrating the general sociopsychological atmosphere are collected together in Table 1:

TABLE 1   *Findings illustrating the general sociopsychological atmosphere*

ASSERTIONS	I agree (%)	I disagree (%)	Hard to say (%)
There is a good atmosphere in my work community.	57	37	6
My work community operates as a team.	41	45	14
In my work community there is no competition that would undermine openness.	41	36	23
In my work community there are no attempts to conceal disagreements but instead they are as a rule talked out.	36	53	11
Problems are talked through together.	26	60	14
The general atmosphere of my work community encourages me in my work.	40	46	14
There is no backbiting in my work community.	21	56	23
My work community sets time aside for discussing conflicts.	26	61	12
The flow of information is open.	30	59	12
I get on well with my fellow workers.	86	9	5
Generally speaking, I like my current job.	75	19	6

The data included in Table 1 were gathered in three vocational education establishments and one upper secondary school using an atmosphere indicator designed, as a part of a Jyväskylä Vocational Teacher Education College project, Functioning Work Community, to create an infrastructure of self-

evaluation in individual schools (Nikkanen 1994b). The answers to the 37-item indicator came from 193 respondents.

A positive atmosphere alone does not necessarily indicate that a school is perceived to operate as a team. Apparently the concept 'fellow worker' is understood in a number of different ways – possibly not everyone sees a colleague as a fellow worker. Certainly I and my best fellow workers, but not those others! There is still a great deal to talk about and much scope for improvement before we have ensured favourable conditions for and the prerequisites of learning.

In 1993 the writer collected data on developmental needs among the personnel of 22 educational establishments. The indicator used as the tool, designed and tested by the writer and Heikki K. Lyytinen, is divided into 19 developmental fields. This survey had 1258 respondents. As a second example, Table 2 below displays some assertions measuring atmosphere (Nikkanen 1994a) and percentage distributions of responses to them:

TABLE 2   *Findings illustrating the general sociopsychological atmosphere from several educational establishments*

ASSERTIONS	I agree (%)	I disagree (%)	Hard to say (%)
I find my establishment's general administrative culture encouraging.	29	41	30
My establishment has a strong community spirit, operates as a team.	36	45	45
I find my work community encouraging.	43	32	25
Discussions in my establishment are characterised by openness.	29	52	19
The atmosphere in my work community is impaired by competing groups among the personnel.	49	27	24
I get on well with the people in my workplace.	84	5	11

244

The distribution of the responses to the assertions suggest that as regards their atmosphere, educational establishments have a great many problems awaiting solution. Another thing indicated by the distributions is that a great majority (84%) of the respondents consider that they get on well with the other people in their workplace. In other words, it is not the respondents themselves who are responsible for any problems with interaction and atmosphere. This mentality of 'certainly I would, but there are all those others' has been identified in many educational establishments. It is nearly always some outside person or group who was placed in the role of a scapegoat. The differences between educational establishments may be quite big. An observant person visiting various schools is fairly soon able to sense the atmosphere prevailing in each. In fact, every school has an operational culture distinct from that of other schools.

4   Conclusions

Surveys of developmental needs have revealed that every school has had more or less serious problems with atmosphere. There may be an awareness of the way things are, there may be knowledge and discussion, but it is quite another matter how people actually behave. Indeed, the prevailing mood seems to be characterised by what may be termed a polyphonic morality where 'the blokes say one thing and do another thing'. From the perspective of the learning school it is important that learning is reflected in changes in the way in which the members of the work community act.

No school develops into a learning school automatically, through wishful thinking. A central factor is a work community's conscious strategic intention to develop in the direction of a learning school. Any school may be and become a school that is constantly learning new things only if it wants to. It is a question of how strongly it is committed to shared development and learning. Enlightened discussion is a powerful tool of development. An open and encouraging atmosphere is a prerequisite for fruitful discussion, co-operation and learning.

TASK:

1. How can a learning school be actualized so that it does not remain a mere pipe-dream? Discuss the obstacles and difficulties you may face when trying to improve the atmosphere of a school.

References

Anderson, C. 1982. The search for school climates: A review of the research. Review of Educational Research 52 (3), 368–420.

Charpentier, P. 1979. Ryhmätyön perusteet. (Elements of teamwork.) Kuusamo: Ihmissuhdeopisto.

James, L. & James, L. 1992. Psychological climate and affect. Test of a hierarchical dynamic model. In C. Cranny, P. Smith & E. Stone (Eds.) Job satisfaction. Lexington Books. New York: Macmillan, 89–117.

Johnson, D. 1970. The social psychology of education. New York: Holt, Rinehart & Winston.

Nikkanen, P. 1994a. Oppilaitosten henkilöstön nykytilakartoituksen laaja vertailuaineisto. (Survey of the current state of educational personnel: Full comparison material.) Odin Tiimi 2 (1), 33–53.

Nikkanen, P. 1994b. Oppilaitoksen yleinen ilmapiiri. Sosiaalis-psykologinen ilmapiiri. (The general atmosphere of an educational establishment. The sociopsychological atmosphere.) In R. Vuorinen (Ed.) Toimiva työyhteisö – oppiva työyhteisö. Final report of a developmental project. Jyväskylä Vocational Teacher Education College. Helsinki: Ministry of Education, 41–62.

Nikkanen, P. 1994c. Koulun yleinen ilmapiiri. (The general atmosphere of school organization.) Odin Tiimi 2 (2), 24–29.

Nikkanen, P. 1995. Oppiva organisaatio ja ilmapiiri. (The learning organization and its atmosphere.) In A thematic publication: Itsearviointi oppivassa työyhteisössä. Jyväskylä Vocational Teacher Education College, 9–13.

Nikkanen, P. & Lyytinen, H. K. 1996. Oppiva koulu ja itsearviointi. (The learning school and self-assessment.) Jyväskylän yliopisto. Koulutuksen tutkimuslaitos.

Ruohotie, P. 1977. Organisaation ilmapiiri. (Organizational atmosphere.) Tampere: [Author].

Ruohotie, P. 1992. Kasvuedellytykset ammatillisissa oppilaitoksissa. (Preconditions of growth in vocational education establishments.) In P. Ruohotie & P. Rauhala (Eds.) Joustava koulutusrakenne ammatillisen koulutuksen kehittämishankkeena. Osaraportti 1. Teknillisen alan joustavan koulutusrakenteen kokeilun lähtökohdat. University of Tampere. Hämeenlinna Vocational Teacher Education College. Ammattikasvatussarja 5, 3–44.

Ruohotie, P. 1993. Ammatillinen kasvu työelämässä. (Occupational growth in working life.) University of Tampere. Hämeenlinna Vocational Teacher Education College. Ammattikasvatussarja 8.

Senge, P. 1990. The fifth discipline. The art and practice of the learning organization. New York: Doubleday/Currency.

Siitonen, J. 1999. Voimaantumisteorian perusteiden hahmottelua. (Outlining the foundations of empowerment theory.) University of Oulu. Department of Teacher Education Oulu. Acta Universitatis Ouluensis E37.

244

Eija Kimonen & Raimo Nevalainen
Department of Teacher Education
University of Jyväskylä

chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter
chapter 11
chapter
chapter
chapter
chapter
chapter

Active Learning for Educational Change

1 Introduction

1.1 The Changing School Culture

As discussed in chapter seven of this book, the central features of the current curriculum reform in Finland emphasize a school culture with personal control of the learning process and a general flexibility and interaction in the functioning of the school. How can these principles be transformed into models of action and teaching practice? Does school culture really change? In the years to come the Finnish schools will probably acquire increasing diversity. Curriculum development will constantly require new knowledge regarding successful models of action and practices in the schools. For their successful development, schools will require qualitative and contextual information which may be collated, for instance, by means of school-based case studies (see Kimonen & Nevalainen 2000).

1.2 International Comparative Study

The purpose of the international research project *Teachers and Students as Active Learners*, initiated by OECD/CERI, was to compare the active learning

process of pupils and teachers as seen in the educational practices of seven countries. The study described active learning, its goal setting, task structuring, accessing of information, the process of working and learning, the utilization of the outcomes of work and learning and the assessment procedures (see Stern 1997, 40–48). This international research project also involved case studies from Finnish schools. The present chapter will examine active learning in one small rural school in Central Finland, the Suvila Lower-level Comprehensive School with 25 pupils in grades 1–6 (Kimonen & Nevalainen 1995; 1997; 2000). We will examine the relationship between the active learning of the pupil and that of the teacher in the small rural school, the aim being an overall outline of the reciprocal relationship between models of action and practice for pupils and teachers respectively.

2 Basic Features of Active Learning by Pupils and by Teachers in the Case-study School

2.1 The Organization of Goals and Tasks

All systematic teaching and study is founded on a conception as to the nature of learning and of the learning situation. This conception is constructed, among other things, from conceptions about human knowledge and mental processes, from societal traditions and norms, and from the expectations set for teaching by society (von Wright 1993, 1). Paradigmatic changes in the conception of learning can form national educational policy and in this way may be also reflected in the practices of individual schools. Transformation of national educational policy can facilitate the autonomous developmental work of schools. In the case-study school, the process of change from a traditional school culture to one more progressive in nature began in the late 1980s. This reform of the instructional goals and practices of the school was promoted by new, constructivist conceptions of knowledge and learning that emerged in Finland at about the same time. According to these conceptions, knowledge is constantly changing, and personal experience and structuring are required in order to comprehend such knowledge. The new approach to the curriculum also gave more freedom to the school. The basis of this new thinking is that the national curricular goals can now be realized in school-based goals

within the curricula of individual schools. It is the responsibility of the teachers to decide how they will attain these goals (see Lindström 1993, 43–44). The transformation of the instructional goals and practices in the case-study school was promoted at an individual level by the in-service training acquired by the teacher in the school. He then became interested in the educational ideas presented especially by John Dewey. On the micro-level, the change was accelerated by educational discussions with his wife, who acts as a peripatetic special teacher, and with the other teacher of the school (see Stern 1994, 25, 29). In setting new educational goals, teachers, however, often need also the support of a school's interest groups (see Holly & Walley 1989, 297). Among the meso- and exo-level factors supporting the thinking of the teacher in the case-study school, the most significant was the renovation of the school, something which took place instead of the threatened closure of the school. In the planning of the renovation he was able to reflect on new educational ideas. In addition, the majority of the pupils' parents and members of the community had a positive attitude to the pedagogical changes in the school.

The teacher's educational goals and action principles, which emphasize pupils' freedom of choice during the learning process, are clearly reflected in the practices of the case-study school. During our research period the pupils were being introduced to the topic of communication. The aim was to compile co-operatively a video commercial and a bulletin. In the co-operation phase of the learning process arising from the project work described here, pupils were allowed to set their own objectives for activities and to observe their achievements (see Kyriacou 1992a, 310). While working, the pupils had an active role characterised by goal-oriented, self-assessment activity directed by metacognitions (see e.g. Driver 1988, 138; von Wright 1993, 27–28; Watts 1991, 91–92). The teacher determined what the pupils had to study during the week, but the pupil groups had the main responsibility for the way they achieved the defined goal (see e.g. Platz 1994, 420).

The work of a teacher in a small school is by nature broadly-based (see Kalaoja 1988, 99–100; Kimonen & Nevalainen 1993, 94). The challenges and problems arising from the miscellaneous activities of the case-study school's everyday life, as well as the teacher's own interest in education, have formed the basis for the teacher's learning motivation. Furthermore, acting as an adult educator has been central in the development of his own approach to learning and in the transformation of the instructional practices of the school.

TABLE 1   The main features of active learning by pupils and by teachers in goal and task orga-
            nization

ASPECT OF ACTIVE LEARNING	ACTIVE LEARNING BY PUPILS	ACTIVE LEARNING BY TEACHERS

Goal setting	• During co-operation the pupils had an active role characterised by goal-oriented, self-assessment activity, directed by metacognitions.
	• Pupils were allowed to set their own objectives for the activity and follow their achievement.
	• Pupil groups bore the responsibility for the course of action with which they achieved the defined objectives.
		• The process of change from a traditional school culture to a more progressive culture started at the end of the 1980s.
		• Transformation of the instructional goals was promoted by:
		  - in-service training
		  - discussions with teachers
		  - discussions within the school board
		  - renovation of the school instead of closure
		  - transformation of the concepts of knowledge and learning
		  - reform of national educational policy.

Task structure	• The strength of the groups composed of pupils of different ages was their correspondence to life situations outside school. • During the co-operation phase stress was laid on the pupils' independent initiative, sense of responsibility and co-operativeness. • The problems with the heterogeneous groups consisted of the lack of co-operative skills and of information processing skills, as well as great differences between the group members in concentrating.	• The work of a teacher in a small schools is by nature broadly-based. • The challenges and problems arising from the everyday activity of the school and interest in education have formed the basis for the teacher's learning motivation and consequently encouraged him to change his own work. • Acting as an adult educator has been central in the change of the teacher's own learning process and in the transformation of the instructional practices in the school. • In the project work the teacher's activiness was evident in the orientation and evaluation phases of the learning process. • At the beginning of the teaching unit the teacher presented the objectives, topics and methods of work to the pupils. • During the activity he guided and encouraged the pupils. • At the end of the project work he also gave pupils feedback on their activity.

Correspondingly, the teacher's commitment to the development of the school and his success in practical educational situations have motivated him to shift the emphasis of his own work onto pupil activeness (see Stern 1994, 1, 4). During the research period, the teacher's activeness was evident mainly in the orientation and evaluation phases of the learning process arising from of the project work. During the co-operative phase of the work he guided and encouraged pupils (see e.g. Keiny 1994, 159; Page 1990, 78–79).

Co-operation between the members of the school community and the representatives of the school's interest groups was evident in the action practices of the school. The pupils practised co-operative learning in small groups composed of pupils of different ages. The strength of these small groups consisted in their naturalness (see Slavin 1991, 80–81; 1992, 333). During the co-operation phase special emphasis was placed on pupils' independent initiative, sense of responsibility and co-operativeness (see Jaques 1991, 98–99; Kyriacou, Brown & Constable 1990, 1–2). The most problematic elements arising from the activity of the heterogeneous small groups were the defectiveness of co-operative skills and information processing skills. The pupils' level of concentration also varied according to age (see Niemi 1998, 49–50; Simons 1997, 35–36). Co-operation between the teachers was both flexible and open. The teachers had planned the school activities together at the beginning of the term. Also the school board and the parents participated in the planning of school work. Our observations on the active learning of pupils and teachers in goal and task organization in the case-study school have been summarized in Table 1.

2.2 The Processes of Work and Learning

The process of change in the case-study school proceeded inductively in phases, by means of the experiences the teachers gained in practice and through discussions they had concerning their work. During the first phase of the change, the teachers adopted topic units lasting from one to two weeks. During the second phase, the teachers increasingly stressed activity-oriented learning in their teaching. During the third phase, the teachers extended the duration of the school day. The teachers at the case-study school aim to continuously develop their teaching practices. The teachers also want to develop themselves, their teaching, and their teaching materials.

During our research period the learning process arising from the project work consisted of orientation, co-operation and evaluation phases. The teacher's role in the learning process was developmental, as he was seeking to develop his pupils as learners (see Keiny 1994, 159). The teacher's essential tasks in the orientation phase included pupil motivation and instruction giving. During the co-operation phase he actively gave advice and patiently guided the activity of the small groups. During the evaluation phase the teacher examined the outcomes with the pupils and later he also wrote feedback concerning pupils' outcomes and co-operative skills (see e.g. Johnson, Johnson & Holubec 1990, 43; Olkinuora 1994, 68; Page 1990, 78–79). The project work carried out in small groups offered the pupils the opportunity for active interaction with one another and for solving the problems that emerged from working together (see e.g. Jaques 1991, 98; Kyriacou 1992b, 42). The most problematic aspects of the group work were the lack of negotiation and conciliation skills, and the passivity of the youngest group members, especially in the planning of the work. Problems were also common in the processing of information. The pupils selected, grouped, classified and interpreted information inadequately (see Watts 1991, 41–42). They were also satisfied with fairly routine solutions. It seems that the simultaneous mastery of the social and cognitive goals set for small group work is a demanding challenge for pupils in the active learning process of project work.

In order to acquire new information for the construction of his models of thinking and action, the teacher needs new knowledge (see e.g. Hargreaves 1994, 435–436; Johnston 1994, 199–208; Elliott 1994, 43–69; Ross 1994, 389–392). The teacher in the case-study school has participated in courses organized by the Continuing Education Centre of the University of Jyväskylä and by the National Board of Education and he has acted as an educator in teacher in-service training. He has found inspiration for his school work from educational books, journals and other literature. He has also accessed information through discussions with other teachers, pupils' parents and members of the school board. Naturally, the teacher has gained a considerable amount of experience-based knowledge through his long professional experience. In his own teaching the teacher usually utilizes the opportunities provided by the immediate environment of the school (see Kalaoja 1990, 48, 68–69, 90). He also seeks continuously to direct his pupils in accessing information from various sources both indoors and outdoors. Table 2 summarizes our observations

TABLE 2   The main features of active learning by pupils and by teachers in the process of work and learning

ASPECT OF ACTIVE LEARNING	ACTIVE LEARNING BY PUPILS	ACTIVE LEARNING BY TEACHERS
Process of work and learning	• In the learning process of project work a number of phases were identified: orientation, co-operation and evaluation. • During project work the pupils actively interacted with one another and co-operatively solved the problems that emerged from the task. • The essential tasks of the teacher during the orientation phase included motivating pupil and giving instructions • During the co-operation phase he offered advice and guided the activity of small groups. • During the evaluation phase the teacher examined the learning products with the pupils and ·later gave written feedback.	• The process of change at the school proceeded inductively, in phases, by means of the experiences the teachers gained in their working practice and through discussions about these experiences. • During the first phase of the change the teachers introduced study units. • During the second phase the teachers wanted to develop a more activity-oriented form of teaching. • During the third phase the teachers extended the school day.
Accessing information	• The pupils of the case-study school are used to accessing information from many different sources both within and outside the school. • Pupils have obtained information by reading books, interviewing experts, and by observing and investigating their environment.	• The teachers in the case-study school sought to continuously develop their teaching practices. The teachers aimed to develop themselves, their teaching and their teaching materials. • In the teaching situations the teacher's role was developmental, aimed at developing his pupils as learners. • The teacher has accessed information by participating in courses and by acting as an adult educator himself. • He has gained incentives for his work from educational books, journals and other literature. • He has also acquired information through discussions with other teachers, pupils' parents and members of the school board. • His professional experience as a teacher has naturally provided him with considerable experience-based knowledge.

regarding the active learning of pupils and teachers during the process of work and learning in the case-study school.

2.3   Utilizing and Assessing the Processes and Outcomes of Work and Learning

The Finnish school has developed as an institution which in many respects is separated from other spheres of social life, and, consequently the utilization of the school outcomes for purposes other than learning has generally been rather uncommon. However, the small rural school has traditionally been involved in the life of the village community (Bell & Sigsworth 1987, 207–214; Forsythe & Carter 1983, 165–167; Gulliford 1991, 79–89, 124–125; Pirhonen 1993, 51–61). The products of the pupils in the case-study school are utilized to some extent in the activity of the school and the surrounding community. The teacher has, for his part, acted as an agent of change mainly by offering other teachers from the municipality, and from elsewhere in the province, an account of his own experiences and observations as an implementor of a school-based curriculum (see Stern 1994, 34). Further, the school has been open to teachers and university students, who have wished to become acquainted with co-operative project work in combined grades.

The evaluation practices of the case-study school mainly follow the evaluation principles outlined in the new Finnish curriculum. The assessment of the learning process and outcomes is continuous within the school. During the evaluation phase of the learning process, special attention was paid to areas in which pupils were successful. Nevertheless, the achievement of social objectives was not discussed; instead, the teacher gave a written assessment of the co-operation skills displayed by each pupil in their personal study-books. Also the pupils evaluated their own learning activities and results in their study-books, but they were not, however, instructed to carry out assessment of the group work. Nor did they consciously assess one another's products or co-operation processes (see Johnson & Johnson 1992, 69).

The teachers in the case-study school evaluated the functioning of the school annually, together with parents and the members of the school board. According to the teacher, the new work and learning methods which activate pupils have given rise to many positive characteristics in pupils' work includ-

TABLE 3   The main features of active learning by pupils and by teachers in the utilization and
            assessment of the processes and outcomes of work and learning

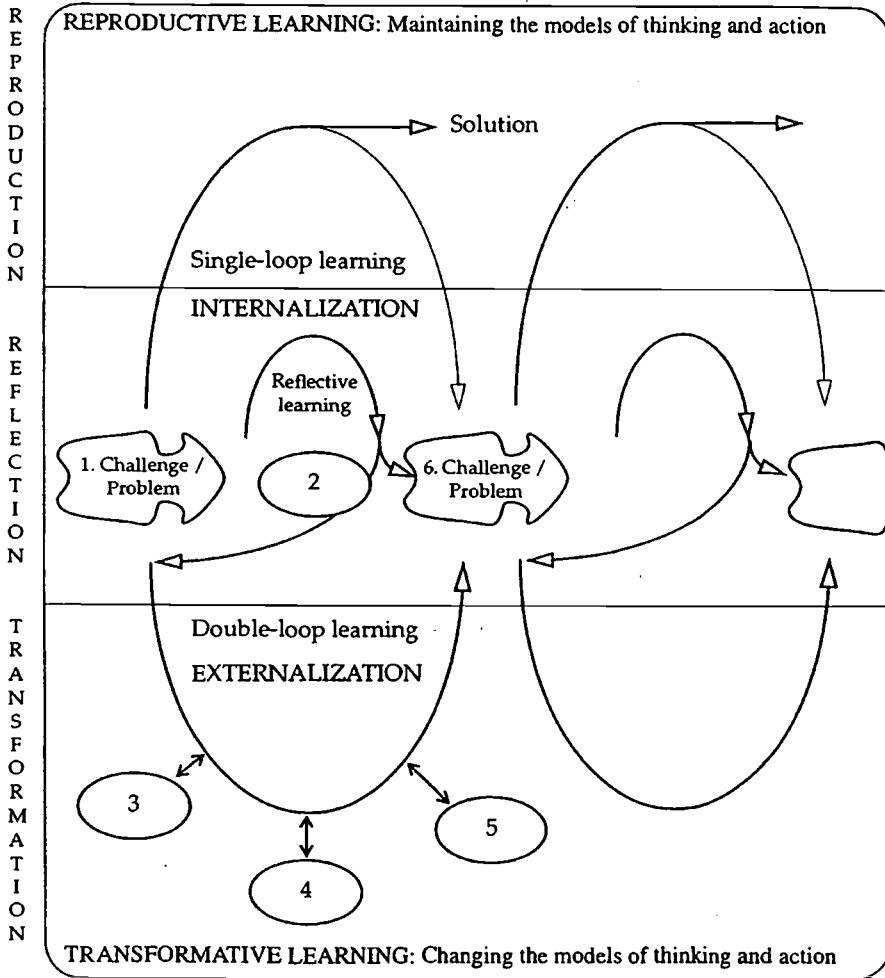| ASPECT OF ACTIVE LEARNING	ACTIVE LEARNING BY PUPILS	ACTIVE LEARNING BY TEACHERS
Outcomes of work and learning	• Pupils project outcomes are utilized to some extent in the activities of the school and in the surrounding village community: - Pupils' products are often published in the local newspaper. - Pupils have usually performed at the functions of the village community. - Pupils have participated in events organized by the village committee, such as the annual voluntary cleaning up of the roadsides.	• The teacher has been an agent of change affecting school culture by describing to other teachers his experiences and observations as an implementor of a school-based curriculum. • Other teachers and university pupils have become acquainted with the activity of the school. • The teacher has participated in the cultural activities of his own village community. • The school has been a meeting place for the village community.
Assessment	• The teacher, pupil and his/her parents evaluated the pupil's learning. • Methods of work and learning based on active learning have developed many positive features in pupils, including increased initiative and a growing sense of responsibility. • Pupils have learned to appreciate project work as an important part of school work.	• The teachers in the case-study school evaluated the functioning of the school in conjunction with parents and the members of the school board. • During the evaluation phase of the learning process of the project work the teacher directed attention to areas in which pupils were successful. • After the project work, the teacher gave a written assessment of each pupil's co-operation skills in his/her personal study-books. • The teaching theory underlying the teacher's practice revealed a comprehensive awareness of holistic education and constructivist learning.

ing increased initiative and a growing sense of responsibility. The pupils have learned to appreciate project work as an important part of school work. The theoretical basis of the teacher's work, which emphasizes a global and historical mode of thinking, and acknowledges pupil abilities and interests, reflects an internalized overall view of holistic education and constructivist learning. According to the teacher, the school as a functional system is always in a state of development. Transformation demands of the teacher continuous critical reflection and the renewal of his/her own principles and practices of action. Table 3 summarizes our observations concerning the active learning of the case-study school's pupils and teachers in the utilization and assessment of the processes and outcomes of work and learning.

TASKS:

1. New educational views brought pupil-centred active learning methods to the Finnish school. Consider the features of the organization of teaching and learning in a progressive school culture.. Visit a lower-level comprehensive school and observe the teaching process based on theme work. Also interview the teacher. Describe the process of teaching and learning. Characterise the teacher-pupil interrelation. Consider the strengths and weaknesses of this progressive teaching method.

2. According to the new curricular concept, school is a learning centre, interacting with the community around it and with its various interest groups. Consider the nature of the relationship between the school and its immediate community. Interview some lower-level comprehensive school teachers. Describe the nature of the relationship of their school and its interest groups. What is the focus and direction of this co-operation? Consider the teachers' answers in the light of the changing school.

3. Much is being said today about educational change. Consider the factors promoting and constraining innovation in the school community. Interview, for instance, your own lower-level comprehensive school teacher. Describe the curricular reform in his/her school. What factors might have promoted and constrained this development? Consider the teacher's answers in terms of what has been written in the literature.

258

3 Active Learning and the Process of Change in the School

The teacher's learning process and the development of the school are closely related. Transformation of the traditional school context requires the teacher to critically reflect on his/her own principles and practices of action and to transform them; in other words, to create a new school context. From the teacher's point of view, innovations in working and the management of change involve a comprehensive learning process, where the prevailing school culture is initially internalized and, then through externalization, transformed. The learning process of the case-study school teachers in the traditional school culture of the 1980s was essentially reproductive. Thus, the teachers reacted to changes in the internal and external setting of action mainly by identifying defects and correcting them. In this way the teachers preserved the models of thinking and action sustained by the school, which were based on a behaviouristic conception of learning which emphasized the external control of learning. Accordingly, as discussed in chapter seven of this book, such single-loop learning aims at the preservation of prevailing school practices and routines (see Argyris & Schön 1976, 19; Kauppi 1993, 79). By contrast, a modern school culture based on progressive pedagogics which follow the constructivist conception of learning, requires transformative learning. In order to change the context of the school, the teacher needs new models of thinking and action. As a result, a change in the basis of action becomes a double-loop learning process for him. One aspect of transformative learning is reflective learning based on deliberation and discussion (see Argyris & Schön 1976, 19; Kauppi 1993, 87). We will next examine in more detail the transformative learning process of the teacher in the changing school culture. We will attempt to outline comprehensively the interrelationship between reproductive, reflective and transformative learning and the way they proceed in phases during the active learning process of the teacher. Special attention will be directed towards the internalization and externalization of school culture. Figure 1 depicts the active learning process of the teacher during the process of school change.

255

FIGURE 1   The active learning of the teacher during the process of school change

The figure contains the following labels:

REPRODUCTION
REFLECTION
TRANSFORMATION

REPRODUCTIVE LEARNING: Maintaining the models of thinking and action

Solution

Single-loop learning
INTERNALIZATION

Reflective learning

1. Challenge / Problem
2
6. Challenge / Problem

Double-loop learning
EXTERNALIZATION

3
4
5

TRANSFORMATIVE LEARNING: Changing the models of thinking and action

1. Facing challenges: Problem-based work and learning
2. Analysing practices
3. Defining new practices
4. Constructing new models for thinking and action
5. Producing new practices
6. Facing new challenges: Problem-based work and learning

260

1. Facing challenges through problem-based work and learning

Learning and knowledge are always linked to a context in which knowledge is learned and then used. The context of a school, its practices of action, and the school culture largely determine what is perceived as a problem, what is seen as a method, and what is understood as an acceptable solution (see von Wright 1993, 18). The process of change in the small rural case-study school proceeded inductively in phases, by means of the teacher's practical experiences and from the discussions arising from those experiences. The aspiration to discontinue the fragmented teaching practices which encouraged passive learning and to adopt instead a holistic and activity-oriented school culture, created the basis for the teacher's problem-oriented work and for a learning process that has lasted for several years. (Figure 1.) The contradictions between the prevailing practices and new challenges motivated the teacher to plan the comprehensive process of change at the school. Gradually, new models of thinking were also reflected in the practices of the school. The practices of the case-study school were based primarily on the pragmatist conception of man, according to which the learner is regarded as an active-minded and inquiring individual engaged in a continuous process of problem solving.

2. Analysing current practices

People do become competent at various tasks and in various fields by gradually internalizing already invented knowledge and procedures. A developmental cycle of expert activity begins with an almost exclusive emphasis on internalization (Engeström 1992, 15–17). The teachers in the case-study school had internalized the behaviouristic models of thinking and action, prevalent in the traditional school culture, during the course of their teacher training. This internalization process was further enhanced by experiences gained in working life. Critical reflection and analysis of problems that arose from the practices of action nevertheless led the teachers towards the innovative development of school work and towards a search for new solutions. (Figure 1.)

257

3. Defining new practices

Creative externalization occurs first in the form of discrete individual devia-
tions and innovations. As the disruption and contradictions of an activity
become more demanding, internalization increasingly takes the form of criti-
cal self-reflection, and then the process of externalization, a search for novel
solutions, increases (Engeström 1992, 15–17). According to expansive learn-
ing theory the direction of the transformation of learning and practices of
action is built around the zone of proximal development. This zone of proxi-
mal development is the area between the established, contradictory mode of
action and a qualitatively novel mode of action which offers solutions to the
contradictions (Kauppi 1993, 90). The zone of proximal development in the
case-study school can be examined on two levels. The lower level of change
in instructional practices is determined by the teacher's independent resourc-
es in developing the school. The higher level of change is brought about by
the amount of positive support encouraging the teacher. Such support is of-
fered by persons closely connected with the functioning of the school, includ-
ing pupils, other teachers, parents and administrators. The zone area which
lies between these levels represents the development possibilities of the school.
The zone of proximal development of the case-study school was expanded by
many external factors. The change process was accelerated by the renovation
of the school building, in the planning of which the new instructional practic-
es of the school culture were also outlined. The teachers wanted to develop
their teaching in a more comprehensive and action-oriented direction. These
new models of action, in turn, required the implementation of many changes
in the curriculum, task structure, learning and teaching processes and assess-
ment. The new national educational policy provided favourable starting points
for these activities. (Figure 1.)

4. Constructing new models for thinking and action

Externalization reaches its peak when a new model for the activity is con-
ceived, designed and implemented (Engeström 1992, 15–17). The adoption
of new models for thinking and action was essential in the shift away from the
traditional learning context in the case-study school. The transformation of
the prevailing school culture by means of externalization demanded a process

262

of double-loop learning from the teacher. This double-loop learning empha-
sizes the identification and solution of those problems connected with school
culture that require transformation of action principles (see Argyris & Schön
1976, 19; Kauppi 1993, 87). The teacher in the case-study school sought to
acquire new models of thinking and action by studying and also by acting as
an educator himself in teacher in-service training. (Figure 1.)

5. Producing new practices

The first result of the transformative learning process was the adoption by
teachers of topic units. This presupposed a transformation of the teaching
culture by opting for an activity-oriented approach. The teacher's holistic
approach and the emphasis placed on activity-orientation arose from the fact
that these aspects were in a dialectical relationship in the teacher's work. The
teacher had to understand the multifarious connections between activity-ori-
entation and a comprehensive approach to knowledge in practice, and then
include this experiential knowledge in his own model of thinking and action.
The .combination of holistic education with activity-oriented learning pro-
duced new challenges in the school culture. The internalization and external-
ization of these challenges initiated a new learning process in the continuing
shift of the school towards active learning. (Figure 1.)

6. Facing new challenges

As the new model becomes consolidated, internalization of the way it oper-
ates becomes the dominant form of learning and development. In this frame-
work learning involves designing, implementing and mastering the next de-
velopmental stage of the activity system itself (Engeström 1992, 15–17). The
change process of a school is a continuum, where answers are sought to ques-
tions perceived as significant. At its best, the active learning of the teacher
consists of independent solving of problems arising from the everyday life of
the school, and of active accessing of knowledge and skills for the construc-
tion of new models for thinking and action. (Figure 1.) The future aim of the
case-study school is to increase the interaction between the school and the
environment. This trend creates new challenges for the teachers and pupils in
developing their active learning in the direction of authentic learning. Ac-

cording to von Wright (1993, 12–13), however, activeness does not have an inherent pedagogical value. The essential issue is what is done, and what part this plays in the overall learning process.

TASKS:

New educational views brought pupil-centred active learning methods into Finnish schools. Consider the features of the organization of teaching and learning in a progressive school culture. You may base your assignment on either of the following topics, or, if you wish, you may choose your own related topic:

I. The teaching and learning process in project work: The planning and implementation of one's own teaching. Discussion in the light of the plans and the literature.
1. *Carefully plan the teaching and learning process for the project work to be implemented in your practice teaching class. Do this in co-operation with other students. Personally fill in the planning table attached (Appendix 1).*
2. *After teaching, consider your activities and those of the pupils during the teaching and learning process of the project work. Prepare a paper (10–15 pages) examining your teaching experience in the context of your own plans. Compare your views to the premises arising from your lecture diary and the educational literature. In addition, prepare a short presentation (10–15 min.) together with 2–3 other students. You might begin your presentation with a short description of the various phases and the content of the teaching and learning process of your class's project work. Finally you could briefly examine a special instructional issue of your choice.*
3. *Hand in your planning table together with the essay.*

II. The teaching and learning process in project work: Observation of teaching and interviewing the teacher. Discussion in the light of the interviews and the literature.
1. *Carefully observe the teaching and learning process for the project work to be implemented in your practice teaching school. Follow the whole process. Also interview the teacher. Do this in co-operation with other students. Personally fill in the observation table attached (Appendix 1).*

2. After the observation and the interview, consider the activities of the teacher and of the pupils during the teaching and learning process of the project work. Prepare a paper (10–15 pages) examining your observation and interview data in the context of your own views. Compare your philosophy to the premises arising from your lecture diary and the educational literature. In addition, prepare a short presentation (10–15 min.) together with 2–3 other students. You might begin your presentation with a short description of the various phases and the content of the teaching and learning process of your school's project work. Finally you could briefly examine a special instructional issue of your choice.

3. Hand in your observation table together with the essay.

References

Argyris, C. & Schön, D. A. 1976. Theory in practice. Increasing professional effectiveness. San Francisco: Jossey-Bass.

Bell, A. & Sigsworth, A. 1987. The small rural primary school. A matter of quality. London: Falmer.

Driver, R. 1988. Theory into practice II: A constructivist approach to curriculum development. In P. Fensham (Ed.) Development and dilemmas in science education. London: Falmer, 133–149.

Elliot, J. 1994. The teacher's role in curriculum development: An unresolved issue in English attempts at curriculum reform. Curriculum Studies 2 (1), 43–69.

Engeström, Y. 1992. Interactive expertise: Studies in distributed working intelligence. University of Helsinki. Department of Education. Research Bulletin 83.

Forsythe, D. & Carter, I. 1983. The local view: A case study approach. In D. Forsythe, I. Carter, G.A. Mackay, J. Nisbet, P. Sadler, J. Sewel, D. Shanks & J. Welsh (Eds.) The rural community and the small school. Aberdeen: Aberdeen University Press, 137–170.

Gulliford, A. 1991. America's country schools. Washington, DC: Preservation.

Hargreaves, D. H. 1994. The new professionalism: The synthesis of professional and institutional development. Teaching and Teacher Education 10 (4), 423–438.

Holly, M. L. H. & Walley, C. 1989. Teachers as professionals. In M. L. H. Holly & C. S. Mcloughlin (Eds.) Perspectives on teacher professional development. London: Falmer, 285–307.

Jaques, D. 1991. Learning in groups. London: Kogan Page.

Johnson, D. W. & Johnson, R. T. 1992. Yhteistoiminnallinen oppiminen ja koulun kehittäminen. (Co-operative learning and school development.) In K. Hämäläinen & A. Mikkola (Eds.) Koulun kehittämisen kansainvälisiä virtauksia. Helsinki: VAPK-kustannus, 57–84.

Johnson, D. W., Johnson, R. T. & Holubec, E. 1990. Circles of learning: Cooperation in the classroom. Edina, MN: Interaction Book.

Johnston, S. 1994. Experience is the best teacher; or is it? An analysis of the role of experience in learning to teach. Journal of Teacher Education 45 (3), 199–208.

Kalaoja, E. 1988. Maaseudun pienten koulujen kehittämistutkimus. Osa 2. Opettajana kylä-koululla. (Being a village school teacher.) University of Oulu. Reports from the Faculty of Education 56.

Kalaoja, E. 1990. Maaseudun pienten koulujen kehittämistutkimus. Osa 3. Pienten koulujen ja niiden opetuksen evaluointia. (Evaluation of small schools and their teaching.) University of Oulu. Reports from the Faculty of Education 63.

Kauppi, A. 1993. Mistä nousee oppimisen mieli? Kontekstuaalisen oppimiskäsityksen perusteita. (The foundations of the contextual learning concept.) In A. Kajanto (Ed.) Aikuisten oppimisen uudet muodot. Kohti aktiivista oppimista. Helsinki: Kirjastopalvelu, 51–109.

Keiny, S. 1994. Constructivism and teachers' professional development. Teaching and Teacher Education 10 (2), 157–167.

Kimonen, E. & Nevalainen, R. 1993. The teacher in a small rural school implementing the local curriculum. A case study of the Sointula Lower Level Comprehensive School, Central Finland. In S. Hämäläinen & J. Jokela (Eds.) OECD/CERI: Teacher quality in Finland. Policy and practice in five primary schools. University of Jyväskylä. Department of Teacher Education. Research 54, 85–112.

Kimonen, E. & Nevalainen, R. 1995. Towards active learning. A case study on active learning in a small rural school in Finland. University of Jyväskylä. Department of Teacher Education. Research 57.

Kimonen, E. & Nevalainen, R. 1997. Finland: A rural school. In D. Stern & G. L. Huber (Eds.) Active learning for students and teachers. Reports from eight countries. Frankfurt am Main: Peter Lang, 82–88.

Kimonen, E. & Nevalainen, R. 2000. Curriculum change: policies and practices. A case study on curriculum change in small rural school in Finland. University of Jyväskylä. Department of Teacher Education. Research. Prepublication version.

Kyriacou, C. 1992a. Active learning in secondary school mathematics. British Educational Research Journal 18 (3), 309–318.

Kyriacou, C. 1992b. Essential teaching skills. Herts, Great Britain: Simon & Schuster.

Kyriacou, C., Brown, R. & Constable, H. 1990. Active learning: A family of concepts. EARLI News 11, 1–2.

Lindström, A. 1993. Koulutus ja koulutoimi muutoksessa. (Education and the school system in change.) In H. Blom & S. Lipsanen (Eds.) Valinnaisuus lisää liikkumavaraa kouluun. Helsinki: VAPK-kustannus, 35–48.

Nevalainen, R. 1995. Opettajan sosiaalinen osallistuminen yhdyskuntakasvatusprosessiin. Tutkimus maaseudun pienten koulujen opettajien toiminnasta kyläyhdyskunnassa. (Social participation of rural small school teachers in the process of community education.) University of Turku. Unpublished licentiate thesis in education.

Niemi, H. 1998. Jos sulla on halu oppia ... (If you want to learn ...) In H. Niemi (Ed.) Opettaja modernin murroksessa. Jyväskylä: Atena, 39–55.

Olkinuora, E. 1994. Oppimis-, tieto- ja opetuskäsitykset toimintaa koulussa ohjaavina taustatekijöinä. (Concepts of learning, knowledge and teaching as guiding factors in school work.) In J. Tähtinen (Ed.) Opettajaksi kasvaminen. Turun yliopisto. Kasvatustieteiden tiedekunta. Julkaisusarja B46, 54–73.

Page, M. 1990. Active learning: Historical and contemporary perspectives. University of Massachusetts. Unpublished doctoral dissertation.

Pirhonen, S. 1993. Koulu kyläyhteisössä. (The school in the village community.) Helsinki: Sisäasiainministeriö.

Platz, D. L. 1994. Student directed planning: Fostering student ownership in learning. Education 114 (3), 420–422.

Ross, J. A. 1994. The impact of an inservice to promote cooperative learning on the stability of teacher efficacy. Teaching and Teacher Education 10 (4), 381–394.

Simons, P. R. J. 1997. Definitions and theories of active learning. In D. Stern & G. L. Huber (Eds.) Active learning for students and teachers. Reports from eight countries. Frankfurt am Main: Peter Lang, 19–39.

Slavin, R. E. 1991. Synthesis of research on cooperative learning. Educational Leadership 48 (5), 71–82.

Slavin, R. E. 1992. Cooperative learning. In M. C. Alkin (Ed.) Encyclopedia of educational research, Vol 1. New York: Macmillan, 235–238.

Stern, D. 1994. Quality in teaching: Implications for teacher education and training. Paper prepared for a seminar on Quality in Teacher Education and Teacher Training. 7–9 July 1994. Limerick, Irland.

Stern, D. 1997. Study procedures. In D. Stern & G. L. Huber (Eds.) Active learning for students and teachers. Reports from eight countries. Frankfurt am Main: Peter Lang, 40–48.

von Wright, J. 1993. Oppimiskäsitysten historiaa ja pedagogisia seurauksia. (Conceptions of learning: Historical backgroud and instructional implications.) Helsinki: Opetushallitus.

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.

Watts, M. 1991. The science of problem-solving. London: Cassell.

Webb, R., Vulliamy, G., Häkkinen, K. & Hämäläinen, S. 1998. External inspection or school self-evaluation? A comparative analysis of policy and practice in primary schools in England and Finland. British Educational Research Journal 24 (5), 539–556.

APPENDIX 1

Planning /observation of the teaching process

Student: _____Grade: _____ Date: _____

Topic of teaching period:

_____

Subjects to be integrated:

_____

1. MOTIVATION AND ORIENTATION
- arousing interest, instructions, problems, previous knowledge, possible solutions

TEACHER'S ACTIVITY	PUPIL'S ACTIVITY
Materials	Sources

2. WORK AND ACTIVITY

Teaching methods 1. Individual 2. Group 3. Class work

TEACHER'S ACTIVITY	PUPIL'S ACTIVITY
Solutions Differentiation	Solutions, products, new solutions Differentiation

3. REFLECTION (evaluation and control)

1. Collation of material learnt, testing, correction and complementation
2. Self-evaluation, the pupil's critical evaluation of his/her learning and its results

TEACHER'S ACTIVITY	PUPIL'S ACTIVITY
TEACHER'S PRODUCTS - links with real life	PUPIL'S PRODUCTS - application in real life supporting learning

Other things to be planned/observed: Organization, teacher-pupil/pupil-pupil rela-
tions, other human relations, social climate

Rosemary Webb and Graham Vulliamy
Department of Educational Studies
University of York

AFTERWORD

A New Professionalism for the Millennium?

1   Introduction

Comparing the nature and impact of educational reform in England and Finland has a special interest because in many respects the educational policies of the two countries are moving in opposite directions. Thus, whilst England introduced a detailed and centrally prescribed National Curriculum with the Education Reform Act of 1988 and the government increasingly advocates separate subject instruction and whole-class teaching, Finnish legislation in 1994 dismantled its longstanding subject-based national curriculum and encouraged schools to develop school-based curricula incorporating thematic work and accompanied by more active-learning pedagogies. The York-Finnish project (Webb & Vulliamy with Häkkinen, Hämäläinen, Kimonen, Nevalainen & Nikki 1997) provided a unique opportunity to examine and document the implementation of the reforms at classroom level and teachers' attitudes towards them. Teachers in both countries were trying out unfamiliar approaches to curriculum organisation, pupil grouping, teaching methods and assessment. They frequently confronted the same issues, such as how best to achieve progression and differentiation, albeit in England from a position of increased prescription and in Finland from a situation of unaccustomed teacher autonomy. For teachers in both countries the demand for changes in curriculum policy and practice heightened their awareness of the comparative strengths

and weaknesses of centralised and decentralised approaches to curriculum change outlined by Nevalainen, Kimonen and Hämäläinen in Chapter 6.

2 Teacher's Responses to Change

Since the completion of the York-Finnish project, as outlined in Chapter 4, the introduction of government initiatives in England has continued unabated resulting in the ever-increasing intensification in teachers' work. It is interesting that although the educational context is very different for Finnish teachers from their counterparts in England, they are experiencing similar manifestations of work intensification and accompanying stress. Data from the York-Finnish project suggested that this was derived from three factors. Firstly, there was the uncertainty and anxiety generated by having to change without full understanding of why such changes were necessary, what these changes might look like in practice and how they might be planned and implemented. Secondly, as in England, change meant many additional staff meetings, audits of the existing curriculum to see where it met the new requirements and the production of plans and policy documentation – all of which increased workloads and reduced time for preparation for teaching. Thirdly, although very underdeveloped, public accountability and marketisation were beginning to take effect in Finland at least to the point where some teachers had an uncomfortable feeling that their school culture and working conditions could be under threat.

In both countries teachers' values were powerful determinants of the ways in which the policy changes have been interpreted and implemented. Certain core values – notably a commitment to a child-centred and experience-based integrated curriculum – were shared by many of the teachers in the English schools and expressed particularly strongly in the small schools of Riverside and Tanglewood portrayed in Chapter 5. Similar values were also held by the teachers at Suvila described in Chapter 7 – a school leading the way in implementing the *Framework*. These studies of small schools illustrate the manner in which attempts to preserve such values took markedly different forms, given the very different national policy contexts in which they were played out. Thus, for example, on the one hand, the headteacher of Suvila explicitly used new national policy changes in Finland to promote far-reaching child-centred

changes to traditional patterns of curriculum and classroom organisation in this school. On the other hand, teachers in the English schools struggled to preserve child-centred values in the face of curriculum overload, an emphasis on subjects, the publication of league tables based on Key Stage 2 test results and perceptions of the expectations of Office for Standards in Education (OF-STED) inspectors.

In Finland those teachers, whose values and curriculum preferences were legitimated by the reforms, experienced enhanced self-worth as their work came to the forefront of valued practice. At a personal level the opposite was the case for those teachers who could not understand the rationale for the reforms and felt that in teaching according to the municipal curriculum they were doing a good job. For them the reforms undermined their beliefs and sense of personal competence and challenged not only their established practices but also their identity. It is therefore perhaps not surprising that initially, when such teachers were faced with the need to change, they found it difficult to cope. Thus, the two teachers at the small school of Ranta-Sointula featured in Chapter 7, whilst aware of national exhortations to shift away from traditional textbook-based subject-centred teaching towards school-devised curricula incorporating more integrated approaches, were resistant to so doing. Consequently for them drawing up the school curriculum was little more than a paper exercise. As we argue in Chapter 5, the close match between the teachers' self-identity and the school identity which is possible in a small school is one of the ways in which the small school ethos can act as an insulation against government directives.

Osborn and colleagues characterise individual English teachers' responses to the National Curriculum and its assessment in a four-fold typology: *cooperation, retreatism, resistance* and *incorporation* (Osborn & Broadfoot with Abbott, Croll & Pollard 1992). Perhaps surprisingly, given the different educational contexts, in the York-Finnish project we found many commonalities between the responses to change of the English and Finnish teachers which are further reflected in the teachers' experiences discussed in this book. Most of the teachers in the research by Osborn et al. (1992, 148) appeared to be *'incorporating'* – that is 'feeling that they will accept the changes, but will not allow anything considered really important to be lost'. There were some examples of teachers in the English schools going a stage beyond this and *appropriating* (Woods 1995) the National Curriculum in order to address their con-

273

cerns, make the reforms work for them and develop their practice in new ways. However, the data from the English schools reveal a growth in 'change without commitment' where external agendas were met out of fear or perceived necessity to preserve the image of the school without teachers as individuals wanting to change or believing that the changes represented an improvement. The Finnish data also contain numerous examples of *incorporation* where teachers were prepared to incorporate into their existing practices some of the ideas from the *Framework* providing they could basically maintain the content of the municipal curriculum. However, there were also examples of *resistance* to the reforms where teachers intended to continue with separate subject teaching, whole-class instruction and the use of textbooks and commercially prepared materials and tests. In the Finnish schools, as exemplified by Suvila, *co-operation* was of a different kind to that occurring in England because teachers' values and preferences were congruent with the reforms. Therefore their response might be more aptly labelled *accumulation* or *reinforcement* to acknowledge the ways in which the reforms legitimated, built on and encouraged the innovative practices that were already being developed. *Appropriation* occurred where teachers, although they considered the reforms to be unnecessary and were generally unsupportive of them, opted to use aspects of the *Framework* to bring about those changes which they perceived as valuable, such as abandoning the notion of a spiral curriculum in order to avoid content repetition and increase curriculum flexibility and spontaneity. There were also a few examples of *enrichment* where the changes were contributing to teachers' professional development in areas new to them, such as learning to plan co-operatively.

All forms of responding to curriculum change appear to induce stress to some degree. However, *retreatism* probably causes the most teacher stress and anxiety because it involves submitting to imposed changes without any changes in professional ideology. This existed only in a weak form in Finland when teachers, who preferred traditional pedagogies, experienced difficulties in introducing the changes embraced enthusiastically by colleagues. In England it was very manifest in relation to OFSTED inspections, where teachers felt forced into approaches to classroom practice that were different from those that they would normally employ. In Finland, where the external pressures for compliance to policies exerted upon individual teachers from national and local authority policymakers were minimal, there exists in the data a further

category – that of individual or corporate *isolationism*. A variant of *retreatism*, it occurs when individual teachers or, as in the case of Ranta-Sointula the whole school, remain aloof from the proposed reforms and choose not to participate apart from at the superficial level of putting together some curriculum documentation.

3   Managing Whole School Change

As revealed in the York-Finnish project, the effective management of change and the nature of the support and encouragement given to individual teachers is strongly determined by the systems and procedures in place to plan and implement the changes at the level of the whole school. Consequently, schools with a history of managing innovation, whether school-initiated or resulting from national directives, have a considerable advantage over schools which lack such experience. In England the willingness and ability of teachers to work together to generate ideas and to solve problems has long been recognised as a feature of innovative schools. The introduction of the National Curriculum necessitated an increase in teacher collaboration over curriculum review and planning. However, in relation to the English case-study schools external pressures, especially OFSTED inspections and Key Stage 2 testing, brought about changes even though these were often in conflict with teachers' beliefs. In such 'change without commitment' teachers comply with what they consider is required without resistance but also without any enthusiasm and collegiality becomes an enforced contrived process. The school-wide implementation of such changes is accomplished by having the managerial systems and structures in place to introduce and maintain them and access to external support packages to provide appropriate knowledge and skills. If there is commitment, then it is to the process and systems of change by those teachers responsible for their instigation rather than to the content of the changes. In Finland, lack of measures to coerce teachers into implementing the reforms has meant that the extent to which they have been adopted by schools has depended largely on their congruence with schools' philosophies and preferred practices. This provides a context much more conducive to the genuine forms of collegiality advocated within this book.

External accountability in England in the form of OFSTED inspections has undoubtedly led to change in terms of written policies, systems and procedures. However, the relationship between these and fundamental changes in classroom practice remains tenuous. The York-Finnish project data reveal that OFSTED inspections can cause loss of confidence, feelings of inadequacy, deprofessionalisation and extreme anxiety. When combined with exhaustion from the intensification of work and stress, this can halt the creativity and development even of schools deemed successful and render them debilitated (Webb, Häkkinen, Hämäläinen & Vulliamy 1998). School self-evaluation as advocated in Finland has never been widely practised in England. However, the government appears to value school self-evaluation because as claimed by the head of the government's Standards and Effectiveness Unit: 'If each school can do what many have already achieved and link targets, benchmarking and self-evaluation in a virtuous circle, the conditions will be in place for success' (Barber 1997, 22). Certainly a common context and goals for developing and sharing school self-evaluation approaches has been created by government requirements – such as the Literacy Hour and the National Curriculum. Also, the pressures exerted through the introduction of national, LEA and school targets, and dissemination to schools of information provided by national testing, league tables and performance and assessment records which enable schools to compare their own performance with that of schools in similar circumstances encourages self-evaluation. Most importantly, a recognition of the need for changes in the inspection regime to incorporate a lighter touch for successful schools in combination with the resignation of Chris Woodhead, OFSTED's controversial Chief Inspector, and the setting up of a General Teaching Council for increasing self-regulation by the profession, may ultimately produce a climate where support is provided for, and account taken of, school self-evaluation.

While Finnish schools were collecting evaluation data to inform development, these data tended to be on a wide variety of aspects of schooling, gathered through various techniques and with wide variations in rigour. The totality of the information tended to lack overall coherence and was not part of a whole-school evaluation strategy – for example, designed to focus systematically in depth on specific areas identified as problematic or newly introduced and therefore in need of informed scrutiny. However, despite the limitations of their school self-evaluation, Finnish schools had ownership over their meth-

ods of data collection and analysis and commitment to respond to evaluation findings which led to direct and immediate changes to practice. Parental opinion on, and suggestions for shaping, the curriculum and other aspects of school life appeared both more systematically gathered and a great deal more influential than in the English case-study schools. Pupil self-assessment is extremely underdeveloped in England and has been unintentionally discouraged by the demands of external and summative assessment. However, in Finland pupil self-assessment was also being explored for the contribution that it could make not only to pupil independence but also to the evaluation of the effect of resources, teaching methods and classroom environments on pupil progress. The evaluation of an issue or problem to be tackled is the first stage in school-based action research undertaken by teachers and such experiences of data collection and analysis could prove useful precursors to participation in projects such as the OK project described by Kohonen in Chapters 2 and 9. In arguing for the relationship between teacher development and curriculum development he refers to the pioneering work undertaken by Lawrence Stenhouse. As a primary teacher, whose doctoral research was supervised by Stenhouse until his untimely death, Rosemary Webb can testify to the strength of his belief in, and commitment to, teachers improving the schooling process through the understandings gained from carrying out research into their own practice. Teacher research is fundamental to all the higher degree programmes at the University of York (see e.g. Vulliamy & Webb 1992). Practising teachers on our part-time programmes frequently use the opportunity to research and critically reflect upon the nature and impact of aspects of the government's curriculum reforms. Thus we read with particular interest and recognition Kohonen's account of the teachers' experiences on the OK project.

4   Conclusion

As we enter 2001 in the new millennium, education in both England and Finland is at a fascinating turning point in history. In England, after over a decade of fast paced and fundamental change, there are signs that a new professionalism is emerging. This is especially the case with teachers trained more recently and therefore accepting and comfortable with current government notions of 'best practice'. As argued by Rauste-von Wright in Chapter 1, ini-

tial teacher training (ITT) needs to change in response to the demands made on intending teachers by government reforms. In the English context this has meant a highly prescriptive National Curriculum for ITT which has come in for severe criticism by many teacher trainers. The new professionalism in England is derived from an in-depth knowledge of subject content and pedagogical knowledge, a commitment to raising standards of pupil attainment through the effective implementation of statutory requirements and whole-school responsibilities in relation to the management of the curriculum and its assessment and the performance of colleagues. It is threatened by the toll to morale of the events and loss of teacher autonomy of recent years, the consequent drop in teacher recruitment and the recent highly contentious moves to introduce performance-related pay for teachers. However, the new professionalism is powerfully underpinned by: considerable additional government investment in the education service; the demands for new professional standards from the Teacher Training Agency (TTA); the raising of standards in literacy and numeracy achieved by primary teachers' successful implementation of the National Numeracy and Literacy Strategy; the increasing facility of the teaching force with information communication technology. (ICT); the greater discretion given to teachers over the implementation of the further slimmed down National Curriculum 2000; and the long awaited General Teaching Council.

In line with national policy, notions of professionalism in the two countries are also developing in opposite directions. Finnish teachers are intended to become increasingly confident autonomous professionals capable of adapting and responding creatively to change. Ideally they are moving away from working in isolation to establishing collegial cultures in schools conducive to sharing and learning from one another both informally and formally through staff meetings and workshops, school self-evaluation and teacher research. It is hoped that these experiences will give the new professionals a much greater awareness of how children learn and the implications of this for the organisation and conduct of teaching. Through contributing to the development of their schools as learning organisations, exhibiting the characteristics set out by Nikkanen in Chapters 3 and 10, they can be personally empowered to take on new challenges and promote the professional development of colleagues. In the final chapter Kimonen and Nevalainen analyse the active learning by teachers involved in rising to these challenges. In addition, as argued by

Räsänen in Chapter 8, the ability to teach content through a foreign language is increasingly likely to be a characteristic of the new professional. The bureaucracy created by the new reforms, the introduction of open enrolment and the growing climate of external accountability in Finland could act as constraints on the emergence of the new professional. These constraints may make teachers and schools unwilling to engage in critical reflection and data collection processes which are time-consuming and potentially threatening to their self image and likely to expose their weaknesses. However, the non-hierarchical nature of Finnish schools and the predominance of small schools with their family atmosphere and supportive staff relationships appears to provide a supportive setting for teachers working together to examine their practice, challenge their assumptions and develop new approaches tailored to their communities and pupils.

References

Barber, M. 1997. Spice up your life, we're going to be talked about. Times Educational Supplement, December 5, 22.

Osborn, M. & Broadfoot, P. with Abbott, D., Croll P. & Pollard, A. 1992. The impact of current changes in English primary schools on teacher professionalism. Teachers College Record 94, 138–151.

Vulliamy, G. & Webb, R. 1992. (Eds.) Teacher Research and Special Educational Needs. London: David Fulton.

Webb, R., Häkkinen, K., Hämäläinen, S. & Vulliamy, G. 1998. External inspection or school self-evaluation? A comparative analysis of policy and practice in primary schools in England and Finland. British Educational Research Journal 24 (5), 539–556.

Webb, R. & Vulliamy, G. with Häkkinen, K., Hämäläinen, S., Kimonen, E., Nevalainen, R. & Nikki, M.-L. 1997. A Comparative Analysis of Curriculum Change in Primary Schools in England and Finland. University of York. Department of Educational Studies.

Woods, P. 1995. Creative Teachers in Primary Schools. Buckingham: Open University Press.

Contributors

Glyn Hughes
PhLic, MA, Lecturer in English Language
Department of Teacher Education
University of Jyväskylä
Jyväskylä, Finland

Seppo Hämäläinen
EdD, Professor of Teacher Education
Department of Teacher Education
University of Jyväskylä
Jyväskylä, Finland

Jouko Kari
EdD, Professor of Education
Department of Teacher Education
University of Jyväskylä
Jyväskylä, Finland

Eija Kimonen
EdLic, Assistant in Education –
        Instruction and Curriculum
Department of Teacher Education
University of Jyväskylä
Jyväskylä, Finland

Viljo Kohonen
PhD, Professor of Foreign Language Pedagogy
Department of Teacher Education
University of Tampere
Tampere, Finland

Raimo Nevalainen
EdLic, Lecturer
University Teacher Training School
University of Jyväskylä
Jyväskylä, Finland

Pentti Nikkanen
PhD, Senior Researcher
Institute for Educational Research
University of Jyväskylä
Jyväskylä, Finland

Maijaliisa Rauste-von Wright
PhD, Professor of Educational Psychology
Department of Teacher Education
University of Helsinki
Helsinki, Finland

Anne Räsänen
PhLic, MEd, Senior Lecturer in English
Language Centre
University of Jyväskylä
Jyväskylä, Finland

Graham Vulliamy
PhD, Professor of Education
Department of Educational Studies
University of York
York, England

Rosemary Webb
PhD, Reader in Education
Department of Educational Studies
University of York
York, England

277

CURRICULUM APPROACHES

What are the prerequisites for changing the curriculum, and how are these changes reflected in school development? What are the principles and practices underlying the everyday functioning of schools? Can national differences be observed? These are some of the issues dealt with in this unique collection of texts, which focuses on both the theory and practice of curriculum change in Finland. Two chapters on England provide an added comparative dimension.

The book is divided into three parts. The overall theoretical context for the articles, which is set up in Part One, demonstrates two commitments, both of which lie at the centre of current Finnish policy on school-based curriculum. These are, firstly, a commitment to constructivist theories of learning, and, secondly, to alternative approaches to both the professional development of teachers and to the school as a learning organisation.

Part Two of the book presents detailed case studies, illustrating the practice of curriculum change in schools in England and Finland, together with relevant context-setting chapters indicating both the pace of change in each country and, interestingly, the fact that in some respects the curriculum policies of these countries are moving in opposite directions.

Part Three contains reflections on the changing curriculum experience informed by both theoretical considerations and a synthesis of research findings presented earlier. These, together with suggested follow-up activities for students, should help make the book a valuable resource for students of education and for practising teachers. Researchers and administrators in the field of education will also find the book rewarding and challenging. For readers in England, the volume has a special interest because many of the findings from the school development projects resonate strongly with the experiences of collaborative action research projects centring on teachers' professional development.

Cover: Martti Minkkinen

CE 081452

U.S. Department of Education

Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)
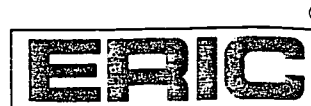
REPRODUCTION RELEASE

(Specific Document)

DOCUMENT IDENTIFICATION:

Title:
Curriculum approaches: readings and activities for educational studies

Author(s): Ed. by Eija Kimonen

Corporate Source:	Publication Date:
Institute for Educational Research, University of Jyväskylä	2001

REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) 2A	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) 2B
Level 1 ↑ [X]	Level 2A ↑ [ ]	Level 2B ↑ [ ]
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here,→ please	Signature:	Printed Name/Position/Title: Riitta Pitkänen, Librarian	
	Organization/Address: Institute for Educational Research University of Jyväskylä, P.O. Box 35	Telephone: + 358-14-260 3212	FAX: +358-14-260 3201
		E-Mail Address:	Date: 20.3.2001
	FIN-40351 Jyväskylä, Finland	rpitkane@jyu.fi	(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:	
	Institute for Educational Research, University of Jyväskylä
Address:	
	P.O.Box 35
	FIN-40351 Jyväskylä, Finland
Price:	
	FIM 170, EUR 28,59

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:	
Address:	

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:　　Cheryl Grossman
Processing Coordinator
ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: