

A FRAMEWORK FOR EFFECTIVE SCHOOL IMPROVEMENT

Final report of the ESI project

Work Package 11 of the ESI project
SOE2-CT97-2027
Capacity for change and adaptation of schools:
The case of effective school improvement

Gerry J. Reezigt (Editor)

The ESI team

Bert Creemers, Wijnand Hoeben, Rob de Jong, Gerry Reezigt, Jaap Scheerens, Hechuan Sun (the Netherlands), Marcel Crahay, Marc Demeuse, Regine Denooz, Anne Matoul (Belgium), Penni Nikkanen, Jouni Valijarvi (Finland), Georgia Kontogiannopoulou-Polydorides, Yiouli Papdiamantaki, Georges Stamelos (Greece), Emilio Lastrucci, Roberto Melchiori, Rocco Postiglione (Italy), Isabel Lopes da Silva, Eunice Gois (Portugal), Mercedes Muñoz -Repiso, F. Javier Murillo, Josu Solabarrieta, Aurelio Villa, Lourdes Hernandez, H. José Pérez -Albo (Spain), Louise Stoll, Felicity Wikeley, Caroline Lodge, Jim Brown (United Kingdom)

FINAL REPORT

Contract n°: PL 97 - 2185 (ESI-project)

Project n°: SOE 2-CT97-2027

Title: Capacity for Change and Adaptation of Schools in the case of Effective School Improvement

Project coordinator:

B.P.M. Creemers
GION Institute for Educational Research, University of Groningen,
the Netherlands

Partners:

Groningen Institute for Educational Research (GION)

Prof.dr. Bert P.M. Creemers

Institute of Education, University of London/University of Bath

Prof.dr. Louise Stoll

Department of Education, University of Athens

Prof.dr. Georgia Kontogiannopolou -Polydorides

Institute for Educational Research (IER), University of Jyväskylä

Prof.dr. Jouni Valijarvi

Service de Pédagogie Expérimentale (SPE), Université de Liège

Prof.dr. Marcel Crahay

Centro Europeo Dell'Educazione (CEDE), Rome

Prof.dr. Roberto Melchiori

Instituto de Inovação Educacional (IIE), Lisbon

Dr. Maria Isabel Lopes da Silva

Centro de Investigación y Documentación Educativa (CIDE), Madrid

Dr. Mercedes Muñoz-Repiso

Centre for Applied Educational Research (OCTO), University of Twente

Prof.dr. Jaap Scheerens

Reference period: from February 1, 1999 to January 31, 2001

Starting date: 1 February 1998 **Duration:** 32 months

Date of issue of this report: July 6, 2001

Project financed within the TSER Programme

ISBN 90-6690-482-8

© 2001. GION, Institute for Educational Research , University of Groningen, NL

No part of this book may be reproduced in any form, by print, photo print, microfilm or any other means without written permission of the Director of the Institute.

Niets uit deze uitgave mag worden veeelvoudigd en/of openbaar gemaakt door middel van druk, fotokopie, microfilm of op welke andere wijze dan ook zonder vooraf gaande schriftelijke toestemming van de Directeur van het Instituut.

CONTENTS

Abstract	1
1. EXECUTIVE SUMMARY	2
2. BACKGROUND AND OBJECTIVES OF THE PROJECT	10
2.1 Background information for the construction of an ESI model	10
2.2 The role of models in educational science	12
2.3 General principles for the construction of an ESI model	13
3. SCIENTIFIC DESCRIPTION OF THE PROJECT RESULTS AND METHODOLOGY	15
3.1 Contribution from theories to an ESI model	15
3.1.1 School improvement theories	15
3.1.2 Curriculum theories	16
3.1.3 Behavioural theories	17
3.1.4 Theories of organisation, organisational learning and the learning organisation	19
3.1.5 Theories of choice	21
3.1.6 Summarisation of the factors derived from theories	22
3.2 Contribution from the case studies analysis to an ESI model	24
3.2.1 Types of improvement programmes	25
3.2.2 Types of improvement outcomes	26
3.2.3 The importance of the educational context in European countries	26
3.2.4 Factors that promote or hinder effective school improvement according to the case studies analysis	27
3.3 Intermediate outcomes: effective school and classroom/teacher Characteristics	30

3.4	Draft version of an ESI model	31
3.4.1	Key concepts	31
3.4.2	A model for effective school improvement	37
3.5	Revision of the ESI model	41
3.5.1	The analysis of existing school improvement projects (Work Package 5)	42
3.5.2	Main findings of the country conferences (Work Package 10)	43
3.5.3	Main findings of the final ESI workshop (Work Package 9)	52
3.5.4	Main conclusions for the revision of the ESI model	54
3.6	A comprehensive framework for effective school improvement	54
3.6.1	Context factors	58
3.6.2	School factors	65
4.	CONCLUSIONS AND POLICY IMPLICATIONS	76
5.	DISSEMINATION AND EXPLOITATION OF RESULTS	87
5.1	Dissemination as a joint effort of country teams	87
5.2	Dissemination within countries	88
6.	ACKNOWLEDGEMENTS AND REFERENCES	93
7.	ANNEXES	94

Abstract

In the Effective School Improvement project, a comprehensive framework on effective school improvement was developed which integrates concepts derived from a variety of theories (especially educational effectiveness and improvement theories) and from an analysis of case studies of successfully improving schools. Eight countries (the Netherlands, Finland, the United Kingdom, Belgium -French Community, Greece, Italy, Spain, and Portugal) participated in the project.

The state of the art in the theories under study did not allow for the construction of an effective school improvement model that could live up to the requirements for scientific models. Still, the construction of a comprehensive framework was possible. Because of strong differences between countries, we have decided to use general concepts in the framework which can then be filled in more specifically on the basis of the actual or desired educational situation in separate countries. We have given examples of these specifications in outlining the concepts of the framework.

The improving school is in the center of the framework. The school executes improvement processes, aimed at improvement outcomes, within an improvement culture. The improving school is embedded in the educational context. The school is experiencing pressure to improve from this context, receives resources for improvement and keeps the wider educational goals of the society in mind during improvement. All relationships in the model (within the improving school and between the educational context and the improving school) are reciprocal.

The national context is an important frame factor in fostering or impeding effective school improvement. The context differs a lot in the participating countries. Therefore the function of the ESI framework can be quite different for policy makers in different countries. Policy implications for each country separately are inferred at the end of the report. In general, policy makers are advised to develop educational goals at a medium level of specification. Pressure to improve should be developed not primarily as a sanction for schools but as a stimulus for improvement. Policy makers are in a position to deliver resources that facilitate the motivation and capacity of school teams necessary for effective school improvement.

1. Executive summary

Effective school improvement refers to planned educational change that enhances student learning outcomes as well as the school's capacity for managing change.

Effective school improvement is a major concern for both school effectiveness and school improvement theory and research. However, the paradigms of school effectiveness and school improvement have grown apart over the years, not only in their methodology but also in their focus. While school effectiveness is strongly focusing on student outcomes and the characteristics of schools and classrooms that are associated with these outcomes without automatically looking at the processes that are needed to bring changes about, school improvement is mainly concerned about changing the quality of teachers and schools without automatically looking at the consequences for student outcomes. In short, school effectiveness is trying to find out *what* is to be changed in schools in order to become more effective while school improvement is trying to find out *how* schools can change in order to improve.

The main principle of the ESI project is that stronger links between the two paradigms of school effectiveness and school improvement will help both to profit from each other's strong points. The construction of an ESI model can be a first step in the integration of paradigms. The model for effective school improvement must allow us to explain why improvement efforts succeed or fail. It must make clear which factors promote or hinder effective school improvement.

The state of the art in the field of ESI forces us to follow the *inductive approach* to model development, as opposed to the *deductive approach*. We do not have a well-outlined ESI theory from which we can deduct the phenomena that we want to include in our model. Instead, we will take concepts from several theories and from the daily practice of school improvement efforts, and then build our model inductively out of these concepts. Models can be of a conceptual or a formal nature. Conceptual models are characterised by the use of verbal descriptions, while formal models present mathematical equations. The ESI model that we will try to elaborate clearly is a *conceptual model*.

In school effectiveness research and in school improvement as well, case studies have always been in the forefront. This may easily lead to the impression that every school is unique in its attempts to change its situation in order to become more effective. When this line of reasoning would be followed consequently in the theoretical part of the ESI project, the construction of a model becomes impossible. The idea that every school is unique neglects the level of abstractness that models need for the explanation of phenomena that exceed the individual school and the individual case study. The same holds for the uniqueness of countries in the perspective of an internationally comparative project such as ESI. Educational systems, laws and regulations differ strongly from one country to another. However, we assume that similarities can be described at a more abstract level from the observed differences.

The ESI model must therefore necessarily focus on *the common aspects* of ESI in schools in a variety of countries. Although the model certainly can generate ideas that may be

useful for a unique school in a specific European country, it can never pretend to explain all the exact processes and outcomes in one singular school.

We have built the Effective School Improvement (ESI) framework on the findings of a theoretical analysis (school effectiveness and school improvement theories, curriculum theories, behavioural theories, theories of organisation and organisational learning, and theories of choice), the case studies analysis of improvement projects in the ESI project countries (Belgium French Speaking Community, England, Finland, Greece, Italy, Portugal, Spain, The Netherlands), the analysis of successful internationally acknowledged improvement projects, and the experiential knowledge gathered in the ESI country conferences on effective school improvement. Obviously the intensive discussions in the meetings and workshops of the ESI members have also contributed strongly to the design and development of the comprehensive framework.

We developed a draft model for effective school improvement based on an analysis of theories and case studies. The draft model needed revisions, as we concluded particularly on the basis of the country conferences. The function of the model needed clarification, its representation should be more dynamic, the context should be emphasised much more strongly and the focus on outcomes derived from the effectiveness literature was considered too narrow. The model should also allow for more general societal goals to be pursued by schools, simply because schools are supposed to do so by the governments of their countries.

Therefore we revised the model and decided to change its name to 'comprehensive framework', because we were not able to construct a model in the strict scientific sense. The state of the art in the international literature on improvement issues still makes it very hard to build a model which can predict success or failure of improvement efforts. Also, the variety of context factors in the ESI countries makes it hard to fill the key concepts in a model with factors that apply for most countries.

As a consequence, we have presented our framework as an abstract, basic picture which shows the main concepts and relations between concepts that play a part in improvement efforts in all ESI countries, albeit in different ways. We have put the improving school in the centre of the picture, embedded in the wider educational context of a country. The context exerts pressures to improve in various ways, offers resources and requires the achievement of certain educational goals. However, the expectations of the educational context must be accomplished in the schools. In schools, we must study the improvement culture, improvement processes and improvement outcomes to find out why some efforts succeed and others fail.

We have divided the concepts in the framework into more specific factors, which together constitute the main concept. We have presented an explanation per country per factor, because of the sometimes massive differences between countries. By this procedure we have tried to clarify elements of effective improvement practices in all countries by means of a similar set of factors and concepts. Moreover, this procedure clearly shows similarities and differences between countries and their potential influence on improvement efforts.

The comprehensive framework shows that an improving school is firmly embedded in the educational *context* of a country. Schools and school improvement can never be studied apart from their educational context. As such, the improving school is always confronted with the main contextual concepts of *pressure to improve, resources for improvement and educational goals*, which exist in the educational context. Even when schools are free to decide about their improvement outcomes, these will always have to be in line with the wider educational goals that are determined in the context.

The importance of the educational context appears most prominently in internationally comparative studies such as the ESI project, but should also be incorporated in all within-country studies of effective school improvement. From the perspective of school improvement, the influence of the context on the school is much more intensive than the influence of the school on the context. Still, schools will over time influence their context as well.

The main contextual concepts of pressure to improve, resources for improvement and educational goals are overarching a wider number of factors.

Table. Factors within the main contextual concepts of the framework

<i>Pressure to improve</i>	<i>Resources/support for improvement</i>	<i>Educational goals</i>
<ul style="list-style-type: none"> - market mechanisms - external evaluation and accountability - external agents - participation of society in education/societal changes/ educational policies which stimulate change 	<ul style="list-style-type: none"> - autonomy granted to schools - financial resources and favourable daily working conditions - local support 	<ul style="list-style-type: none"> - formal educational goals in terms of student outcomes

In the improving school, the concepts of the *improvement culture in the school, the actual improvement processes and the improvement outcomes* are essential. The improvement culture is the background against which the processes are taking place. The improvement outcomes are the goals that the improving school wants to achieve. The concepts of culture, processes and outcomes are all interrelated and will constantly influence each other. The culture will influence not only the processes, but the outcomes of improvement as well. The processes obviously influence the improvement outcomes, but the processes will also change the improvement culture. The outcomes will influence the processes and also the improvement culture of the school. The interrelationships between these main concepts show that effective school improvement is an ongoing cyclical process without a clearly marked beginning or ending.

The main school concepts of improvement culture, improvement processes, and improvement outcomes are overarching a wider number of factors.

Table. Factors within the main school concepts of the framework

<i>Improvement culture</i>	<i>Improvement processes</i>	<i>Improvement outcomes</i>
<ul style="list-style-type: none"> - internal pressure to improve - autonomy used by schools - shared vision - willingness to become a learning organisation/ a reflective practitioner - training and collegial collaboration - improvement history - ownership of improvement, commitment and motivation - leadership - staff stability - time for improvement 	<ul style="list-style-type: none"> - assessment of improvement needs - diagnosis of improvement needs - phrasing of detailed improvement goals - planning of improvement activities - implementation of improvement plans - evaluation - reflection 	<ul style="list-style-type: none"> - changes in the quality of the school - changes in the quality of the teachers - changes in the quality of student outcomes (knowledge, skills, and attitudes)

The functions of the framework

The comprehensive framework for effective school improvement is neither fully descriptive, nor fully prescriptive in character. Instead, it contains descriptive elements such as the factors, which constitute the national educational context but also prescriptive elements. For example, the central place of the school in the framework is based on effectiveness and improvement theories and research that have shown that effective improvement requires school level processes. Although the importance of teachers and their work in classrooms is certainly acknowledged, individual teachers are generally not considered the main lever of change for effective whole school improvement. Even when teachers succeed in achieving major changes in their classrooms with strong effects on student outcomes, this is not an example of effective school improvement as we have defined the concept.

Although isolated teacher efforts can surely enhance student learning outcomes (the effectiveness criterion of ESI), they cannot really be expected to have a lasting impact on the school as an organisation (the improvement criterion of ESI). As a consequence, the most important level in the model is the school level. For some countries, improvement efforts in secondary education or in large primary schools may also concern specific departments or other subsets of school staff. In that case, we suppose that the factors for the departments will be essentially the same as the factors that we have depicted in the framework for the school. A second prescriptive element in the framework is the focus on student outcomes as important improvement outcomes. For improvement to be effective there must always be a link, at least at the conceptual level, with student outcomes pursued by the school.

The comprehensive framework aims at three different target groups: practitioners, researchers and policymakers.

- For practitioners, the framework can be useful in the design, planning and implementation of school improvement. The framework gives an overview of all factors that may promote or hinder effective school improvement and as such it can be used as a way of exploring educational practice. However, schools must translate

the factors in the framework to their own situation and tailor them to their own needs. The framework can never prescribe how a specific school in a specific country should act in order to achieve effective school improvement.

- For researchers, the framework is especially important for further research in the field of effective school improvement. The framework can be used to generate hypotheses and to select variables that should be investigated and further operationalised. It presents an overview of relevant variables but does not specify criteria (such as how often school evaluation should take place to have an impact on improvement outcomes). The international dimension of the framework, reflected in the ample attention for the context factors, provides insight in the influences of these factors across countries but also within countries. In traditional improvement research, the educational context is often excluded. Its importance is rarely acknowledged and analysed.
- Policymakers have to be aware that the framework can never be used as a recipe for effective school improvement or as a ready-made toolbox for the implementation of improvement in schools. The framework merely clarifies which factors must be taken into consideration in the planning of improvement processes in schools. It also shows which conditions must be taken into account, both at the context and the school levels. The framework may help policymakers to see how important school improvement is for student outcomes or how important the school is as a meaningful unit for improvement. Also, the framework shows policymakers how strongly schools are influenced by the context. This implies that adequate context measures will often be needed in improvement efforts. Leaving the school to improve on its own will often not be a realistic option.

The statements above make clear that the framework will always need interpretation whenever it is used, whether it is used for practice, research, or policy. Keeping this constraint in mind, the framework may have the following functions for practitioners, researchers, and policymakers:

- it can start a debate and it can contribute to ongoing discussions about effective school improvement,
- it can introduce new arguments in a debate and thereby assist in decision-making,
- it can act as an eye-opener about improvement factors which are different in different countries,
- it can be used as a tool for the planning, designing, implementation, evaluation, and reflection of improvement projects and research on effective school improvement,
- it can be used as an input in teacher training.

The exact functions of the framework will, however, always be dependent on the context in which it is used and the persons who use it.

We will now go into more detail about the policy implications of the ESI framework.

POLICY IMPLICATIONS

The school as centre of improvement

Effective school improvement requires school level processes aiming to enhance the quality of instruction in classrooms. Individual teachers can never promote lasting changes in the school. The school organisation may add or subtract value to that of its

individual members. In schools with little team collaboration, we might expect to find a large variation in the performance of pupils. In a well led and managed school the chances of seeing less variation and greater consistency across the school are higher. In this way there is a 'school effect', adding value to that of individual teachers.

The school as the central level for effective improvement is by no means self-evident in the participating countries. In some countries policymakers use effective school knowledge, which point at the importance of the school as organisation. Schools are held (more or less) accountable for results (to be controlled by the inspection; to be published in newspapers and the internet) and the development of schools as learning organisations is fostered (e.g. peer coaching, team staff development, schools receiving ear-marked funds for staff development).

In most countries the school as organisation does not play a major role in effective school improvement. The teachers or the context are the most important units. Some examples show the relative low importance of the school as driver for ESI: teachers work independently (without a school plan of common goals and methods); inspectors assess only teachers (not the schools); teachers are placed centrally at schools (which might reduce their involvement in school improvement); the principal's main function is administration (educational leadership is not fostered); the principal is elected for a short time period (in this way reducing his/her central role in managing school reform).

The context level is the most important in one of the participating countries. Teachers are supposed to apply educational policies. In this situation schools and teachers are not supposed to initiate improvements on their own.

The ESI model shows that an improving school is firmly embedded in the educational context of a country. The improving school is always confronted with three main contextual factors: educational goals, pressure to improve and resources for improvement. Even when schools are free to decide about their improvement outcomes, these will always have to be in line with the wider educational goals that are determined in the context.

Educational goals

The model stresses that improvement efforts will always have to fit within the national educational goals. How global or specific national goals should be is a matter of debate. The development of many, highly specific, goals may result in complaints about overloaded curricula and has a tense relationship with school autonomy. Global goals do not function as frame factors for schools and teachers. National goals should be realistic and not too detailed, allowing schools and teachers a certain autonomy in order to adapt goals to school's needs.

Pressure to improve

Schools often need some form of external pressure from the educational context to start improving. In the model four types of pressure are distinguished.

a. Market mechanism

The market refers to competition between schools. The idea is that competition will be an impetus for schools to improve. In an educational system where decentralisation leads to more autonomy for schools, competition between schools is likely to increase. The positive side is that the consumers (parents) will be better informed about the schools' quality. Participants also mention a lot of dangers of schools as a market place, such as parents preference for traditional schools, the creation of white and black schools, inequality between schools. Policy makers should try to reduce the negative aspects of market mechanisms.

b. External evaluation and accountability

External evaluation generally concerns the measurement of student outcomes with a national validated test (related to national objectives). When schools are held accountable for their results in terms of student outcomes, and when these outcomes are made public, schools often feel the pressure to change student outcomes in a positive way. External evaluation is valued positively by scholars (not by teachers) but it can also lead to negative consequences (e.g. helping students with the test; approval of cheating) if sanctions are high (closing down of schools) or when evaluations are not fair. Policymakers should facilitate external evaluations at regular school periods, present the evaluations in a fair way (value added) and use the information especially for the improvement of schools.

c. External agents

External agents such as inspectors, policy makers, educational consultants and researchers may push schools to improve by giving suggestions what and how to improve. Policymakers should encourage the existence of (high quality) external agents and their function as facilitators of effective school improvement.

d. Participation of society in education and societal changes

The society influences schools in many ways and demands school improvement whenever necessary. These influences are often mediated by government policies responding to these influences. These influences are visible in for example changes in national educational objectives, ways of learning (learning to learn how to study), new themes (information technology), etc. Sometimes these changes are receiving wide support (ICT), but there is a limit to the amount of changes schools are willing to perform. Policymakers have to be careful not to overload schools with innovations.

Resources (support) for improvement

Material and non-material forms of support are essential for effective school improvement. In the ESI model three forms of support are distinguished:

a. Autonomy granted to schools

Autonomy of schools relates to several domains such as: educational goals, educational means, organisation (personnel, management, administration) and finances. For effective school improvement some autonomy is necessary because

improvements which do not tailor to school's needs, are likely to fail. The success of autonomy depends to a large extent on the willingness and capacity of the school team to (continuously) improve in the direction of a more effective school. Some forms of external control seems to be a requirement to stimulate schools to use their autonomy in a 'good' way.

b. Financial resources and working conditions

With sufficient financial resources and time, improvement will succeed more easily. Large classes, a large amount of teaching hours and instability of education policies do not contribute to the motivation to improve.

c. Local support

Local support refers to the support from parents, district officials, school administrations, and school boards.

The general policy implications of the ESI model are elaborated in country specific consequences in the report.

2. Background and objectives of the project

In the Effective School Improvement project, we have built a framework for effective school improvement (ESI). The project aimed at developing a comprehensive theoretical framework that integrates concepts from theories in the field of school effectiveness and school improvement. Moreover, the framework is also built on useful concepts of other theories such as curriculum theories, behavioural theories, theories of organisation and organisational learning, and theories of choice.

The theoretical perspective was not the exclusive input for the construction of a framework. In the ESI project, an extensive analysis took place of about thirty improvement projects in the participating countries. The main findings of this analysis were also considered in the construction of the ESI framework. As a consequence, the final version of the framework is based on both theory and practice.

In 1998 the ESI project partners discussed the possibilities of combining several theoretical traditions for the first time. At the end of that year, the contributions of all partners were published in the report *Effective School Improvement: State of the Art/Contribution to a Discussion*, edited by Wijnand Hoeben (1998). In July 1999, all partners prepared papers about one or more theories that, according to the grant request, were to be used for the ESI model (Work Package 3, workshop in Bilbao). The revised versions of these workshop papers were published in an ESI report (*Effective School Improvement: 1st theoretical workshop/contributions from relevant traditions*, edited by Gerry Reezigt) in April 2000.

The outline of the ESI framework was discussed during the ESI meeting in Bath in November 1999 (Work Package 7). The first concept was discussed extensively during the ESI meeting in April 2000 in Liège (Work Package 4). The framework was then revised and discussed in country conferences, which took place in October and November 2000 in all participating countries of the project. The final version was developed during an ESI meeting in Lisbon in November 2000.

Initially, we set out to construct a model for effective school improvement. However, during the process we found out that we were not really able to build a model that could live up to all scientific qualifications which the term 'model' would imply. Therefore we prefer to talk about an ESI framework instead. The terms 'framework' and 'model' are both used. When we describe the first stages of our work, we use the term 'model'. When we describe the final stages of the project we refer to the ESI framework.

In this chapter, we will first present background information for the construction of an ESI model (2.1). Then we will discuss the role of models in educational science (2.2) and finally we will outline general principles for the construction of an ESI model (2.3).

2.1 Background information for the construction of an ESI model

Earlier ESI reports (for example Hoeben, 1998) have outlined why an ESI model would be a valuable asset. In this chapter we will merely summarise the background notions behind this idea. Next we will mention the definition of effective school improvement that the ESI project has developed in the recent past. We need to keep this definition in mind when we discuss the construction of an ESI model.

The surplus value of an ESI model

Effective school improvement is a major concern for both school effectiveness and school improvement theory and research. However, the paradigms of school effectiveness and school improvement have grown apart over the years, not only in their methodology but also in their focus. While school effectiveness is strongly focusing on student outcomes and the characteristics of schools and classrooms that are associated with these outcomes without automatically looking at the processes that are needed to bring changes about, school improvement is mainly concerned about changing the quality of teachers and schools without automatically looking at the consequences for student outcomes. In short, school effectiveness is trying to find out *what* is to be changed in schools in order to become more effective while school improvement is trying to find out *how* schools can change in order to improve.

The main principle of the ESI project is that stronger links between the two paradigms of school effectiveness and school improvement will help both to profit from each other's strong points. The construction of an ESI model can be a first step in the integration of paradigms. A model can show the relationships between school effectiveness and school improvement in a meaningful framework. It can be a starting point for the further development of theories about effective school improvement. In the future it may promote research that combines essential factors from both paradigms better than before.

Definition of effective school improvement

In earlier reports the concept of effective school improvement was defined (Hopkins et al., 1994; Hoeben, 1998) as follows:

Effective school improvement refers to planned educational change that enhances student learning outcomes as well as the school's capacity for managing change.

To evaluate effective school improvement, an *effectiveness criterion* (does the school achieve better student outcomes?) is needed as well as an *improvement criterion* (does the school manage to change successfully from old to new conditions that are necessary for effectiveness?).

The model for effective school improvement must allow us to explain why improvement efforts succeed or fail. It must make clear which factors promote or hinder effective school improvement.

Hoeben (1998) takes the comprehensive model of educational effectiveness developed by Creemers (1994) as a point of departure for the construction of an ESI model. This effectiveness model summarises the main concepts of the school effectiveness knowledge base and puts them in a meaningful order. In addition the model integrates effectiveness concepts with, among others, concepts of curriculum theories (especially at the classroom level) and theories of organisation (especially at the school level). The comprehensive model however does not have an 'improvement part' and therefore cannot function as an ESI model.

2.2 The role of models in educational science

Before we try to construct an ESI model, it seems useful to pay some attention to the role of models in educational science and the role of our model in the theoretical field that we are dealing with. This will force us to think about the actual potential of our model and it will also help us to focus on everything that our model cannot pretend to be .

According to Scheerens (1992, p. 13), the concepts of 'theory' and 'model' are very often confused. A theory explains relationships between phenomena and consists of a set of units (facts, concepts, and variables), a system of relationships among units and interpretations about these relationships that are comprehensible and predict empirical events. A model *specifies and visualises the theoretical phenomena in a simplified and reduced way*. It shows the main concepts of the theory and sheds light on the interrelationships.

In the ESI project we are drawing on more than one theory. Therefore we cannot simply take the main concepts of just one theory and visualise these. Instead, we will use our visualisation, the model, to integrate theoretical notions derived from several domains and their interrelationships in a meaningful way. As such the construction of the ESI model is not a final step but *a first step* of an eclectic nature in an ongoing process of theory development.

Scheerens (1992) states that school effectiveness theory development so far can be characterised as a relatively simple summarisation of empirical relationships. In the field of ESI this statement holds too. We have to keep in mind that up till now there is no long tradition in the development of theories and models about effective school improvement. The model that we try to construct therefore cannot pretend to be more than a *summarisation and meaningful ordering of concepts and their interrelationships in the relatively new field of effective school improvement*. Further research and further theoretical developments will change our model in the long run, make it more refined and more empirically valid as well.

The state of the art in the field of ESI forces us to follow the *inductive approach* to model development, as opposed to the deductive approach (Scheerens & Bosker, 1997). We do not have a well-outlined ESI theory from which we can deduct the phenomena that we want to include in our model. Instead, we will take concepts from several theories and from the daily practice of school improvement efforts, and then build our model inductively out of these concepts. Models can be of a conceptual or a formal nature (Scheerens & Bosker, 1997). Conceptual models are characterised by the use of verbal descriptions, while formal models present mathematical equations. The ESI model that we will try to elaborate clearly is a *conceptual model*.

In school effectiveness research and in school improvement as well, case studies have always been in the forefront. This may easily lead to the impression that every school is unique in its attempts to change its situation in order to become more effective. When this line of reasoning would be followed consequently in the theoretical part of the ESI project, the construction of a model becomes impossible. The idea that every school is unique neglects the level of abstractness that models need for the explanation of phenomena that exceed the individual school and the individual case study. The same holds for the uniqueness of countries in the perspective of an internationally comparative project such as ESI. Educational systems, laws and regulations differ strongly from one

country to another. However, we assume that similarities can be described at a more abstract level from the observed differences.

The ESI model must therefore necessarily focus on *the common aspects* of ESI in schools in a variety of countries. Although the model certainly can generate ideas that may be useful for a unique school in a specific European country, it can never pretend to explain all the exact processes and outcomes in one singular school.

2.3 General principles for the construction of an ESI model

The preceding text made clear that the ESI model will not be build on just one theory . Instead, it tries to integrate concepts from several theories and from the analysis of case studies from all participating countries. To prevent the model from becoming merely a garbage can of ideas and concepts, we need some structuring principles. The following principles are proposed:

The basic structure of the comprehensive effectiveness model will be used as a starting point for the ESI model.

The ESI model will use the structure that also forms the basis of the comprehensive model of educational effectiveness (Creemers, 1994). By this we mean the overall multilevel structure with the three levels in addition to the student level: the context level, the school level, and the classroom/teacher level. Factors that are important for ESI will therefore be placed in one of these levels. For reasons of convenience we will not distinguish a separate *department* level in this text, although improvement in secondary education will often concern specific departments and in such efforts the department may be more important than the school. In that case, we suppose that the factors for the departments will be essentially the same as the factors for the school.

Overarching school improvement concepts will be defined at each level in the model.

The comprehensive effectiveness model shows three overarching concepts within each level (quality, time, and opportunity). All concepts are supposed to be related to student outcomes. Characteristics of effective contexts, schools and classrooms are grouped under the headings of the overarching concepts. The main benefit of this approach is that mere lists of all kinds of factors that might be related to student outcomes are ordered conceptually in a meaningful way.

The same procedure seems useful for the ESI model. Key overarching concepts will therefore be defined that are similar for all levels, but can be specified and filled in with specific factors for each level separately. Factors that turn out to be important for ESI will be headed under one of these key overarching concepts in one of the levels.

The *first step* will now be the selection of factors that are important for effective school improvement. The factors come from the theories that were mentioned above and the case studies analysis. Preferably, these factors:

- have shown empirical evidence in improvement settings. This criterion however will not be exclusively decisive because of the state of the art in ESI research.

- are alterable and observable. This means that more static and 'hidden' factors are not preferred, such as for example 'the personality of the teacher' or 'the latent curriculum of schools', although the potential role of such factors on effective school improvement is not denied.

The *second step* is then to regroup these factors under the heading of a restricted set of overarching key concepts at the context, school, or classroom/teacher level.

3. Scientific description of the project results and methodology

In this section, we will present the results from the various analyses we conducted in order to build the final ESI framework. First we discuss our findings from the analysis of theories (3.1) and the case studies analysis (3.2). Then we will focus on the educational effectiveness knowledge base to highlight the topic of intermediate outcomes, i.e. effective school and classroom/teacher characteristics (3.3) and give the first draft of our ESI model (3.4). This model was extensively reviewed and revised by testing it on existing datasets, discussing it in country conferences and by analysing all comments in the final workshop of the ESI project (3.5). At the end of this chapter we will present the comprehensive framework for effective school improvement (3.6), which is the revision of the draft model.

3.1 Contribution from theories to an ESI model

The ESI model will be built on useful concepts of school effectiveness and school improvement theories, curriculum theories, behavioural theories, theories of organisation and organisational learning, and theories of choice.

For the effectiveness input in the model, we will use recently developed models and other overviews of the school effectiveness knowledge base. School effectiveness theory is especially important in the perspective of the question as to which results effective school improvement processes should achieve. These results can be summarised as effective school and classroom/teacher characteristics as well as student outcomes in various domains. We will get back to school effectiveness theory later. The other theories are more specific where the processes that schools need in order to achieve the desired outcomes are concerned.

For our discussion of improvement theories we will use the ideas of Stoll and Wikeley that were offered during a first workshop of the ESI project in Groningen (published in Hoeben, 1998). For the other theories we will use the papers of the ESI partners that were presented in the Bilbao workshop of 1999 as our starting point (published in Reezigt, 2000).

We will describe the main concepts and factors that each theory, according to the ESI partners, has to offer in the field of effective school improvement. In these descriptions we do not pretend to cover the papers fully. Instead, we want to focus on the topics in the papers that are most closely related to our current goal: the search for factors for an ESI model. These factors will then be summarised.

3.1.1 School improvement theories

Stoll and Wikeley (in Hoeben, 1998) make clear that school improvement efforts over the years have become more focused on effectiveness issues, such as teaching and learning processes and student outcomes. Although school improvement may concern the school level or the teacher level (for example, school improvement can be directed at the school organisation or at classroom management), its main goal must essentially be stated in terms of student outcomes. It may not be so very important where changes are actually initiated (for example, at the level of the central government, or at the level of the

individual school). It seems more important whether a school is able to take charge of changes. A school must be ready for changes and show some signs of an ownership mentality.

For school improvement to be successful, the issue of school culture should not be neglected. When the school structure (which is often an object of school improvement) is changing while the school culture does not change, the danger of short-lived and superficial changes is real. For school improvement to occur, characteristics of the school culture must be favourable. Schools for example must have shared goals and feel responsible for success. Other requirements are collegiality, risk taking, mutual respect and support, openness and an attitude of lifelong learning.

A possible link between school effectiveness and school improvement may occur through the school development planning process. In the description of this process by Stoll and Wikeley, the concepts mentioned above (focus on effectiveness issues, readiness for change, ownership mentality and a favourable school culture) all have their own place. A new dimension is provided by the four-stage cycle of needs assessment, planning, implementation, and evaluation that underlies all change processes. Attention is drawn to the fact that someone must start this cycle and keep the school going as well during all the stages of the continuous cycle. In other words, someone must lead the improvement processes.

The following ideas from improvement theories seem to be important for the ESI model:

- Goals of improvement must be stated *in terms of student outcomes* (or intermediate outcomes at the school or classroom level that can clearly be related to student outcomes),
- Schools need to show a certain level of *readiness for change*,
- Schools must feel at least some *ownership* of the change processes,
- Schools need to have a *school culture that favours changes*,
- For improvement to succeed, schools must go through a *cycle of needs assessment, planning, implementation, and evaluation*,
- Schools need *leadership*, meaning that someone must be in charge of the change processes.

3.1.2 Curriculum theories

In the Bilbao workshop the Dutch, Italian and Portuguese ESI partners discussed curriculum theories.

The influence of curricula on student outcomes has abundantly been demonstrated by effectiveness research. Characteristics of effective curricula (such as a clear ordering of goals, advance organisers etc.) are therefore generally incorporated in effectiveness models. For the school improvement part of the ESI model, the concept of the implementation of curricula is important. Even when documented curricula that teachers use in their classrooms live up to all the criteria for effectiveness, their effects may be small when the implementation is not optimal (see De Jong in Reezigt, 2000). When teachers leave out too much subject matter or do not teach the full curriculum, and when teachers adapt the curriculum so strongly that the initial goals are changed, students cannot be expected to achieve the goals that the curriculum stands for. When teachers of the same school do not attune their curricula they may hinder student learning.

The concept of curriculum is not only important at the classroom and the school level. In some countries national curricula are provided to schools that prescribe what should be taught to whom. In these countries the contents of the curriculum are outlined and sometimes also the way in which they are supposed to be taught (see Postiglione & Melchiori in Reezigt, 2000). Here too however the effectiveness of such curricula will in the end strongly depend on their implementation by the teachers in classrooms and schools (see De Jong in Reezigt, 2000).

According to Hoeben (1998) the role of curriculum theories in the construction of an ESI model is not restricted to the concepts of effective characteristics and implementation. For curricula to be effective, they must be designed as well as implemented as feedback systems. When teachers implement curricula, they must be aware of the goals that they try to achieve and they must evaluate whether they do achieve these goals or not. When they do not, they should adapt the curriculum. This type of adaptation in the implementation phase is effective, because it helps the teacher to keep focusing on the goals that students are supposed to achieve.

Postiglione and Melchiori (in Reezigt, 2000) draw attention to ideas about the curriculum as the social regulation of power and knowledge. The curriculum of schools can be regarded as a way in which a society constitutes power patterns and class hierarchies. Often this role of the curriculum is latent. They also make clear that the curriculum can be seen as a theory about the building of people's life. As a consequence, the outcomes of schools can not only be found in final exams, for example. School effectiveness research therefore should not only deal with short-term outcomes, but it should also consider long-term outcomes such as professional careers and lifelong learning.

Lopes da Silva and Gois (in Reezigt, 2000) have analysed common perspectives that curriculum theories share with organisation theories. They do so because they feel that educational research that puts the school in the centre of attention has often wrongly neglected the field of curriculum and favoured the field of organisation theories. Two common aspects of curriculum and organisation theories are power relations and degree of openness. In analysing effective school improvement it may be important to look at the match between the organisation and the curriculum of schools. When a school changes its curriculum (for example, from a subject matter/discipline approach to a constructivist or child-centred approach), changes in the organisation of the school may be needed as well. The following ideas from curriculum theories seem to be important for the ESI model:

- The concept of the *implementation of essential elements* of curricula,
- Curriculum implementation as a feedback system: *goal setting and evaluation of goal achievement*,
- The *latent role* of the curriculum as a regulation of power and knowledge,
- The importance of the curriculum for *lifelong learning*,
- The *relations* between the curriculum and the organisation of the school: preferably there should be some form of cohesion between these.

3.1.3 Behavioural theories

In the Bilbao workshop the Italian and Belgian ESI partners discussed the importance of behavioural theories for effective school improvement.

In behavioural theories the chain of stimulus, response and external reinforcement has gradually been replaced by more complex theories such as the one developed by Vygotsky (Postiglione & Melchiori in Reezigt, 2000). These more recent theories focus, among others, on the importance of cultural means and self-reinforcement in human development. Behaviour, according to these theories, is not merely externally reinforced and conditioned, but constructed in a cultural and social setting. On the basis of ideas from these theories the culture of a school (rules, values and manners of behaviour) and the extent to which students identify with this culture seems to influence student achievement. For individual students, their previous school experience and their current experiences with teachers will be important for their commitment and their progress.

Three dimensions are essential: the structure of goals and rewards, the role and power relations and the system for communicating results and evaluations. These dimensions are essential in processes of student learning, but they may concern improvement processes in schools as well. The same holds for the concept of motivation, which is important for successful learning. Motivation can be enhanced by active learning procedures (actively building up knowledge instead of passive acquisition) and evaluation procedures that are internally guided. For improving schools this might imply that an active behaviour of teachers (and other staff) and the use of self-evaluation procedures may be essential.

According to Postiglione and Melchiori (in Reezigt, 2000), the concept of 'knowledge about knowledge' is the most important one for effective school improvement. By this they mean that schools, in addition to their professional knowledge of school subjects and organisational topics, must know and study the world of their students. Knowledge about knowledge concerns five fields of study for schools: thematisation of the hidden and latent aspects of education, reflections about learning, dialogic knowledge about students, dialogic school management, and a broadened approach to evaluation.

Demeuse, Schillings and Crahay (in Reezigt, 2000) have analysed traditional behavioural theories and find strong similarities with the production-oriented stages in the evolution of educational systems. Teachers function as knowledge distributors and methods of teaching and learning are uniform. The school organisation is bureaucratic and improvement is defined as a planned change in production means. The analysis does not include newer ideas about behaviour as presented by Postiglione and Melchiori. The feature that can be derived from their analysis however for effective school improvement is the emphasis on the teachers as the central actors in educational processes.

The following ideas from behavioural theories seem to be important for the ESI model:

- The *school culture* (rules, values, manners of behaviour) influences achievement,
- *Previous school experiences* and contacts with teachers influence achievement,
- Change processes in schools are influenced by the structure of *goals and rewards*, the *role and power relations* and the *system for communicating results and evaluations*,
- *Active behaviour* of teachers (and other staff) and the *use of self-evaluation procedures* are essential for improving schools,
- Essential for effective school improvement is the school's *knowledge about knowledge*,
- *Teachers are central* in educational processes.

3.1.4 Theories of organisation, organisational learning and the learning organisation

Most ESI partners have discussed the importance of theories of organisation (Spain, Portugal), organisational learning and the learning organisation (Belgium, Finland and Greece) for effective school improvement.

The Portuguese ESI partners (Lopes da Silva & Gois in Reezigt, 2000) have analysed the common perspectives that curriculum theories share with organisation theories. The organisation theories that they discuss are mainly the same as the theories that were presented by the Spanish team (see below). The main conclusion of the Portuguese analysis is the need for some degree of cohesion between the school's curriculum and organisation (for more information see 4.2).

The Belgian paper (see Demeuse et al. in Reezigt, 2000) defines learning organisations as innovation oriented because their aim is to increase capacities for change and adaptability. They refer to the ideas of Dalin to explain the learning organisation. According to Dalin, management of change is crucial in a learning organisation. Improvement processes are a continuous undertaking, a part of the everyday school life instead of an isolated, rather unusual event.

Very often schools have not yet reached the stage of a learning organisation. Dalin has made a typology of schools in the earlier stages. The first type is called the fragmented school, which means that there is no common understanding of needs and initiatives for change do not result from joint staff discussions. Changes in fragmented schools need a lot of external support. The second type is the project school. In these schools the innovative drive is coming from the management and the school leader. There is an innovation history in the school and development of common goals is still ongoing. The third type is the organic school and this is the type that strongly resembles a learning organisation. This school is open for internal and external change initiatives. It knows its own strengths and weaknesses and it is able to cope with and to learn from improvement processes. The organic school creates its own innovation history and experience.

In the paper from Nikkanen (in Reezigt, 2000) the best possible environment for school improvement is the school as a learning organisation. A learning organisation encourages learning of its members both individually and as groups; it takes its internal and external clients into consideration; it is aware of its core competencies; processes of formulating, implementing, evaluating and improving are ongoing; and it improves its capacity to create its own future. The process through which an organisation develops these features (this may happen in school improvement processes) is called organisational learning.

The Greek paper (Kontogiannopoulou -Polydorides et al. in Reezigt, 2000) summarises the ideas of Senge concerning learning organisations. These organisations allow members to expand their capacities, nurture new patterns of thinking and collective learning. Some characteristics are systems thinking (team members are aware of their interconnectedness), personal mastery (for the individual and the organisation), shared vision, team learning and mental models. The authors also describe the ideas of Dixon who defines organisational learning as the intentional use of learning processes at the individual, group and system level to continuously transform the organisation that is increasingly satisfying its stakeholders. In the cycle of learning, an organisation must take four steps: a widespread generation of information, integration of new information in the

organisational context, collective interpretation of the information, and authority to take action based on the interpreted meaning. According to the authors, the concept of a learning organisation is hardly applicable on schools in a centralised educational system such as the Greek system. Although individual learning of teachers may occur, organisational learning is not to be expected. The main conclusion for the ESI model seems to be that some degree of school autonomy is necessary for schools in order to be able to act as a learning organisation.

The Spanish ESI partners have summarised theories of organisation and they have tried to derive their main importance for effective school improvement. According to Muñoz - Repiso et al. (in Reezigt, 2000), both school effectiveness and school improvement theories have already undergone influences of organisational theories and have also influenced these theories in their turn. In school effectiveness theories, factors such as leadership, shared vision and goals, and collaboration and collegiality (among others) have been derived from organisational theories. In school improvement theories, examples of elements of organisational theories are, among others, concepts such as school autonomy, the learning organisation school climate and staff development.

The authors distinguish between several groups of organisational theories. The rational and structural theories state that organisations must have targets, units and structures in the organisation are interrelated and control and assessment procedures are needed for the organisation to function. The theories, especially the systemic ones, show that an organisation such as a school is a complex and dynamical system that may be more or less open to the environment. The human resources theories are sometimes seen as opposed to the rational and structural theories (that tend to neglect the human factor), but they can also be considered as a valuable addition to these. The human resources theories pay attention to the importance of motivation and satisfaction of school personnel, the need for shared targets and decision-making, and educational leadership. Symbolic theories of organisation have drawn attention to the interpretations that individuals in schools make of their organisation. The ideas about the influence of the school culture are mainly derived from this group of theories. The political approach to organisations focuses on the power relations and the distribution of power in schools as well as on conflictive interests that may bring changes about. Finally contingency theories stand alone in their conviction that each organisation needs its own model. These theories do not pretend to explain general processes and outcomes in more than one organisation but rely heavily on the importance of variability in environmental influences and specific organisational responses to these.

The organisational theories often seem to be incompatible at first sight in their ideas about how organisations such as schools function and produce. However, most of the theories deal with just some elements and specific functions of an organisation. Therefore an eclectic approach is useful because only then theories are allowed to show their complementary sides.

Elements of organisational theories that must be reflected in an ESI model are the following according to the Spanish team:

- Changing schools need *leadership*;
- They need a *shared vision and shared goals* that they want to achieve;
- Teachers must *collaborate*, be *committed to change* and *participate* in management and decision-making;

- Changes need clear *planning and evaluation* by the school: an analysis of internal and external pressures to change, a diagnosis of the school, clear priorities to some actions, suitable strategies and a problem-centred orientation, evaluation of the improvement processes;
- For changes to succeed, the school *culture and climate* must be favourable (social cohesion, collegiality);
- Schools must be willing to become a *learning organisation* (training and staff development, engage in a self-regulative cycle);
- There must be *external support* (of parents, counsellors, educational networks) and *resources*.

From the other ESI papers that were summarised earlier, we take the following elements for the ESI model:

- Improvement processes essentially should be *part of everyday life* in the school instead of isolated events;
- Earlier experiences and the *innovation history* of the school influence improvement processes;
- The best setting for improvement processes is a *learning organisation*. A learning organisation encourages learning of its members both individually and as groups; it takes its internal and external clients into consideration; it is aware of its core competencies; processes of formulating, implementing, evaluating and improving are ongoing; and it improves its capacity to create its own future;
- Schools need at least some *autonomy* in order to become learning organisations.

3.1.5 Theories of choice

Theories of choice and their importance for effective school improvement were discussed by the Dutch and Belgian ESI partners.

Public choice theory focuses on external conditions that may reduce the ineffectiveness and inefficient functioning of public sector institutions such as schools (Scheerens in Reezigt, 2000). When market mechanisms are introduced (for example the freedom of parents to choose a school for their children, the freedom of schools to hire their own personnel) the competition between schools will promote their effectiveness and efficiency. Schools will try harder to do the best they can. For school improvement to occur, public choice theory does not point at mechanisms inside schools in the first place but at conditions outside of schools.

A major problem in the consequences of public choice theory is that choices, for example choices of parents, will not always automatically be based on the quality in terms of the educational performance of schools. Schools may then be rewarded for characteristics that have nothing to do with their core task of educating students (Demeuse et al. in Reezigt, 2000). Evaluation and control mechanisms are needed to overcome this problem and to keep schools focused on their core task. In some countries where the autonomy of schools has grown recently these mechanisms have been established in the form of yearly publications about the outcomes of schools.

Theories of choice in general presuppose positive effects of the introduction of market mechanisms in the educational system. Still, these mechanisms may also have negative consequences, especially from the perspective of public service and equity. For example,

when schools are allowed to become more selective the accessibility of the educational system may be endangered for some groups of students and inclusive policies may be sabotaged.

The following ideas from theories of choice seem to be important for the ESI model:

- *Market mechanisms* outside the school such as parental freedom of choice and community involvement may stimulate school improvement,
- Schools need some *autonomy* to be able to react adequately on external demands,
- A system of *evaluation and control* is needed to guard the educational quality of schools.

3.1.6 Summarisation of the factors derived from theories

We have seen that most theories that we discussed have some factors to offer that may be included in an ESI model. These factors are summarised in Table 1. For reasons of clarity we have structured the factors within the levels that they represent (context, school, classroom), in accordance with the principles mentioned earlier.

We stated that factors for the ESI model preferably must show some empirical evidence in improvement settings and they must be alterable and observable. Unfortunately, the empirical evidence of factors is generally still rather unclear. Therefore we cannot use this criterion very strictly. The other criterion of alterability and observability is easier to use. Most factors live up to this criterion.

There are however four problematic factors at the school level. These are depicted in Table 1 by means of an asterisk. The factors 'latent role of the curriculum' and 'knowledge about knowledge' do not really meet the criterion of alterability and observability. The factors 'importance of the curriculum for lifelong learning' and 'cohesion between curriculum and school organisation' are in fact more in line with effectiveness characteristics of curricula than with improvement factors. For these reasons we will leave these factors out of the ESI model.

Table 1 **ESI factors and theories they were derived from** (A: school improvement, B: curriculum, C: behavioural, D: organisation, E: public choice)

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
<i>Context level factors</i>					
Market mechanisms (parental choice, community involvement)					+
External support (parents, counsellors, networks) and resources				+	
External evaluation and control					+
<i>School level factors</i>					
School culture (that favours change)	+		+	+	
School autonomy				+	+
Previous school improvement experience			+	+	
Leadership	+			+	
Cycle of needs assessment, planning, implementation, evaluation (analysis of pressure, diagnosis, priorities, suitable strategies, problem-centred orientation, evaluation)	+			+	
Shared vision and shared goals				+	
School readiness for change	+				
Improvement goals in terms of student outcomes (or intermediate outcomes in terms of effective school or classroom characteristics)	+				
Willingness to become a learning organisation (self-regulation)				+	
Staff development				+	
Improvement as a part of everyday life				+	
Teachers are central in improvement efforts			+		
School ownership of change processes	+				
Structure of goals and rewards			+		
Role and power relations			+		
System for communicating results and evaluations			+		
Goal setting and evaluation of goal achievement		+			
Self-evaluation procedures			+		
* Latent role of the curriculum		+			
* Importance of the curriculum for lifelong learning		+			
* Cohesion between curriculum and school organisation		+			
* Knowledge about knowledge			+		
<i>Classroom/Teacher level factors</i>					
Teacher collaboration				+	
Teacher commitment to change				+	
Teacher participation in management and decision making				+	
Implementation of essential elements of curricula/innovations		+			

Five school level factors were mentioned in more than one theoretical field (previous school improvement experience, school autonomy, school culture, leadership, and the cycle of needs assessment, planning, implementation, and evaluation). Some school level factors are overlapping. For reasons of clarity, we suggest a regrouping of these school level factors. After that, six main factors are left. The list of factors that remains after this procedure is in Table 2.

Table 2 Regrouped ESI factors (derived from theories)

<p><i>Context</i></p> <ul style="list-style-type: none">- Market mechanisms (parental choice, community involvement)- External support (parents, counsellors, networks)/resources- External evaluation/control <p><i>School</i></p> <ul style="list-style-type: none">- Previous school improvement/readiness for change- School autonomy- School ownership of change processes- Leadership- School culture that favours change:<ul style="list-style-type: none">• Shared vision and shared goals,• Willingness to become a learning organisation (staff development, self-regulation),• Improvement as a part of everyday life.- Cyclical improvement process of:<ul style="list-style-type: none">• Assessment (analysis of internal and external pressures to change, diagnosis of the school),• Goal setting for improvement (goals in terms of student outcomes or intermediate outcomes in terms of effective school or classroom characteristics),• Planning of improvement processes (giving priorities to some activities above others, choosing suitable strategies, problem-centred orientation, decisions about a structure of goals and rewards, definition of role and power relations, system for communicating results and evaluations),• Implementation of improvement (in which teachers are central),• Evaluation of goal achievement. <p><i>Classroom/Teacher</i></p> <ul style="list-style-type: none">- Collaboration- Commitment to change- Participation (management, decision making)- Implementation
--

3.2 Contribution from the case studies analysis to an ESI model

The comparative case studies analysis in the ESI project is based on several case studies of improvement programmes per participating country. All ESI partners provided a number of programme descriptions (varying from two to ten different descriptions) on the basis of an evaluation framework developed in the ESI project. The similarities and differences between these programmes were then analysed by means of a rating instrument. The ESI partners decided per country which programmes were to be included in the analysis.

The analysis was undertaken in the first place to find the factors that promote or hinder effective school improvement in each specific country. The programme descriptions were used for this aim. Information about the educational systems per country was provided to put the findings from the programme descriptions in a wider perspective. In the second place the analysis should make clear whether these factors work in the same way in

different countries. Some of the findings in the analysis are important for the construction of an ESI model, especially because they may point at other factors than the ones derived from theoretical domains or because they make clear how exactly some factors work in practice.

A selection of case study findings will be highlighted from the perspective of the construction of an ESI model. These findings refer to the types of improvement programmes that were studied, the types of improvement outcomes that were found, the importance of the educational context in different European countries, and finally the factors that supposedly promote or hinder effective school improvement.

3.2.1 Types of improvement programmes

The case studies have shown that there are predominantly three types of improvement programmes. These are mainly characterised by the initiator of improvement efforts (in the school or outside) and the perceived need for improvement (felt by the school or defined by others).

- *Bottom-up programmes: improvement programmes that are fully initiated and executed by the school*. This does not mean that support or help from external agents cannot occur, but the school is clearly in charge. There may be an external impetus as well (such as the obligation to live up to certain standards), but the focus of the improvement, the goals of improvement, and the actual form improvement activities take are solely decided upon by the school.
- *Top-down: improvement programmes that are forced upon the school*. Agents outside the school (policy makers, innovators, and researchers) develop the programme and try to implement it in the school, without a clearly stated need or wish of the school to do so. The improvement approach is clearly top-down. Many improvement initiatives that are based on changes in educational laws are of this type.
- *Mixed: improvement programmes that are initially developed by external agents and subsequently voluntarily implemented in schools*. In this case, schools may be able to choose between various improvement initiatives but in theory they are also free to decide not to participate in a programme. The improvement approach is mixed, because the improvement activities take their actual form as a collaboration of the school and others outside the school.

There is no linear relation between the type of improvement and the educational system in a country. It would be far too simplistic to say that relatively decentralised countries will show bottom-up improvement, while relatively centralised countries will only show top-down improvement. In addition, countries that are transgressing from a centralised system to more decentralisation do not automatically show mixed approaches of school improvement. In theory, all types can occur in all countries, although of course the bottom-up approach will be found sooner in countries where schools have some freedom to make their own decisions. On the other hand, freedom of schools does not guarantee effective bottom-up improvement at all.

The type of improvement that a school is involved in has consequences for the occurrence and the influence of some factors that were mentioned earlier. Factors such as readiness for change and school ownership of improvement are more obvious in bottom-up approaches. Still these same factors are essential for top-down and mixed approaches

to improvement too, because they may explain the success or failure of these improvement efforts as well. Therefore the same factors may be used to describe different improvement situations.

The types of improvement that we described therefore do not lead to totally different sets of factors that may explain effective school improvement, but the role that these factors play in a specific situation may vary however. It is important to keep this situatedness of improvement efforts in mind in interpreting the influence of the factors that will be included in the ESI model.

3.2.2 Types of improvement outcomes

To evaluate effective school improvement, an effectiveness criterion must be applied as well as an improvement criterion. The effectiveness criterion refers to changes in the student outcomes in a broad domain of knowledge and skills as a result of improvement. The improvement criterion refers to changes in the school or classroom conditions that are necessary for effectiveness. These changes can be considered as 'intermediate outcomes' of improvement, while changes in student outcomes can be seen as 'ultimate outcomes' of improvement. For school improvement efforts to be defined as effective, ideally both criteria should be met and both types of outcomes should be visible.

The case studies show that in practice it is often very hard to find out whether both criteria are met and whether both types of outcomes are achieved in the programmes that were studied. Sometimes only information about the intermediate outcomes (such as better co-operation between teachers, and the implementation of a higher quality curriculum or syllabus) is available. In this situation the effects on student outcomes remain unknown. Sometimes there are signs that planned changes in student outcomes did occur, while clear information about the actual improvement processes and the implementation of innovative behaviours in schools and classrooms is lacking. In this case, the effects on student outcomes are clear but we cannot explain what exactly brought them about.

Although improvement programmes do not always give full information about the effectiveness and improvement criteria, the ESI model should still include both criteria in the form of intermediate outcomes at the school and classroom levels as well as the 'ultimate' outcomes at the student level.

3.2.3 The importance of the educational context in European countries

A recurring issue in the discussions in the ESI project is the importance of the national educational context and its influence on school improvement. The crucial aspect of the context in the light of improvement seems to be the autonomy of schools (granted and actually used) to decide about their own situation, including improvement plans and activities. The centralisation issue is very complicated, because centralisation can pertain to a wide variety of topics. As yet, it is not evident which topics are essential for effective school improvement.

Schools in relatively decentralised countries have become increasingly autonomous in decisions about how they want to teach, the materials and textbooks they want to use, and how they want to spend their budget. In return, the central government, school boards or

local educational authorities hold schools increasingly accountable for the student outcomes. In these decentralised countries, schools are expected to pursue centrally determined goals in which knowledge and skills that all or at least most students need to achieve. School inspectors are visiting schools on a regular basis and use standardised instruments to measure educational quality.

Schools therefore are not autonomous in their choice of the outcomes they want to achieve, because they have to deal with nationally defined goals. Still, they are relatively autonomous in their decisions about the processes to achieve these goals. In other countries such as Belgium schools are quite autonomous in the processes while they are not held accountable for outcomes either. According to the Belgian ESI partners, this situation may strongly impede improvement efforts in schools. In Greece, which is very centralised in many aspects of education (such as the centrally developed textbooks that are available for school subjects), schools are not held accountable either and the inspectorate does not exist any longer. In the Netherlands, schools are not free to hire and fire their personnel but other decentralised countries have shown devolution of these competencies and some semi-centralised countries too give schools autonomy to decide about the acquisition of personnel.

This short description makes clear that the centralisation-decentralisation dimension needs to be specified for a set of domains in which schools may or may not have obtained autonomy, which pertains to the possibility to decide for themselves. In the literature about 'functional decentralisation' several domains are discerned which all seem to bear relevance for effective school improvement:

- Educational goals (what to teach),
- Educational means (how to teach),
- Organisation, including management and administration,
- Finances.

What we can learn from the case studies findings from the perspective of the construction of an ESI model is that factors such as 'autonomy' or 'freedom of schools' or 'centralisation' are not formulated specific enough. It must be clear in the model that centralisation and autonomy issues always point at specific domains in which schools can be more or less free to decide.

3.2.4 Factors that promote or hinder effective school improvement according to the case studies analysis

The case studies analysis has resulted in an overview of 'lessons learnt' in all countries. The ESI team in each country described factors that supposedly promote or hinder effective school improvement. The main findings are summarised in Table 3 at the three levels (context, school, and classroom/teacher) that also are present in Tables 1 and 2. Sometimes the absence of a certain factor is seen as hindering for ESI, for example, a school principal who does not act as an educational leader (in the Netherlands). In this case, 'leadership' is depicted in Table 3 as an ESI promoting factor. The factors are ordered according to the number of countries that have mentioned them as influential for ESI.

Table 3 shows that the factors derived from theories and the factors derived from the case studies analysis show considerable overlap. The effects that factors are supposed to exert

are also in accordance with the theoretical expectancies, with the exception of market mechanisms. The new factors that were mentioned most often refer to practical constraints that may promote or hinder ESI efforts. All factors live up to the criteria of observability and alterability mentioned earlier. The empirical evidence, another criterion for inclusion in the ESI model, is not always convincing in an objective sense. However, we could not strictly apply this criterion to the theoretical factors either.

Factors that promote ESI according to one country are generally seen as promoting as well in other countries. External pressure, external evaluation, leadership, and teacher motivation are clear examples. Staff instability is consistently regarded across countries as a factor that hinders ESI. There are only three factors that do not lead to similar judgements across all countries. These are the role of external agents (seen as important in most countries, but not in Spain), the role of parents and the community in improvement efforts (seen as important in two countries, but not in Spain) and the complexity of the improvement effort. While Spain found that a comprehensive innovation seems more successful, the Dutch opinion is that smaller improvement programmes with a clear focus in one or two domains of education will more likely lead to success.

The case studies analysis has made clear that there are more factors than the theoretical ones that are important for ESI. These factors must be integrated in the ESI model as well.

Table 3 **ESI factors for effective school improvement from the case studies analysis**
 (+ means positive influence on ESI, - means negative influence on ESI, 0 means no influence on ESI; T means the importance of the factor was also found in the theoretical part of ESI, see also Table 2)
 (N: the Netherlands, F: Finland, B: Belgium, UK: United Kingdom, S: Spain, P: Portugal, I: Italy, G: Greece)

	<i>T</i>		<i>N</i>	<i>F</i>	<i>B</i>	<i>U K</i>	<i>S</i>	<i>P</i>	<i>I</i>	<i>G</i>
Context level factors										
External agents involved in improvement programmes	<i>Yes</i>		+		+	+	0	+	+	+
External pressure to start improvement			+		+	+	+	+	+	
External evaluation of schools	<i>Yes</i>		+		+	+			+	+
Market mechanisms	<i>Yes</i>				-	-				
Decentralisation of decisions (content, teaching practice)										+
School level factors										
Positive attitude towards change	<i>Yes</i>		+	+	+	+	+		+	
School culture, shared values, vision on education, mission	<i>Yes</i>		+	+	+	+	+			
School organisation that facilitates improvement (time etc.)						+	+	+	+	+
Leadership of the principal (or other staff members)	<i>Yes</i>		+	+		+	+			
Staff instability			-				-	-		-
Internal evaluation (assessment of students and teachers)	<i>Yes</i>		+	+		+				+
Goal setting (student outcomes and/or intermediate goals)	<i>Yes</i>		+	+		+				
Parental/community involvement in improvement programmes							0	+	+	
Adequate planning of the improvement process	<i>Yes</i>			+			+			
Improvement embedded in overall school development			+			+				
Getting ready for change/tackle visible issues first						+	+			
Complexity/comprehensiveness of the improvement programme			-				+			
Self-regulative improvement cycle	<i>Yes</i>						+			
Student participation in improvement efforts									+	
Classroom/Teacher level factors										
Teacher motivation and involvement/participation in processes and decisions	<i>Yes</i>			+	+	+	+		+	+
Teacher collaboration (in school, across schools)	<i>Yes</i>			+		+		+	+	
Feedback on teacher behaviour			+	+						
Teacher training/staff development						+	+			
Implementation of essential elements of curricula/innovations	<i>Yes</i>					+		+		

3.3 Intermediate outcomes: effective school and classroom/teacher characteristics

Student outcomes can be considered the main effectiveness criterion for effective school improvement, while changes in the school or classroom characteristics form the improvement criterion. For example, when students are not achieving optimally for a certain school subject, changes in the curriculum or in the classroom management may be necessary. When teachers cannot manage to offer students the curriculum that they are supposed to, because of lack of time, changes in the school organisation may be necessary.

In general, intermediate outcomes should always be related to student outcomes. When changes in school and classroom/teacher characteristics are undertaken, it should be clear how these are expected to enhance student outcomes. The school effectiveness knowledge base makes clear which characteristics are essential in this respect. Because most overviews revert to roughly the same set of (inter)national studies, the characteristics mentioned by different authors show substantial overlap. We will restrict ourselves to the main characteristics derived from these overviews.

Effective school characteristics

At the school level, the following effective characteristics are essential for student outcomes in a broad domain:

- Achievement orientation and high expectations,
- Professional leadership,
- Consensus and cohesion among staff,
- Shared vision and goals,
- Curriculum quality,
- Opportunity to learn (for students *and* teachers),
- School climate: orderly atmosphere,
- School climate: effectiveness orientation and good internal relationships,
- Evaluative potential,
- Parental involvement/home-school partnership.

Effective classroom/teacher characteristics

At the classroom/teacher level, the following effective characteristics are essential for student outcomes in a broad domain:

- High expectations of students,
- Purposeful teaching,
- Classroom climate,
- Learning environment,
- Effective learning time/concentrating on teaching and learning,
- Structured instruction,
- Independent learning,
- Differentiation and grouping procedures,
- Monitoring progress,

- Positive reinforcement and feedback.

3.4 Draft version of an ESI model

As was described earlier, the procedure for the construction of a model is the following:

- As a first step, factors from theories and case studies that are important for ESI are selected. Preferably, these factors show empirical evidence and are observable and alterable.
- As a second step, the factors are meaningfully regrouped under the heading of a restricted set of key concepts at the context, school, and classroom/teacher level.

The sets of factors in Tables 1, 2 and 3 are the results of the first step. Now we will try to take the second step.

Most improvement factors that we found are located at the school level. The theories and case studies we studied are dealing with school improvement efforts that focus at this level for changes in the educational processes and outcomes. Although the importance of teachers and their work in classrooms is certainly acknowledged, teachers are not considered the main lever of change for effective school improvement. Even when teachers succeed in achieving major changes in their classrooms with strong effects on student outcomes, this is not an example of effective school improvement as we defined the concept.

Although isolated teacher efforts can surely enhance student learning outcomes (the effectiveness criterion of ESI), they cannot really be expected to have a lasting impact on the school as an organisation (the improvement criterion of ESI). As a consequence, the most important level in the model is the school level and most concepts that constitute ESI are at this level. For convenience we will not distinguish a separate *department* level in this text, although improvement efforts in secondary education will often concern specific departments. In that case, we suppose that the factors for the departments will essentially be the same as the factors for the school.

However, this conclusion may yield conceptual problems for countries in which the school organisation is not strongly developed. The school level factors in the model may not adequately describe the actual situation in schools in a centralised country as Greece, but also in a more decentralised country such as Belgium that does not actively stimulate schools to improve. It may be that some of the concepts that we describe at the school level in the model are in fact taking place at another level, for example, when the national government takes the initiative for improvement or when teachers decide that improvement is needed in their classrooms. Still, in these situations too the schools will ultimately have to be the essential centres of effective school improvement, even when the initiative for changes comes from the outside or is absent. When the school as an organisation does not actively engage in improvement efforts at least to some extent, improvement effects will be marginal and probably not lasting (in the case of enthusiastic or isolated teachers) or effects will not be found at all.

3.4.1 Key concepts

We suggest the following ESI key concepts under which the factors that we found may be grouped:

- Pressure to improve,
- Goal setting for improvement,
- Autonomy granted to schools/used by schools and teachers to decide about improvement,
- Culture that favours improvement,
- Readiness for improvement,
- Cyclical improvement processes.

We will first discuss the meaning of these concepts from the perspective of the school/department level. After that we will look at the implications of these concepts for the context level and the teacher/classroom level.

Key concepts at the school/department level

Pressure to improve. Theoretically, schools define their own improvement needs, design their improvement efforts and evaluate after some time whether their needs have been met. Theories about the school as a learning organisation often depict this kind of improvement (i.e. learning) processes. In this case, schools feel an *internal pressure* to improve.

In practice, we have seen that schools often need some form of *external pressure* to start improving. This external pressure may stem from various sources:

- *Market mechanisms* (for example freedom of choice of schools for parents and students, involvement of the community in what happens in schools) that promote competition between schools. Competition is likely to intensify the need to make a good impression on the general public outside the school and, as a consequence, the need for school improvement. Although market mechanisms do not automatically lead to a better quality of school and negative consequences may occur, they can certainly offer an impetus for change.
- *External evaluation* of the outcomes of the school. When schools are held accountable for their results in terms of student outcomes, and when these outcomes are made public, schools are more or less 'forced' to start improvement efforts. When a school can formally expect sanctions for failure, improvement will actually be forced upon the school by a higher authority to prevent further problems (such as the closing down of a school).
- *External agents.* Schools may be pushed towards improvement by suggestions from external agents such as educational consultants, inspectors, policy makers or scientists, who introduce new ideas and theories about education. For example, in recent years a lot of improvement efforts have come about in many countries that reflect ideas about school effectiveness. The same holds for theories about constructivist learning. Sometimes these ideas have been integrated in educational laws or standards that schools are supposed to meet. Schools, confronted with new ideas about education or new laws, need to improve to keep in touch with these developments.

Goal setting for improvement. Improvement efforts of schools ideally are focused on a clear set of goals that should be achieved in a certain period of time. When goals are vague or unclear for the school staff, improvement efforts are bound to fail. The goals for

effective school improvement are preferably derived from the educational effectiveness knowledge base. This means that schools that want to improve pursue:

- Goals that are directly phrased in terms of *student outcomes*. These student outcomes can reflect a wide range of knowledge, skills and attitudes and are not necessarily narrowed down to cognitive achievement only.
- Goals that are phrased in terms of *intermediate outcomes* at the school or classroom/teacher level. This type of improvement goals concerns for example changes in the school organisation, teacher behaviour, or the materials used by students. In this type, student outcomes are the ultimate goal but the improvement efforts are focused on effective school and classroom/teacher characteristics that will enhance outcomes. Generally speaking, these characteristics promote time for learning, opportunity to learn, or the quality of educational processes in schools and classrooms.

Autonomy used by schools to decide about improvement. The school improvement literature shows that in general at least some autonomy of schools is favourable for the success of improvement efforts. An improvement project developed outside the school, which is merely forced upon the school, is likely to fail. This is especially so when the project is not tailored to fit the school's needs, in consultation with the school. Even when some implementation occurs, which is already rather questionable in this context, consolidation of improvement in the long run is not very likely.

We have seen that autonomy of schools can have to do with several domains: educational goals (what to teach), educational means (how to teach), organisation (including hiring and firing personnel, management and administration), and finances. There is some evidence that full autonomy in all these domains does not necessarily promote improvement. The same statement however also holds for absence of autonomy in all domains. Effective school improvement will always have to concern the core business of schools, by which we mean student outcomes or intermediate outcomes. The core business is chiefly represented by the domains of educational means and organisation. The domains of educational goals and finances generally will involve actors above the school level, such as a school board, district officials or the national government. As a consequence, some autonomy of schools in the domains of *educational means* and *the school organisation* seems most essential for school improvement.

Culture that favours improvement. Schools with a favourable culture for improvement will easier start and continue improvement efforts than schools who avoid changes. A major factor that constitutes such a culture is a *shared vision on education in the school* that clarifies which goals the school tries to achieve and in what way they try to do so (the mission of the school), and which values are promoted or disputed. Without a clearly stated vision, schools cannot explain to others what they stand for. Also, they cannot track down which elements in the school are not in accordance with their vision and need to be changed or improved.

Another factor of the school culture that favours improvement is *the willingness to become (or stay) a learning organisation*. Schools who sees themselves and their educational procedures as merely static and who are not willing to reflect on their

situation are not likely to start improving. In these schools, activities such as training and coaching of staff will be rare. Schools who have a more dynamic view about themselves and who accept changes as a regular part of life show more characteristics of a learning organisation and will feel the need to improve more quickly. Training and coaching will be regarded as standard activities for the school staff.

A related factor is the view on improvement. 'Static' schools will perceive improvement, as far as they will get engaged in improvement efforts at all, as an occasional task. Whenever some problem arises, something must be done to solve that problem. After that, business goes on as usual. More 'dynamic' schools will consider *improvement as an ongoing process* and as a part of everyday life. Improvement efforts are continuous and embedded in a wider process of overall school development.

Readiness for improvement. Improvement will be very hard when the school is not sufficiently ready to actually start and continue improving. Readiness refers to a general feeling in the school that improvement is needed and must be undertaken as well as to the presence of essential conditions in the school.

An important factor that influences readiness is the *improvement history* of the school. Schools that have succeeded in bringing improvement about will easier start new efforts. Another factor is the feeling of *ownership* of school improvement, which will be more common in schools that are able to influence or fully define the focus and the type of improvement that they will engage in.

A condition that constitutes the readiness to improve is *clarity about the leadership* of improvement efforts. Without leadership improvement efforts are bound to degenerate. Often the school principal is seen as the most appropriate person to be in charge, but this depends to some extent on his or her professional role. Sometimes the school culture does not allow for a strong leader who clearly guides the other staff members. This may happen for example in countries such as the Netherlands, where the relations between principal and teachers are based on equality instead of functional hierarchical differences and teachers will not easily accept authoritarian behaviour of the principal. It is important however that someone (or a group of people) is qualified to take the lead in improvement efforts of schools and subsequently is acknowledged as the leader.

There are two more major conditions in the school organisation that constitute readiness to improve. First, some *stability in the staff* should be guaranteed. It is not only inefficient but also often rather useless to start improving when the continuity of the improvement efforts are at stake because of staff turnover. Second, the school organisation should grant all staff members involved in improvement some additional *time for their improvement activities*, for example for consultations with colleagues or trainers. Improvement should be considered a professional task that cannot depend on the goodwill and spare time of the school staff.

Cyclical improvement processes. Although improvement processes will rarely wind neatly from one stage to the next in the daily practice of schools, there are several stages to be discerned that must be gone through for a good course of events. These stages may sometimes overlap to some extent or return repeatedly before the full cycle of improvement is at its end. Planning for example will often not be a one time activity that takes place relatively early in the improvement process, but instead planning activities

and adaptations of earlier plans may be needed on a continuous basis. This is especially so for complex improvement efforts that involve many staff members and cover more than one school year.

The cycle of improvement processes starts with a phase of *needs assessment*. Before a school can start improving, it must be clear why improvement is required in the first place and what the starting situation of the school is. Such an assessment can be made by representatives of the school (self-diagnosis, self-assessment) or by others, in the form of an audit. The assessment phase ends when a diagnosis of the problems of the school that need to be solved is delivered. Sometimes the improvement processes are merely mandated by the educational context, for example by educational laws. However, then too needs assessment in the school is needed in order to fit the general requirements sufficiently to the particular needs of the school.

The next phase concerns the *phrasing of detailed goals* that the school wants to achieve in the improvement process. General goals (for example, higher achievement of students, a better attitude of students, and the introduction of information technology in the school) must be specified into more detailed goals and subsequent activities that are linked to these detailed goals. These can function as support for the persons involved in the improvement efforts. The goals must be phrased in terms of student outcomes or as intermediate goals that refer to effective school or classroom/teacher characteristics.

The following phase concerns the *planning of the actual improvement activities*. In this phase, commitments must be made about the time needed for activities. Also, the person(s) in charge of the planning have to face:

- decisions about priorities and the order of activities (tackling visible issues first, especially when the improvement undertaken is very complex),
- strategies that will be applied (such as inservice training facilities for teachers, professional courses outside the school, or coaching by staff members),
- the (possible) contacts with external agents and the tasks of these agents in the school,
- the (possible) appointment of internal agents and their tasks in the school,
- the division of tasks among other persons in the school,
- the use of incentives (will there be specific rewards for persons involved in the improvement efforts),
- the role and authority of persons involved in the improvement efforts, so that there will be no misunderstanding about these roles and the power relations in the school,
- the role and influence of students, parents and the community in the improvement efforts,
- the way in which results of the improvement efforts will be communicated to everyone involved during and after the improvement process.

The *implementation* phase follows directly after the planning phase and may also influence the further planning of activities, when developments take another turn than was initially expected. The precise focus of implementation depends on the goals that the school wants to achieve in the improvement process. Generally speaking, the implementation phase is the most substantial phase in the cycle of improvement. When implementation does not occur, all preceding efforts have been in vain and the pursued goals will not be achieved. Also, the implementation phase will generally involve more persons in the school in improvement activities than the other phases do.

The final phase of the cyclical improvement process, that may form the input for a new cycle of improvement, is the *evaluation* phase. In this phase, the school assesses by means of self-evaluating procedures whether the goals of improvement have been achieved sufficiently. These procedures can also be performed by external agents, if this was defined in an earlier stage as one of their tasks.

In effective school improvement, the cyclical improvement processes will be co-ordinated at the level of the school (or the department). In actual educational practice phases may sometimes be mainly executed at the context level (for example, when the national government sets goals and schools are obliged to follow) or the teacher level (for example, when the school level is not strongly developed and improvement is left to the initiative of teachers). In principle however we assume that effective school improvement needs co-ordination at the school level in all phases of the cyclical processes.

Key concepts at the context level

Some concepts described above for the school level are in fact situated (at least partly) at the context level and refer to processes or actions of agencies above the school level such as the school board, the district, or the national government. These concepts are:

- *Pressure to improve*. As far as the pressure to improve is external and originates somewhere outside the school, the factors under this concept are at the context level. This holds for the external pressure caused by market mechanisms, the external evaluation of schools, and external agents.
- *Goal setting for improvement*. Not only schools can set goals for improvement, but agencies in the context of the school do so as well. Governments have often specified in some detail which knowledge, skills and attitudes students are supposed to learn in schools (student outcomes). School boards, inspectors or district representatives may also interfere with the characteristics of schools and classrooms (intermediate goals).
- *Autonomy granted to schools to decide about improvement*. This type of autonomy for schools (especially in the domains of educational means and the school organisation) must always formally be granted by agencies in the context of the school (school board, national government). For the context level, this means that decentralisation of authoritative powers must take place in the specified domains.

The remaining key concepts (culture that favours improvement, readiness for improvement, and cyclical improvement processes) are not specifically related to the context level.

Key concepts at the classroom/teacher level

Earlier we have stated that the school is the central unit for effective school improvement. However, several key concepts that were outlined for the school need also to be 'translated' to the classroom/teacher level. These are:

- *Autonomy used by teachers to decide about improvement*. Earlier it was shown that some autonomy is needed for the success of schools in their improvement efforts. The same holds for teachers who are involved in school improvement. When improvement activities are merely forced upon them by the school staff,

implementation may not occur or just rudimentarily. Therefore, it is essential that teachers can participate in decision making processes with regard to school improvement.

- *Culture that favours improvement* . For schools, it is important that they are willing to become or stay a learning organisation. In the same sense it is important for teachers who are involved in improvement that they are willing to perceive themselves as learners. This implies that they are willing to participate in training, coaching, and collaboration with other teachers whenever improvement efforts call for these forms of schooling.
- *Readiness for improvement* . Improvement is more likely to succeed when schools have a sense of ownership. This is also true for teachers who are expected to participate in improvement. Therefore, teachers must show at least some motivation and commitment to the improvement plans of the school. When commitment is not automatically present, the school should try to develop it after all before the improvement process goes on.
- *Cyclical improvement processes* . Teachers are central in the implementation phase of most improvement processes. When they do not implement the essential elements of the improvement plans, effects are not to be expected. For successful implementation, regular feedback is necessary.

The remaining key concepts (pressure to improve and goal setting for improvement) are not specifically related to the classroom/teacher level. This is not to say that teachers may not need pressure to improve or may not be participating in goal setting. Still, we think that the main external pressure (whenever needed) should be exerted on the school. Also, goal setting must be co-ordinated by the school. The potential activities that schools may perform to get teachers started and to have them define, adapt or refine goals are headed under the key concepts of readiness and autonomy (see above).

3.4.2 A model for effective school improvement

The key concepts and the factors that belong to the key concepts can now be summarised in the form of an ESI model. We have defined the structure of the model (three levels: context, school, and classroom/teacher), we have outlined the key concepts and the factors at each level, and we have specified the outcomes of effective school improvement (intermediate outcomes at the school and classroom/teacher level versus student outcomes).

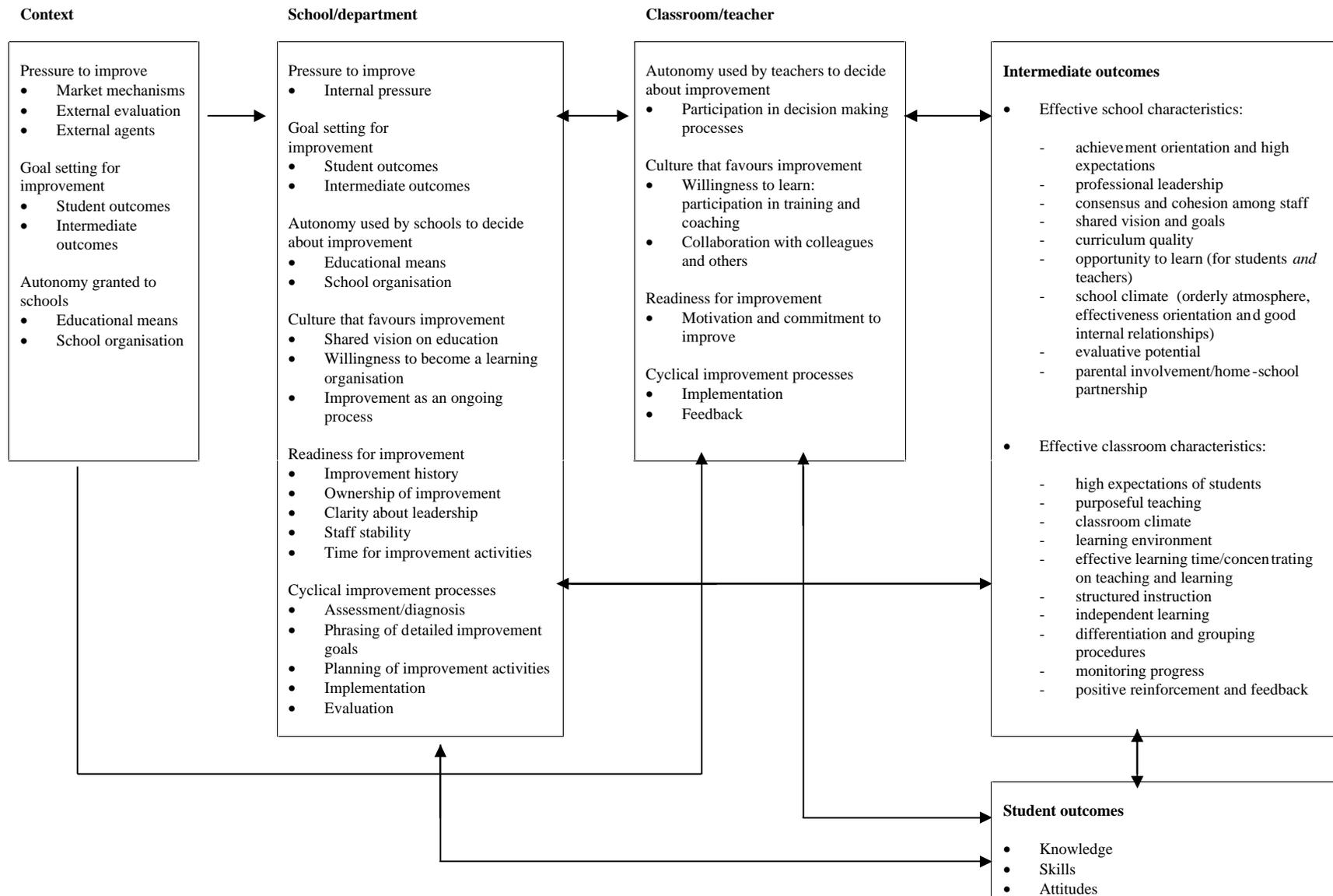
The problem however is how the relationships between the key concepts at the several levels and across the levels must be pictured. The same holds for the factors. The literature and the case study analysis both are not really conclusive about the relationships between factors that matter in effective school improvement. Therefore, we will not suggest this kind of relationships in detail at this stage of development in the theory and research of effective school improvement. Still, some general principles that are helpful for the building of the model seem rather obvious:

- The context level will directly influence the school level and the classroom/teacher level, while the opposite is not so. The classroom/teacher level may be influenced

directly by the context level, especially in countries where the school level does not play a very important role, but also indirectly (mediated by the school level).

- The school level and the classroom/teacher level are reciprocally related. The concepts at the school level influence what happens in classrooms, but the teaching and learning processes will in their turn influence what happens at the school level.
- The school level and the classroom/teacher level will both influence the intermediate outcomes of effective school improvement (effective school and classroom/teacher characteristics). These outcomes may in their turn influence both levels.
- The classroom/teacher level generally is the main level that influences student outcomes, although the school level may also directly influence student outcomes. These outcomes however may influence the classroom/teacher level in their turn, but also the school level (for example, the school decides to purchase a new curriculum when student achievement is low).
- Effective school improvement may be mainly directed at intermediate outcomes (effective school and classroom characteristics), at student outcomes, or at both types of outcomes at the same time. When intermediate outcomes are the main focus, it should be clear how, in the end, these outcomes will enhance student outcomes. When student outcomes are the main focus, it should be clear whether changes in school and/or classroom characteristics are necessary. Therefore, there should always be at least a conceptual reciprocal link between intermediate and student outcomes.

Figure 1 A model for effective school improvement



3.5 Revision of the ESI model

Now we will present findings from three separate sources that we will use in the revision of the ESI model. These three sources are:

- the analysis of existing data (Work Package 5),
- the country conferences (Work Package 10),
- the final workshop on Effective school Improvement (Work Package 9).

The main objective of the analysis of existing data (Work Package 5) was to confront the ESI model with data from effective improvement studies. These studies had not been analysed earlier in the ESI project (they did not overlap with the ESI case studies of Work Package 7 (De Jong, 2000)). By comparing the key concepts and the factors in the model with characteristics of these newly analysed studies, some information about the validity of the model would be obtained. Studies were selected that matched the effectiveness criterion (a clear focus on student outcomes) as well as the improvement criterion (distinct attention for change processes in schools in order to achieve the project outcomes). Preferably, the studies had to be externally evaluated and reported. Six studies from the United States and the United Kingdom were analysed by the Dutch and Belgian ESI members: Success for All, Roots and Wings, Accelerated Schools, Modern Red Schoolhouse, the Improving School Effectiveness Project, and the High Reliability School. To compare the studies a checklist was used that reflected the key concepts and the factors of the ESI model in an earlier version of April 2000 (De Jong et al., 2001).

The second source that we will use to revise the model is the information gathered in the country conferences (Work Package 10). The draft model in the version of July 2000 (see foregoing text) was discussed intensively in all ESI -countries in the form of a country conference in October and November 2000 (see also De Jong, 2001). The main objectives of these conferences were to disseminate preliminary results of the project to researchers, practitioners and policymakers and especially to get feedback on the draft model in consideration of its revision. The ESI countries were free to decide about the format of their country conferences. The input for participants in the conferences was the draft model and the way in which it was developed. The joint information available for all countries was the text of the preceding text in this report: background information on effective school improvement and the role of a model, the contributions from the theoretical and the empirical analyses performed by the ESI members and finally the draft model itself. Some countries used the English version of this text; others translated the text in their own language. Some countries provided their participants solely with this text, others added other documents of the ESI project, such as earlier reports. Countries were free to decide about the amount of information for participants, as long as the joint text was given.

To structure the feedback from conference participants, a short questionnaire was developed by the ESI team (see also De Jong, 2001). The questionnaire checked the opinions of participants about all variables in the model by asking how important the variables are for ESI (either in a positive or a negative sense), why they are important, how the variables are related, which variables are most important, and why. In addition, the questionnaire asked for suggestions about changes in the model, other variables etc. The questionnaire was optional in the conferences. Not all ESI countries used this instrument to gather information .

The third and final source for the revision of the ESI model is the output of the final ESI workshop of November 2000 (Work Package 9), which was organised when all country conferences had taken place. For four successive days the ESI members presented and discussed the country conference findings and tried to build the final version of the ESI model.

3.5.1 The analysis of existing school improvement projects (Work Package 5)

For the analysis, we needed effective school improvement programmes with data about improvement strategies and results on implementation and (preferably) student outcomes. We have selected six improvement programmes, four of which are from the United States (Success for All, Roots and Wings, Modern Red Schoolhouse, and Accelerated Schools), one is from Scotland (the Improving School Effectiveness Project) and one is from England/Wales (the High Reliability Schools Programme). All programmes are still running. The programmes are considered 'effective school improvement programmes' because they deliberately intend to raise student achievement as well as the quality of school and teacher factors. All programmes have the basic subjects as their primary curricular focus. They all take between three and six years.

The aim of studying the programmes was to test the validity of the draft model (version developed in the ESI project in the spring of 2000). In order to analyse the programmes; a checklist was developed which structured the analysis to encompass the project content, the context level, the school/teacher level, and the outcomes. Here, the findings for the context and the school/teacher level factors are most important. For more detail we refer to De Jong et al. (2001). The main findings are the following:

- The main variables at the context level could be distinguished in all programmes. No clear evidence could be found for the relevance of market mechanisms, simply because these do not apply in the programmes. External evaluation and external agents are clearly visible in the programmes though. Student outcomes of project schools are measured in all programmes. Pressure to improve is used in all externally driven programmes but the amount of pressure seems to be different. An additional context variable, resources (e.g. finances, materials, and personnel assistance), was suggested to be of importance for the facilitation of improvement processes. This seems to be a main factor because without external assistance improvement efforts are not clear, too difficult or too time consuming for school staff.
- At the school level all suggested factors were available in the programme descriptions. The distinction between culture and readiness for improvement did not seem relevant, as these factors are strongly related. A shared vision on education (as part of culture) is difficult to obtain without ownership and leadership (part of readiness). Willingness to learn (a culture component) and motivation and commitment to improve (a readiness aspect) are equally closely interrelated. The programmes use different measures to increase internal pressure, e.g. a high participation commitment of the school staff (80%), high costs to be accepted as project school, staff development, extra personnel (facilitator; tutor), family support and a frequent assessment cycle. Measures are taken to ensure that teachers are willing to learn (schools receive training and support, meetings are scheduled during school days, there are procedures to minimise the workload of teachers). All

programmes are directed at the staff (or the community) in order to develop ownership and collaboration within schools. All staff members participate in the planning and curriculum development phases of the programme, with the staff implementing the plans and strategies. Schools can build upon their previous improvement efforts and incorporate the best of their practices.

- All programmes direct their improvement efforts towards changes in quality of the school and/or the teachers. The changed factors are derived from empirical studies in school and class effectiveness and acknowledge the importance of these factors in the draft ESI model. Conclusions about the outcomes of the projects are difficult. Studies are often correlational and do not allow for straight causal inferences between processes and outcomes. Many of the programmes are still running and do not yet allow for final interpretations.

3.5.2 Main findings of the country conferences (Work Package 10)

As we stated earlier, the ESI countries were free to decide about the format of their country conferences. Table 4 gives an overview of the format of the country conferences, the types of participants per country, and the number of questionnaires that were used for further analyses. Because not all participants returned questionnaires, the number of completed questionnaires generally is somewhat lower than the number of consulted participants.

The participants in the country conferences clearly cannot be seen as a random sample of all persons in a country who are involved in education in some way or another. Therefore, the findings per country cannot be interpreted as a general feeling in a certain country about the ESI model and its concepts and factors. Instead, the conferences are merely meant to generate ideas about the model that ideally stem from a variety of persons (such as practitioners, researchers, and policy makers). In the short summaries per country, we will first describe the general remarks that were made about the model and the relationships between the blocks in the model. Then we will depict the main comments on parts of the model (the context level, the school/department level, the classroom/teacher level, and the intermediate outcomes) and suggestions for additional factors that are not in the model now. We will inevitably concentrate on the main comments and leave the details out. These can be found in De Jong (2001).

Table 4 Design of the country conferences and participants per country

<i>Country</i>	<i>Activities undertaken</i>	<i>Type of participants consulted</i>	<i>Questionnaires</i>
The Netherlands	One-day workshop + ESI questionnaires	Principals, representatives of school boards and teacher unions, school counsellors, inspectors, researchers, teacher trainers (n=22)	N=22
Finland	Two-day workshop + ESI questionnaires	Principals and teachers who participated in ESI case studies, local policy makers, researchers (n=32)	N=9
Belgium (French Community)	Three debate meetings	Practitioners, policy makers, inspectors, researchers, representatives of parental organisations and unions	N/A.
United Kingdom	One-day conference + ESI questionnaires	Practitioners who participated in ESI case studies, school improvers, policy makers, academics, developers, students (n=15)	N=12
Spain	Half-day congress symposium + Spanish (condensed) version of ESI questionnaire	Educational researchers, inspectors, school principals, teachers (n=80)	N=41
Portugal	Three one-day conferences + ESI questionnaires	Teachers who participated in ESI case studies and others, researchers, policy makers, inspectors (n=53)	N=39
Italy	Five small group interviews	Researchers, principals, teachers, policy makers (n=31)	N/A.
Greece	Three small group interviews	Teachers who participated in ESI case studies (n=10)	N/A.

The Netherlands

General remarks. A problem that refers to all parts of the model is the assumption that the factors will always work in the same way. This may not be realistic, because schools can be in very different situations (for example with regard to their improvement capacities). Factors may work differently for different schools and maybe they will not automatically always play a positive role. For example, external pressure to improve may be beneficial for a well-functioning school that just needed some push from outside. For a failing school that is struggling to survive from day to day, external pressure may be paralysing. There seems to be a kind of imbalance or a kind of tension in the model itself. The intermediate outcomes (effectiveness characteristics of schools and classrooms/teachers) give the impression that they are prescriptions on how to become a good school. At the same time, the school improvement factors (context, school, and classroom/teacher levels) are much more in line with ideas about the school as a learning organisation. Still, a learning organisation is supposed to set its own goals instead of working with recipes from others.

There is an overlap between school and teacher level factors, which complicates the understanding of the model.

Relationships in the model. There is no direct line between the context and the student outcomes, although the context can certainly influence the outcomes (for example, by

setting goals). The line between context and school should be reciprocal. Furthermore, some relationships seem more decisive than others do. The influence of the classroom/teacher level on student outcomes for example is more essential than the relationship between the school level and student outcomes. The model should reflect such differences in influences.

The context level. All factors in the model are certainly considered important but the importance of market mechanisms is not obvious. Some participants state that there is no real educational market in the Netherlands, because there are no sanctions for bad schools. Underperforming schools are not closed down, for example. Moreover, most parents and students do not really act as consumers. Most of the time they choose the school that is nearby. However, other participants state that there certainly are market mechanisms in the Netherlands because parents have a free school choice. These participants do not think highly of market mechanisms. They hold these mechanisms responsible for the division in 'black' (mainly immigrant students) and 'white' schools (mainly Dutch students) in the big cities, which they think is negative from the equality/equity point of view on education.

External pressure to improve may be negative for low-performing schools, when the pressure is not combined with suggestions for improvement or counselling. With regard to external evaluation, participants think that this will only act as a pressure to improve when school results are actually published widely. Evaluation is only fair when indicators are evaluated for which schools can be held truly responsible. External agents are not always so important. When the school hires them and when their jobs partly depend on the budget of the school, they cannot be supposed to be too critical. When they do not interact with individual teachers (for example by coaching teachers during their lessons), their influence may be very small.

Autonomy is only thought to be beneficial for schools and school improvement when they already have a good general quality and can act professionally.

Additional factors concern policies with regard to the daily situation in which teachers have to work, for example with regard to their class sizes. Also, stability in educational policy is mentioned. In the Netherlands, schools are currently struggling with an unbalance between measures that seem to reflect centralisation and measures that reflect principles of decentralisation.

The school/department level. The influence of the factors can often be positive or negative. This will strongly depend on the history of the school and its current situation. Improvement history for example may influence improvement efforts positively when the school has a positive history (successful efforts in the past). When the factor has a negative meaning for the school, its influence may be negative though.

Additional factors concern a critical school board that may exert pressure to improve and motivation in the school staff for improvement.

The classroom/teacher level. No specific comments were made.

The intermediate outcomes. All are important, although parental involvement, independent learning and grouping procedures are considered less important.

Finland

General remarks. The Finnish country conference participants think that the ESI model is promising. It seems to offer a good map of effective school improvement for

practitioners. However, the effectiveness part seems to dominate the model too much at the expense of the improvement part.

Relationships in the model. No specific comments were made, but the showed relationships were accepted and agreed.

The context level. Most factors clearly seem important. There is some discussion about market mechanisms. These may have dangerous effects as they can lead to inequality. They can foster improvement too, however. Although external agents may have influence, they cannot bring about essential changes in schools. These ultimately have to be based within the school. However, even though action should start from within the school, external agents can help to start improvement better in the very beginning.

There are several additional factors that are important for Finland. The first one is the role of the municipality, which is considerable in Finland but not represented in the model. The second factor is the role of teacher unions. These may strongly promote or hinder improvement efforts in Finland. They can support staff stability and reduce the workload for teachers, thereby contributing to favourable conditions for improvement. The third factor is the role of information technology, which may influence education substantially in the near future not only at the context level but also at the other levels. The fourth factor regards resources for schools (such as budgets for educational means, availability of teachers/lack of teachers, national improvement projects) and the economic state of a country.

The school/department level. Most factors are seen as important. Staff stability may promote or hinder improvement. Sometimes staff turnover may bring about new ideas that facilitate improvement initiatives.

Additional factors are financial resources, leadership and managership performed by teachers, support of the principal for teachers, and student involvement in improvement efforts.

The classroom/teacher level. At this level, the role of students is not clearly specified. An additional factor is support from parents and the principal.

The intermediate outcomes. No specific comments were made.

Belgium (French Community)

General remarks. The effort of the model to combine the school effectiveness and school improvement paradigms is fruitful, as well as the attention paid to all levels in the educational system. Still, some problems are to be solved.

First, the model in its current form is not really descriptive or explanatory, but looks rather prescriptive. Practitioners tend to read it as a model to be followed, not as a reading grid or an analysis tool.

A second problem is the scope of the model. It must be flexible enough to be able to take into account quite distinct educational projects, within and across countries. Still, the model can never explain every improvement effort in every country and this should be made clear more strongly. The model tries to correspond with different countries and systems, but it should not be so general that it can say everything and its contrary at the same time. The model seems to assume that what is effective in one school or context, is also effective in another one, which unfortunately is not true.

A third problem is the use that will be made of this model. It is not just a tool to be dropped by politicians in schools. It is not a recipe or a list of good practices to follow. It

can be a tool though that can assist in understanding and probably monitoring the educational system.

Relationships in the model. No specific comments were made.

The context level. Some factors are not appropriate for the Belgian educational system. Market mechanisms are not valued positively in Belgium. For example, free school choice may create homogenous student populations in schools, which is a threat to the concepts of equality and equity. Improvement can be perceived as a risky business for schools, which they will try to avoid when parents might prefer more traditional schools. As yet, schools are not externally evaluated in Belgium. An external agent can only be successful when there is a group of internal agents or at least some cadre in the school responsible for sustaining improvement efforts that were started by external agents. In the Belgian system, such internal agents are not common and schools are not used to address educational experts.

The school/department level. The school is the central unit in the model. For Belgium, this central role of the school is not obvious at all. Teachers and their classes are generally thought to be the most important units. For example, inspectors assess teachers rather than schools. Also, teachers work independent of each other rather than in teams. Schools do not act as learning organisations. Leadership (by the principal) is not an obvious concept in Belgium, where teachers are still rather isolated and principals mainly have administrative tasks. The model does not take into account the local context of schools and the student population (socio-economic), even though these factors may influence improvement efforts and outcomes.

The classroom/teacher level. No specific comments were made.

The intermediate outcomes. The term 'intermediate outcomes' seems to suggest that these outcomes are not the really important ones. Concerning the outcomes (both intermediate and student level), in Belgium some educational objectives are given for all schools (such as to enhance self-confidence and personal development of students, to warrant to all students equal opportunities of social emancipation). Improvement in Belgium will therefore always have to fit in with these global objectives.

United Kingdom

General remarks. Participants in the country conference questioned the usefulness of the model. It cannot explain processes and outcomes for every kind of school. Also, most factors in the model can exert a positive or negative influence, depending on the current situation. This relates to the stage of the school and the current policy situation. The graphic representation of the model is too linear and not appealing for practitioners. The model should highlight the effectiveness criterion (outcomes) as well as the improvement criterion (managing to change, increasing capacity to change) but the focus seems to be on the effectiveness criterion. In the United Kingdom, students as agents of their own learning is an important issue whereas students are not strongly present in the model.

Relationships in the model: there should be a link between the context and the outcomes.

The context level. The national context is very important in the United Kingdom. There is a climate of a pressure to improve (clear indicators are league tables, inspections, and performance-related pay) and accountability. The climate and the speed of change can be negative, because for some schools the pressure may be too high. Nevertheless, the pressure to improve has been an incentive for many schools to focus more on teaching

and learning issues. The improvement agenda should be a matter of schools more than it is now, although some control for unwilling schools is needed. According to practitioners the national focus on outcomes is a totally negative influence, while researchers and policy makers are more mixed in their feelings. Market mechanisms and external evaluation can have both positive and negative influences on schools. In recent years, the autonomy of schools has grown. They have greater control of their budgets, and decision making although this is balanced by greater central control and accountability.

Additional context factors are the local community context and district-level support and resources, comparative performance tables and benchmarking data, and a climate of accountability and blame.

The school/department level. In the United Kingdom, schools cannot be equated with departments as some departments act autonomously within the school. As at the context level, the factors at this level may be positive or negative, depending on the response of schools and the stage they are at. For example, a negative improvement history may make it difficult to implement improvement processes at a later stage.

Additional factors are effective leadership (not just clarity about leadership), resources and funding, the professional development of teachers, a dialogue with students, and being comfortable in using school data, both quantitative and qualitative. This is an important issue in the perspective of self-evaluation.

The classroom/teacher level. The name of this level is not particularly appropriate, because improvement is more about teacher behaviour than about classroom characteristics.

Additional factors are the student/teacher interaction, leadership, and professional development needs.

The intermediate outcomes. The role of students in their own learning and the dialogue with students should be added.

Spain

General remarks. The model received different reactions from persons who are familiar with school effectiveness theories and teachers. The first group thinks that the model is too technological, leans too much on school effectiveness and is too static to reflect the dynamics of school improvement. The attention paid to the classroom level is too small and the effectiveness factors at the classroom level do not have an improvement counterpart. The second group thinks that the model shows the big gap between research and practice and does not reflect the complex daily practice. However, the majority of participants in the country conference consider the model valid for Spain and think that the model may help teachers to start change processes. Also, the model is useful for decision-making in educational policy. In general, the factors in the model will have a positive influence with the exception of market mechanisms.

Relationships in the model. No specific comments were made.

The context level. The Spanish education system is not influenced by market mechanisms. Therefore, for Spain it makes no sense to include this element in the model. Participants state that, even if this influence were possible, it would be very negative for education. External evaluation in general seems favourable. External agents are not favoured by all. In Spain there is no clear group of such agents, except for the inspection

whose role is debated. School autonomy is a very important element, but references to autonomy concerning both curriculum and should be included.

Additional context factors, stable as well as dynamic, are needed. For instance, measures taken by administrations about the development of programmes, previous experience of change in the educational system, working conditions of teachers and schools, promotion of team-work, motivation and training of management teams, and the participation of society in education.

The school/department level. All factors are important, especially a shared vision and ownership of improvement. Clear leadership is also important. In the Spanish educational system, the existing democratic model to choose the school principal makes the management team to clearly assume the leadership role. The place of the cyclical school improvement processes in the model is not satisfying

An additional factor is parent participation. Parents are part of the maximum management body in the school; therefore, their participation should be included in the school level. School autonomy in the field of curriculum and teacher management (for example, choices for training) is essential for school improvement and should be added

The classroom/teacher level. For effective school improvement, the teacher factors are clearly the most important, more than the school factors and the context factors. All factors in the model are important. The classroom and teacher characteristics are confounded. There is a clear lack of elements in the classroom level, which lead to the achievement of intermediate outcomes.

Additional factors are teacher ownership of improvement and teacher involvement in the school.

The intermediate outcomes. No specific comments were made.

Portugal

General remarks. Because of the different assumptions in the school effectiveness and school improvement traditions, the combination of both is difficult. School effectiveness is not very relevant for Portugal, where school autonomy is a recent development and accountability is not a strong political issue. Portuguese schools, although they have some autonomy now, still are not used to see themselves as organisational units. Improvement is mainly decided by individual teachers or groups of teachers and not at the school level. Even schools with an improvement history do not feel that they have ownership of improvement processes. School improvement theories are more familiar for Portugal. However, some participants think that the model can be useful to introduce a stronger focus on intermediate and student outcomes in Portugal and to make schools more accountable for outcomes. For the participants in the country conference, it was not clear for whom the model is meant: for practitioners, researchers, or policy makers? Policy makers may misuse the model. In general, it was felt that the model is too static, too free of context, and too strongly built on cause-effects relationships.

Relationships in the model. It was considered difficult to deal with the same factors at different levels.

The context level. Market mechanisms formally are not very important at this moment in Portugal, although some schools are competitive because they suffer from a decline in enrolment as a consequence of low natality rates. Also, the concept can have a negative

impact. External evaluation and external agents are not so important (although inspectors and researchers think otherwise about their roles).

Additional context factors are the local context and local support, external financing and resources, the teacher career structure and inservice training needed for career steps, and self-evaluation.

The school/department level. Although most factors seem important, they are not so relevant in contemporary Portuguese schools. Internal pressure is not very important (yet) according to teachers. There is no tradition in this respect. The school environment and the student background in a school however can act as a pressure to change. Schools do not always have an improvement history by fear of risk taking and criticisms. Although some leadership by someone in the school is clearly important for effective school improvement, leadership by the principal is not so important in Portugal. School management is not a specific career in Portugal and school managers mainly have an administrative role. Staff stability is a problem, because teachers are centrally placed at schools. However, staff stability was not considered a problem by the schools invited to the country conference, because their staff is perhaps too stable.

The classroom/teacher level. An additional factor might be teacher training.

The intermediate outcomes. No specific comments were made.

Italy

General remarks. In Italy, the efforts to link school effectiveness and school improvement were appreciated, especially by researchers who think that school improvement must lead to student achievement. Teachers however feel that the evaluation of school improvement must take place in the same terms as it is planned. Goals of school improvement are changing of the school climate, or better instructional contents. The school effectiveness criterion of student outcomes is not so relevant, the teachers think. In Italy, teachers and principals are not used to the idea of evaluation on the basis of student outcomes. They fear that tests may give a wrong impression of a student's intelligence or development. Qualitative instruments are favoured and outcomes to be studied are wellbeing, satisfaction, creativity, and motivation. To evaluate schools, the teaching and learning processes must be studied in their opinion, for example procedures to plan the work of teachers, parents' participation in the school, contacts with other educational institutes.

The model fits the Italian educational situation (according to some persons) with regard to school autonomy. Schools can use the model as a guide for their own efforts. The model supplies conceptual tools for schools and decision-makers and can be used as a guide for the planning of improvement efforts in Italy, both at the central level (evaluation of schools, comparison of improvement efforts) and the school level (self-evaluation). The teachers favour the self-evaluative principle and oppose the idea of external evaluation based on student outcomes.

Relationships in the model. No specific comments were made.

The context level. The notion of external pressure to start improvement is not appreciated in Italy, because it may reduce the freedom teachers are used to so far. Italian teachers are not comfortable with external agents, who are perceived as outsiders trying to invade the school.

The school/department level. In Italy, the improvement factors at the school level are considered the most useful for the further planning of improvement activities in schools. Especially a shared vision and a culture favourable for improvement are seen as important. The leadership issue is less important, because principals in Italy tend to be managers in the first place, not educational leaders.

The classroom/teacher level. No specific comments were made.

The intermediate outcomes. Concerning the outcomes, Italy stresses the importance of criteria that transcend short-term educational outcomes. Skills that enhance lifelong learning and the vocational/professional career after compulsory schooling are examples. In this respect, contacts of schools with companies are essential.

Greece

General remarks. The Greek educational situation does not seem to fully support the model, mainly due to the importance assumed by the context level in Greece. Because of the centralised system, most relevant factors operate at this level while the school/department level appears very weak. However, the factors of the model appear to operate differently in the public and the private school sectors of the system. When the model is actually empirically supported (in the public school sector), this would suggest that changes in the Greek educational system may be needed to bring effective school improvement about.

Relationships in the model. These do not adequately reflect the Greek situation.

The context level. In Greece, market mechanisms do not appear to affect the function of public schools, which serve 95 per cent of the student population. Parents and students have no freedom of choice and students are allocated to schools according to place of residence. This does not hold in the private school sector, where schools compete with each other and parents and students have freedom of choice (of school). The 'operational' definition of effective improvement in Greece is associated with success in the university entry examinations. Pressure to improve is reflected in pressure put on schools to achieve high success rates in these exams.

Because the nationally distributed textbooks contain the contents for the exams, implementation of these textbooks (i.e. the curriculum) is the most important task for teachers. The Ministry of Education sets both the outcomes and the curriculum. School improvement therefore also is strongly dependent on actions of the Ministry of Education, although teachers have some freedom to act as they want because there is no external supervision.

Additional context factors in Greece are the society at large, which can act as an external agent, and the professional associations of teachers, which can enhance improvement.

The school/department level. In Greece, many school and classroom factors of the model are in fact functional at the context level (such as improvement history, leadership, and ownership of improvement). Cyclical improvement processes can be found at the context level to some extent, but these are passed on to schools as top-down improvement programs. The pressure that schools feel to improve is derived from the aspirations of the surrounding community to provide their children with university education. The school as an organisation is not very strong in Greece. Schools are not used to implement effective improvement programmes tailored to meet the school's particular needs. However there

is a long history of school reform designed at the central level and equally applicable to all schools.

In the public school sector, the authority of the school to regulate teaching practices is small and the school does not hire its own personnel (although there are differences between public and private schools in this respect). The principal merely has an administrative role. This is not the case in the private school sector where the owner/headteacher acts as a manager and has the ability to fire and hire personnel. Private schools are more in a position to see themselves as organisational units.

The classroom/teacher level. In actual everyday practice, improvement efforts at the school and teacher level in Greece do not regard planned educational changes, but reflect instances of self-regulation that can be performed in the absence of supervision. This kind of improvement (which is not always explicitly considered as intentional improvement by teachers) mostly is executed by some teachers without involvement of the principal. In fact, the contribution of the school level is limited to the permission granted to teachers to experiment with new teaching practices. Teachers generally define improvement efforts as the full and effective implementation of the national curriculum. When they deviate from the curriculum, it is mostly to teach the content in a way they feel is better for their students. However, the goals they want to achieve by doing so are the goals of the national curriculum.

Most pilot experimental projects of planned improvement are initiated by Ministry agents such as the Pedagogic Institute. Such projects allow teachers to experiment with new teaching practices. In this instance the contribution of the school level is limited to granting the teachers permission to participate in the programme/project.

Some (public school) teachers are not interested in more autonomy to decide about education, although others would like more freedom in the teaching of the curriculum. There is no strong sense of being a team in Greek teachers of public schools, a fact largely due to teachers' terms of employment. They remain at the school mostly during their teaching hours, up to 21 hours per week, a fact that does not allow them to develop a spirit of collaboration.

The intermediate outcomes. No specific comments were made (other than the ones already integrated in the text above).

3.5.3 Main findings of the final ESI workshop (Work Package 9)

In the Lisbon workshop of November 2000, the findings from the country conferences were discussed as well as more abstract issues concerning the function of the model, its representation, the importance of context, and outcomes of effective school improvement.

The function of the model

The model is aiming at three target groups: practitioners, researchers and policymakers. In the country conferences, there were questions about the prescriptiveness versus the descriptiveness of the model. The character of the model has implications for the target groups. When the model is prescriptive, the factors that constitute the model should be read as a prescription or a recipe for effective school improvement. Only few participants in the country conferences actually advocate a prescriptive interpretation. For example, from a political point of view the model might help policymakers to focus on student

outcomes (Italy, Portugal) or on the school as a meaningful unit for improvement (Greece, Belgium). Also, it could be used politically to point out to policymakers how strongly the context works and that not only schools are to blame (United Kingdom). Considering the state of the art in the research however, such recipes are not realistic at all. Still, the model is not fully descriptive either. When it would have to be tailored to picture the countries in the project, every country would have a different model. Some factors in the model are present in some countries, but absent in others. Some factors have a positive influence in some countries, but a negative one in others and the same phenomenon can also occur within countries.

The model might have the following functions:

- it can start a debate and it can contribute to ongoing discussions about effective school improvement,
- it can introduce arguments in a debate and thereby assist in decision-making,
- it can act as an eye-opener about improvement factors which are different in different countries,
- it can be used as a tool for the planning, designing, implementation, evaluation, and reflection of improvement projects and research on effective school improvement,
- it can be used as input in teacher training.

These functions can only be fulfilled in different countries when the model allows some flexibility in the interpretation of the factors and their influences. As such, the model might best be described as a comprehensive framework for flexible use. This requires a rather abstract formulation of the factors in the model, which then can be filled with more detailed examples for each country. Ideally, the project should also provide effective strategies related to the factors in the model. For example, when effective leadership is considered important, it should be outlined how to install effective leadership when it is not naturally present in a school or in an educational system.

The representation of the model

In the country conferences, the model was often considered too static. It is necessary to find a more dynamic way to picture the factors that constitute effective school improvement. It should be clear that we are dealing with flexible, dynamic, recursive, and revolving processes. Factors and levels are reciprocally related and cannot be depicted by linear cause-and-effect-relationships.

The importance of the context

Of all the levels with factors in the model (context, school/department, classroom/teacher), the context attracted by far the most attention. The model can contribute to cross-cultural issues, because it enables countries to see the contextual differences better, and to see the similarities. It may well be that the differences are more interesting than the similarities, especially in comparison with within-country models. In these latter models, the context level is often left out and as a consequence the major influences of the context on all other levels in the educational system are not analysed. The context level therefore is the background for all factors at the other levels.

The outcomes of effective school improvement

In the country conferences the focus on academic student outcomes as the major outcomes of effective school improvement was criticised. Schools pursue more student outcomes than academic ones and these should be represented in the model too. In addition, it should be noted that educational objectives (student outcomes) in some countries are strongly determined by the context level. The model suggests too much that the school can choose the outcomes. Even when choices by the school are possible, the pursued outcomes will always have to be in line with the formal educational objectives. The model should also make clear that outcomes are defined by the project as the 'added value' of schools (outcomes corrected for student intake measures).

Student outcomes reflect the effectiveness criterion of effective school improvement. The model does not pay enough attention to the improvement criterion, the capacity of schools to manage change. Concepts that are linked with the improvement criterion are schools as learning organisations and teachers as reflective practitioners.

In short, the final version of the model should be a common framework on effective school improvement that countries can fill with relevant factors and (if possible) strategies. The framework should be presented together with an overview of lessons learned per country and guidelines for the use of the model that are applicable for practitioners, researchers, and policy makers.

3.5.4 Main conclusions for the revision of the ESI model

In the presentation of the final ESI model, its function must be clarified. The appearance of the model has to change in order to make it look more dynamic. The model must make clear that the context factors are the background for all other factors. Concerning the outcomes of effective school improvement, it must be emphasised that not only academic student outcomes are important but other student outcomes and changes in the school as well. The lists of factors in the draft model must disappear, because these suggest prescriptiveness too strongly. The model must allow for a flexible use because of the differences across countries. With regard to the factors that were listed in the draft model, most factors were acknowledged as important although their influence sometimes was the subject of discussion. Some factors must be added, at least for some countries. The problems concerning the school, department, classroom, and teacher levels in the model must be solved.

3.6 A comprehensive framework for effective school improvement

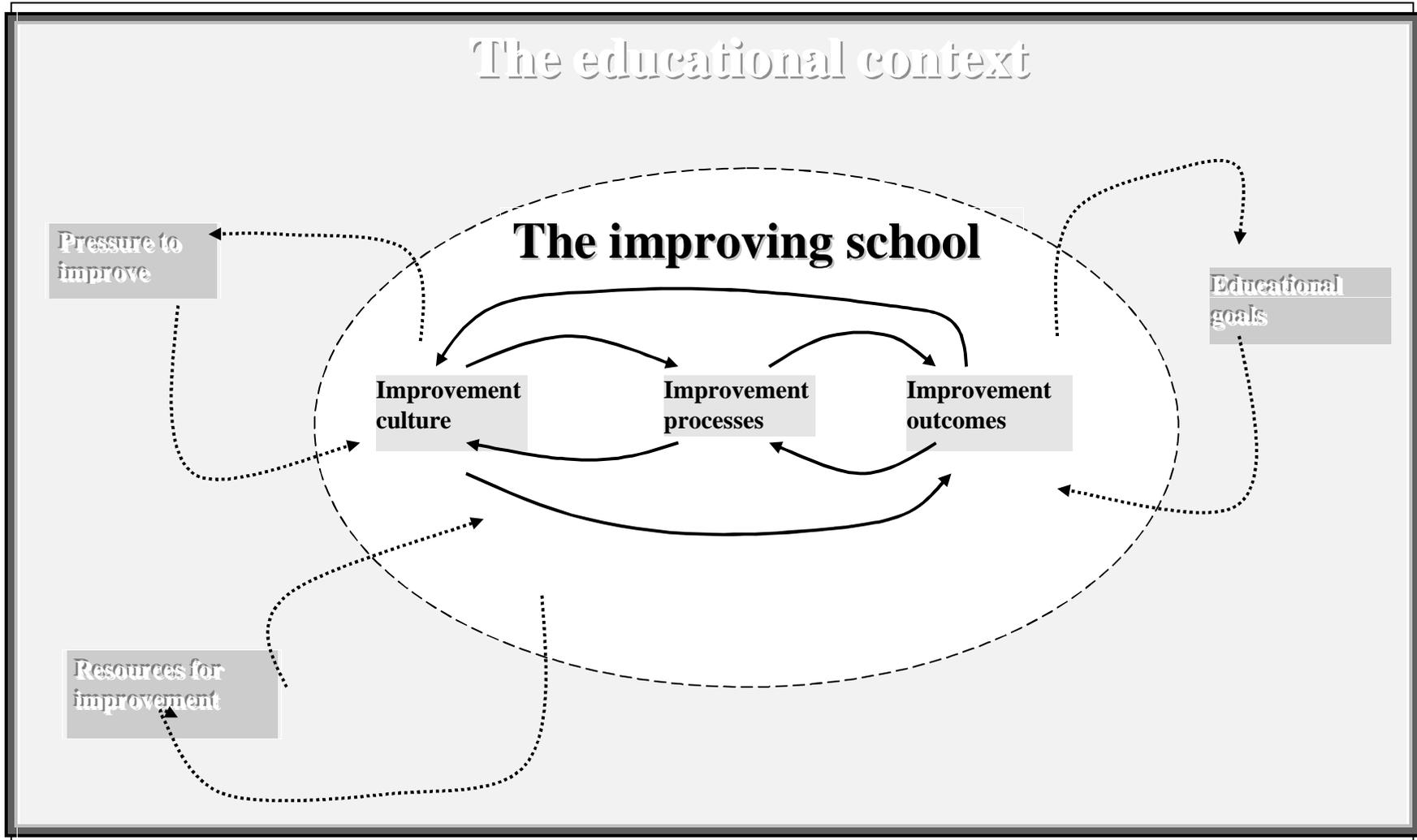
We will now present the comprehensive framework for effective school improvement, which builds on the findings of the theoretical analysis, the case studies analysis of improvement projects in the ESI project countries, the analysis of successful internationally acknowledged improvement projects, and the experiential knowledge gathered in the ESI country conferences on effective school improvement. Obviously the intensive discussions in the meetings and workshops of the ESI members have also contributed strongly to the design and development of the comprehensive framework.

We have decided to use the term 'comprehensive framework' instead of 'model'. Because of the sometimes massive differences across countries, especially in their educational context, in the end it turned out to be virtually impossible to draw a general model that could be used in all ESI countries in the same way for the explanation of success or failure of improvement efforts. Although we certainly have succeeded in defining and describing a set of factors at various levels in the educational system that are related to effective school improvement in most countries in some way, we cannot easily isolate factors that work in exactly the same way in all countries. Even at a rather abstract level this turned out to be very hard to do. A complicating situation is that even when certain factors are supposed to influence effective school improvement in all countries at least to some extent, their influence may vary from very positive to very negative. In addition, we have concluded that an effective school improvement model is not only difficult to draw across countries but also within countries because of the large differences between schools. Improvement may at least partly be a different process for successful schools and failing schools, for example.

Moreover, the empirical evidence that we found on the factors that constitute effective or ineffective school improvement unfortunately is far from conclusive. On the basis of the case studies analysis we have identified factors that we assume are related to effective school improvement. Still, the state of the art in effective school improvement research forces us to be careful in our conclusions about the importance of factors.

Figure 2 shows the comprehensive framework for effective school improvement. We will first outline its main concepts and their interrelationships. Also, we will introduce the factors that are implied by the main concepts.

Figure 2 Comprehensive framework for effective school improvement



The comprehensive framework shows that an improving school is firmly embedded in the educational context of a country. Schools and school improvement can never be studied apart from their educational context. This is clearly indicated by the interrupted line around the improving school, which is central in the framework. As such, the improving school is always confronted with the main contextual concepts of pressure to improve, resources for improvement and educational goals, which exist in the educational context. Even when schools are free to decide about their improvement outcomes, these will always have to be in line with the wider educational goals that are determined in the context.

The importance of the educational context appears most prominently in internationally comparative studies such as the ESI project, but should also be incorporated in all within-country studies of effective school improvement. From the perspective of school improvement, the influence of the context on the school is much more intensive than the influence of the school on the context. Still, schools will over time influence their context as well.

The main contextual concepts of pressure to improve, resources for improvement and educational goals are overarching a wider number of factors, which we will discuss in more detail later. The factors are the following (see Table 5):

Table 5 Factors within the main contextual concepts of the framework

<i>Pressure to improve</i>	<i>Resources/support for improvement</i>	<i>Educational goals</i>
<ul style="list-style-type: none"> - market mechanisms - external evaluation and accountability - external agents - participation of society in education/societal changes/ educational policies which stimulate change 	<ul style="list-style-type: none"> - autonomy granted to schools - financial resources and favourable daily working conditions - local support 	<ul style="list-style-type: none"> - formal educational goals in terms of student outcomes

In the improving school, the concepts of the improvement culture in the school, the actual improvement processes and the improvement outcomes are essential. The improvement culture is the background against which the processes are taking place. The improvement outcomes are the goals that the improving school wants to achieve. The concepts of culture, processes and outcomes are all interrelated and will constantly influence each other. The culture will influence not only the processes, but the outcomes of improvement as well. The processes obviously influence the improvement outcomes, but the processes will also change the improvement culture. The outcomes will influence the processes and also the improvement culture of the school. The interrelationships between these main concepts show that effective school improvement is an ongoing cyclical process without a clearly marked beginning or ending.

The main school concepts of improvement culture, improvement processes, and improvement outcomes are overarching a wider number of factors, which we will discuss later. The factors are the following (see Table 6):

Table 6 Factors within the main school concepts of the framework

<i>Improvement culture</i>	<i>Improvement processes</i>	<i>Improvement outcomes</i>
<ul style="list-style-type: none"> - internal pressure to improve - autonomy used by schools - shared vision - willingness to become a learning organisation/ a reflective practitioner - training and collegial collaboration - improvement history - ownership of improvement, commitment and motivation - leadership - staff stability - time for improvement 	<ul style="list-style-type: none"> - assessment of improvement needs - diagnosis of improvement needs - phrasing of detailed improvement goals - planning of improvement activities - implementation of improvement plans - evaluation - reflection 	<ul style="list-style-type: none"> - changes in the quality of the school - changes in the quality of the teachers - changes in the quality of student outcomes (knowledge, skills, and attitudes)

3.6.1 Context factors

The educational context influences the improving school continuously. For the start of improvement processes, the pressure to improve is the most important context concept. School improvement will always happen within the constraints in resources that are given by the context. Therefore, the resources are the second context concept that we will discuss. Finally, the outcomes of school improvement will always have to be in line with the educational goals that are set by the educational context. As such, the goals are the third context concept that influences school improvement. Wherever possible we will mix the introduction of the factors that fit in the main concepts with examples from the ESI countries.

Pressure to improve

Ideally, schools (as organisational units) define their own improvement needs, design their improvement efforts and evaluate after some time whether their needs have been met. Theories about the school as a learning organisation often depict this kind of improvement (i.e. learning) processes. In practice however, schools often need some form of external pressure from the educational context to start improving. Pressure may be very beneficial when schools are able to improve on their own but have not chosen to. Pressure may be damaging however for schools that are not able to carry out improvement processes on their own and do not receive adequate support.

The factors, which together constitute the concept of pressure to improve, are the following:

- market mechanisms,
- external evaluation and accountability,
- external agents,
- the participation of society in education and societal changes.

Market mechanisms

Market mechanisms (for example freedom of choice of schools for parents and students, involvement of the community in what happens in schools) refer to competition between schools. Competition is likely to intensify the need to make a good impression on the general public outside the school and, as a consequence, the need for school improvement. Although market mechanisms do not automatically lead to a better quality of school and negative consequences may occur, they can offer an impetus for change. In the ESI project, market mechanisms (table 7) were the most debated and controversial factor.

Table 7 Market mechanisms

<i>The Netherlands</i>	<p>The importance of market mechanisms is not obvious. Some state that there is no real educational market, because there are no sanctions for underperforming schools. They are not closed down, for example. Moreover, most parents and students do not act as consumers. Most of the time they choose the school that is nearby. However, others state that there are market mechanisms because parents have a free school choice.</p> <p>Market mechanisms are not generally appreciated, as they are held responsible for the division in 'black' (mainly immigrant students) and 'white' schools (mainly Dutch students) in the big cities, which is seen as negative from the equality/equity point of view on education.</p>
<i>Finland</i>	<p>Market mechanisms may have dangerous effects as they can lead to inequality. They can foster improvement too, however.</p>
<i>Belgium(French Community)</i>	<p>Market mechanisms are not valued positively. Free school choice may create homogenous student populations, which is a threat to the concepts of equality and equity. Improvement can be perceived as a risky business which schools try to avoid when parents might prefer more traditional schools. A positive notion of market would imply that users (e.g. parents) are well informed, at least about what the real quality of a school is, and about the processes needed to achieve this. However, this type of information is often lacking.</p>
<i>United Kingdom</i>	<p>There is a strong climate of a pressure to improve through competition for funding based on open-enrolment in schools and the type of information (performance tables) available to parents in the process of making a choice. This climate and the speed of change can be negative, because for some schools the pressure is too high. Nevertheless, the pressure to improve has been an incentive for many schools to focus more on teaching and learning issues. Market mechanisms therefore can have both positive and negative influences on school improvement.</p>
<i>Spain</i>	<p>The Spanish education system is not determined by market mechanisms. Its presence could be a negative influence.</p>
<i>Portugal</i>	<p>Market mechanisms are not very important at this moment in Portugal. The concept may have a negative impact.</p>
<i>Italy</i>	<p>The notion of external pressure to start improvement is not appreciated in Italy, because it may reduce the freedom teachers are used to so far.</p>
<i>Greece</i>	<p>Market mechanisms do not influence the function of the public school sector (directly financed by the state). Parents and students do not have freedom of choice (of public school) and place of residence is the decisive factor for the allocation of students to schools. This does not seem to be the case in private schools where market mechanisms play a role and freedom of choice is the case. In all cases pressure to improve is associated to success in the university entrance exams.</p>

External evaluation and accountability

External evaluation generally concerns the student outcomes of the school. When schools are held accountable for their results in terms of student outcomes, and when these outcomes are made public, schools are often more or less 'forced' to start improvement efforts. When a school can formally expect sanctions for failure, improvement will actually be forced upon the school by a higher authority to prevent further problems (such as the closing down of a school). However, external evaluation must be fair. Discussions about league tables in the United Kingdom strongly suggest that value-added measurements of schools (the achievement output corrected for the student input) are needed in order to compare the actual contributions of schools to student achievement (table 8).

Table 8 External evaluation and accountability

<i>The Netherlands</i>	External evaluation will only act as a pressure to improve when school results are published widely. This development has recently started, mainly because newspapers started to publish school results. The formal educational policy (by means of the inspectorate) merely followed these developments. Evaluation generally is only thought fair when indicators are evaluated for which schools can be held truly responsible. In general, external evaluation is thought to be important for effective school improvement.
<i>Finland</i>	External evaluation is widely considered necessary and favourable. According to new school laws and regulations, the schools and institutions are expected to evaluate their functions and processes. Feedback for improvement is seen as natural.
<i>Belgium(French Community)</i>	As yet, schools are not externally evaluated in Belgium, but through anonymous external evaluations for which outcomes are not published. These only aim at the beginning of cycles and not at the outcomes achieved at the end of cycles.
<i>United Kingdom</i>	Schools are compared by means of inspection reports and performance tables that are published. There is a climate of accountability and blame for schools that fail. At the teacher level performance-related pay raises further issues of accountability.
<i>Spain</i>	In Spain there is no general policy on external evaluation. When this kind of evaluation has been carried out, always previously accepted by the school itself, it has positively influenced the ESI processes.
<i>Portugal</i>	External evaluation does not act as a pressure to improve.
<i>Italy</i>	Teachers are not used to evaluation on the basis of student outcomes. They think that school processes must be evaluated instead of outcomes.
<i>Greece</i>	There is no formal external evaluation system. Success rates in the university entry examinations provide an informal form of evaluation.

External agents

Schools may be pushed towards improvement by suggestions from external agents such as inspectors, policy makers, educational consultants or researchers, who introduce new ideas and theories about education. For example, in recent years a lot of improvement efforts have come about in many countries that reflect ideas about school effectiveness. The same holds for theories about constructivist learning. Sometimes these ideas have been integrated in educational laws or standards that schools are supposed to meet.

Schools, confronted with new ideas about education or new laws, need to improve to keep in touch with these developments (table 9).

Table 9 External agents

<i>The Netherlands</i>	External agents are not always important. When the school hires them and when their jobs partly depend on the budget of the school, they cannot be supposed to be too critical. When they do not interact with individual teachers (for example by coaching teachers during their lessons), their influence may be very small.
<i>Finland</i>	Although external agents may have influence, especially in the first stages of improvement, they cannot bring about essential changes in schools. These ultimately have to be based within the school.
<i>Belgium (French Community)</i>	An external agent can only be successful when there is a group of internal agents or at least some cadre in the school responsible for sustaining improvement efforts that were started by external agents. In the current system, such internal agents are not common and schools are not used to address educational experts.
<i>United Kingdom</i>	Government agents, such as the national inspectorate, can exert pressure of schools to improve. Other external agents have no such power.
<i>Spain</i>	External agents are not generally seen as useful, since their role is not institutionalised except for the inspection whose role is debated. In those cases in which there has been an external agent, it has had a very positive influence on change processes.
<i>Portugal</i>	Teachers do not see external agents as important, although inspectors and researchers think otherwise about their roles.
<i>Italy</i>	Italian teachers are not comfortable with external agents, who are perceived as outsiders trying to invade the school.
<i>Greece</i>	There are no external agents such as inspectors. The Ministry of Education and its affiliated agents (such as the Pedagogical Institute) can be seen as external agents that design and initiate pilot improvement efforts.

Participation of society in education and societal changes

In general, schools are not isolated institutes. The society influences schools in many ways and demands school improvement whenever necessary. The essential goals of education for example are almost always established by the society at large and these change when the society changes. This can be seen especially clearly in vocational education, which continuously has to be in line with the requirements of the economic life in trade and industry. Economic welfare will influence schools as well as economic downswings. The development of information and communication technology (ICT) has not only altered teaching devices, but also the wider goals of education. Furthermore, the parents of students represent the influence of the society in a more direct way (table 10).

Table 10 Participation of society in education and societal changes

<i>The Netherlands</i>	Ideas about student learning have changed the design of education.
<i>Finland</i>	Information technology may influence education substantially in the near future.
<i>Belgium (French Community)</i>	General educational objectives and common competencies are given for all schools, under legal constraint.
<i>United Kingdom</i>	Government policies, such as the introduction of a national curriculum and its related assessment, are often responses to the changing views of society. Globalisation issues, which focused on the need for a better skilled workforce, have led to benchmarking and target setting.
<i>Spain</i>	New social demands such as educational attention to immigrants, introduction of ICT in the school, a new role of the school in the society, etc. play a crucial role for school improvement
<i>Portugal</i>	General goals centrally determined are seen as social expectations for schools.
<i>Italy</i>	-
<i>Greece</i>	The Ministry of Education sets both the outcomes and the curriculum. Improvement efforts (especially within the public sector) are strongly dependent on actions of the Ministry.

Resources/support for improvement

In order to make school improvement effective, resources and support made available in the educational context are very important. Without sufficient resources and support, schools are likely to experience troubles in their improvement efforts. Resources can be material, but there are also other resources and types of support that may be essential for effective school improvement. The factors that together constitute the concept of resources are the following:

- autonomy granted to schools,
- financial resources and favourable daily working conditions for teachers and schools,
- local support.

Autonomy granted to schools

The school improvement literature shows that in general at least some autonomy of schools is favourable for the success of improvement efforts. For example, an improvement project developed outside the school, which is merely forced upon the school, is likely to fail. This is especially so when the project is not tailored to fit the school's needs, in consultation with the school. Even when some implementation occurs, which is already rather questionable in this context, consolidation of improvement in the long run is not very likely. Autonomy of schools relates to several domains: educational goals (what to teach), educational means (how to teach), organisation (including hiring and firing personnel, management and administration), and finances. There is some evidence that full autonomy in all these domains does not necessarily promote improvement. The same statement however certainly holds for absence of autonomy in all domains (table 11).

Table 11 Autonomy granted to schools

<i>The Netherlands</i>	Autonomy is only thought to be beneficial for school improvement when schools already have a good general quality and can act professionally. If not, autonomy may hinder improvement efforts.
<i>Finland</i>	School autonomy is important and favourable for the success of improvement efforts of a school.
<i>Belgium (French Community)</i>	As the Belgian educational system is based on freedom, schools (but the schools maintained by the French Community, which are formally under the direct authority of the Minister) benefit from a large autonomy and a public grant aid.
<i>United Kingdom</i>	In recent years, the autonomy of schools has grown. They have greater control of their budgets, and decision making although this is balanced by greater central control and accountability.
<i>Spain</i>	Spain has scarce experience in school autonomy. Nevertheless, it is being very useful in the development of ESI processes and is very positively valued by teachers.
<i>Portugal</i>	School autonomy is important, but it has to be more fully implemented.
<i>Italy</i>	-
<i>Greece</i>	By law there is no school autonomy in the domains of goals and means. Private schools have some autonomy in the domains of organisation and finances.

Financial resources and favourable daily working conditions of teachers and schools

The improvement efforts of schools are heavily influenced by the daily working conditions of teachers and schools. With sufficient financial resources and time, improvement will succeed much more easily. An important factor is also the number of available teachers in a country and in a school. When there is barely enough personnel for the necessary daily routines, improvement efforts will easily be suppressed. The daily workload of teachers, defined by for example their number of teaching hours and the size of the classes they have to teach, influences their motivation to improve. The stability of educational policies is important in this respect too. School improvement can be enhanced by educational policies in the form of external pressure on schools to change. However, when educational policies change too rapidly, schools may feel that they are forced from one type of improvement to another. Therefore, some stability in educational policies seems positive and necessary (table 12).

Table 12 Resources and working conditions

<i>The Netherlands</i>	The reduction of class size especially in the lower grades of primary education is supposed to enhance school improvement. With respect to stability of policies, schools are currently struggling with an unbalance between measures that reflect centralisation and measures that reflect principles of decentralisation.
<i>Finland</i>	Teacher unions may strongly promote or hinder improvement efforts, as they can support staff stability and reduce the workload for teachers. This also holds for resources such as budgets for educational means, the availability of teachers/lack of teachers, and the existence of national improvement projects.
<i>Belgium (French Community)</i>	-
<i>United Kingdom</i>	The current shortage of teachers and the problems with recruitment affects the ability of schools to focus on improvement. There is also concern about the

	number of teachers leaving the profession.
<i>Spain</i>	Working conditions of teachers and schools are important. So, elements such as teachers' stability, time for co-ordination of activities, and financial resources seem to be especially important if a successful process of change is intended.
<i>Portugal</i>	External financing and resources are important as well as the teacher career structure and inservice training needed for career steps.
<i>Italy</i>	-
<i>Greece</i>	Professional associations of (public school) teachers can enhance school improvement.

Local support

In addition to support as described above in terms of autonomy and resources, local support can be very important for effective school improvement. While the national support often sets the background for improvement, local support can influence the efforts of schools much more directly. Local support (table 13) includes the wider community of the school, the parents of school students, district officials, school administrations, and school boards.

Table 13 Local support

<i>The Netherlands</i>	A critical school board or groups of parents may exert pressure to improve.
<i>Finland</i>	The role of the municipality is considerable.
<i>Belgium (French Community)</i>	There are three types of schools, depending on distinct organising bodies which can be in the immediate neighbourhood (small communities linked to one school only) or very far (large communities or schools maintained by the French Community). Relationships between schools and organising bodies are thus quite different. Moreover, these are either public (elected representatives) or private (but funded with public funds).
<i>United Kingdom</i>	The local community context and district-level support are important.
<i>Spain</i>	Administrations may take measures concerning the development of improvement programmes.
<i>Portugal</i>	The local context and local support (municipalities) are important for schools.
<i>Italy</i>	-
<i>Greece</i>	-

Educational goals

Although schools have to set specific goals for improvement, the context of the school generally sets the wider educational goals. Improvement efforts will always have to fit in with these goals. When the goals are globally formulated, this will be much easier than when the educational goals are formulated in detail by the educational context (table 14).

Table 14 Educational goals

<i>The Netherlands</i>	There are core goals per school subject for primary and secondary education. These refer to the outcomes that are expected of students, but sometimes also to ways of teaching.
<i>Finland</i>	The work of schools is always target-oriented and intentional. Improvement efforts have to fit in with the goals.
<i>Belgium (French Community)</i>	Some educational objectives are given for all schools (such as to enhance self -

<i>Community)</i>	confidence and personal development of students, to warrant to all students equal opportunities of social emancipation).
<i>United Kingdom</i>	The government sets national, district and school level targets that have to be achieved in core subject areas.
<i>Spain</i>	Establishing new objectives from a new educational regulation is a positive pressure for the development of ESI processes.
<i>Portugal</i>	National goals for all schools are considered to support school evaluation.
<i>Italy</i>	The importance of long term educational outcomes is stressed. Skills that enhance lifelong learning and the vocational/professional career after compulsory schooling are examples.
<i>Greece</i>	The educational goals are set by the centrally designed curriculum. Full and accurate implementation of the curriculum is seen as of paramount importance for success in the university entry examinations.

3.6.2 School factors

As was stated earlier, the central place of the school in the comprehensive framework is based on effectiveness and improvement theories and research, which have shown that effective improvement requires school level processes. Teachers are generally considered an essential lever of change, because changes have to occur in their classrooms and their daily practices, but for effective school improvement individual teacher initiatives are not enough. Even when teachers succeed in achieving major changes in their classrooms with strong effects on student outcomes, this is not an example of effective school improvement as we have defined the concept. Although individual teacher efforts obviously can enhance student outcomes (the effectiveness criterion of ESI), they cannot really be expected to have a lasting impact on the school as an organisation (the improvement criterion of ESI). Improvement efforts initiated by one teacher will generally disappear for example when the teacher changes schools, unless the school as an organisation sustains the efforts.

With the term ‘the school level’ we do not mean that all improvement activities necessarily concern all members of a school staff. In practice, this will not happen very often, or it will only happen in small schools. Improvement efforts in secondary education or in larger primary schools often concern specific departments or other subsets of school staff, for example a group of teachers working in the same grades. In that case, we assume that the factors for the departments or groups of teachers will be essentially the same as the factors that we have depicted in the framework for the school. For reasons of convenience however, we will refer consequently to the school level. The important notion that effective school improvement always requires improvement efforts by more than one person is problematic for educational systems that have no strong tradition of school level improvement, even when teacher improvement activities may occur.

In the discussion of the factors that constitute the concepts of improvement culture, improvement processes, and improvement outcomes we will focus on the school level. Implications for teachers will be mentioned from this perspective.

Improvement culture

Schools with a favourable culture for improvement will start and continue improvement efforts more easily than schools who constantly try to avoid changes and are fearful of improvement. The improvement culture can be considered the background of all improvement processes in the school. Factors that constitute the culture are the following:

- internal pressure to improve,
- autonomy used by schools,
- shared vision,
- willingness to become a learning organisation/a reflective practitioner,
- training and collegial collaboration,
- improvement history,
- ownership of improvement, commitment and motivation,
- leadership,
- staff stability,
- time for improvement.

Internal pressure to improve

Schools can sometimes be forced into improvement by their educational context. However, schools can also decide on their own that they want to improve. For example, schools may find out that their teaching procedures are no longer suitable for their students, or schools want to improve the outcomes of students in a certain school subject. This often happens when the student population of a school changes. Students and parents, as well as critical school boards, may give signs that improvement is needed. In this case, the pressure to improve and the motivation for improvement mainly come from within the school (table 15).

Table 15 Internal pressure to improve

<i>The Netherlands</i>	Internal pressure is often dependent on external stimuli for changes (for example budgets for training and school counselling).
<i>Finland</i>	For the success of a school's improvement it is important that the pressure to improve mainly comes from within the school.
<i>Belgium (French Community)</i>	For some years, schools have been implementing compulsory dialogue meetings for which some time periods are allocated (primary education). Each school had to implement a consultative participating council gathering teaching staff members, parents and local actors (all schools).
<i>United Kingdom</i>	Internal change agents can often be the catalyst for improvement, for example, a new principal or a review of examination data.
<i>Spain</i>	It seems evident that the main change engine is the school itself noticing that it needs to improve. However, it is very difficult to have empirical evidence of this.
<i>Portugal</i>	Internal pressure is not very important. The school environment and the student background in a school however can act as a pressure to change.
<i>Italy</i>	-
<i>Greece</i>	Internal pressure may come from the environment of the school, parents and students who want to succeed in the university entry exams.

Autonomy used by schools

Earlier it was stated that the educational context should grant schools at least some autonomy in order to carry out improvement. This implies however that schools can actually use their autonomy in improvement processes. Although this seems a logical step, in practice it is not. Sometimes schools are not fully aware of the possibilities or they simply do not use their powers fully, for example when there is no effective leader. While autonomy is needed for the success of schools, the same holds for teachers. When improvement activities are merely forced upon them by the senior staff, implementation may not occur or just rudimentarily. Therefore, it is essential that teachers can participate in decision-making processes with regard to school improvement (table 16).

Table 16 Autonomy used by schools

<i>The Netherlands</i>	Schools are recently becoming increasingly autonomous formally, but they still have to get used to their autonomy.
<i>Finland</i>	The participation of teachers in decision-making processes is necessary.
<i>Belgium (Fr.Comm)</i>	-
<i>United Kingdom</i>	Schools that successfully implement improvement are those that have the capacity to work creatively within the parameters set by the external goals and to adapt those goals to meet their own purposes.
<i>Spain</i>	School autonomy in the field of school organisation, resources management, curriculum and teacher management is considered essential for school improvement.
<i>Portugal</i>	Schools, although they have some autonomy now, are not used to see themselves as organisational units.
<i>Italy</i>	
<i>Greece</i>	By law schools are granted no autonomy. In practice there is wide variation in way public schools function, due to lack of supervision and control. This however should not be seen as the result of planned action at the school level, but rather as the result of teacher's initiative. Private schools see themselves more as organisational units; a result due to the managerial role assumed by the owner/head teacher.

Shared vision

A shared vision on education in the school clarifies which goals the school tries to achieve and in what way they try to do so, and which values are promoted or disputed. Without a clearly stated vision, schools cannot explain to others what they stand for. Also, they cannot track down which elements in the school are not in accordance with their vision and consequently need to be changed or improved. Preferably, the vision of the school is discussed with parents and students and also shared by them (table 17).

Table 17 Shared vision

<i>The Netherlands</i>	The development of a shared vision has been in the forefront of several Dutch improvement initiatives.
<i>Finland</i>	Schools need a good culture of discussion. One of the main disciplines of a learning organisation are shared visions. Because a learning school inevitably is an open organisation, discussions are shared with all individuals and groups that

	are somehow co-operating.
Belgium (French Community)	Each school (public or not) has to define and to write a school project which is submitted to the Ministry.
United Kingdom	Having a shared vision is important although it takes time to achieve.
Spain	This element has proved to be very relevant in Spanish schools.
Portugal	The independence of teachers in their classrooms does not allow for the development of a shared vision.
Italy	
Greece	The school as a organisation is not a concept that fits the Greek situation. Especially in the public school sector there is no school vision.

Willingness to become a learning organisation/ a reflective practitioner

A major factor of the school culture that favours improvement is the willingness to become (or stay) a learning organisation. Schools who see themselves and their educational procedures as merely static and who are not willing to reflect on their situation are not likely to start improving. In these schools, activities such as training and coaching of staff will be rare. Schools who have a more dynamic view about themselves and who accept changes as a regular part of life show more characteristics of a learning organisation and will feel the need to improve more quickly. Training and professional development will be regarded as standard activities for the school staff.

Learning organisations cannot function without personnel who are convinced of the need for continuous professionalisation. Therefore schools need teachers who are willing to become reflective practitioners (table 18).

Table 18 Learning organisation/reflective practitioner

The Netherlands	In general schools are not acting as learning organisations yet.
Finland	In order to fulfil their tasks and to survive schools must become learning organisations whose members are reflective practitioners.
Belgium (French Community)	Schools usually do not act as learning organisations.
United Kingdom	Organisational learning and professional development and important factors in English schools.
Spain	The idea of the learning organisation is not usual in the Spanish educational system. Nevertheless, data show its incipient relevance.
Portugal	Schools would like to become learning organisations, but they are not strong enough as organisational units to really allow it.
Italy	
Greece	The school as an organisational unit is not strong and there is no challenge (and limited willingness) to become a learning organisation.

Training and collegial collaboration

For schools, it is important that they are willing to become or stay a learning organisation. In the same sense it is important for teachers who are involved in improvement that they are willing to perceive themselves as learners. This implies that they are willing to participate in training, development, and collaboration with other teachers whenever improvement efforts call for these forms of schooling (table 19).

Table 19 Training and collegial collaboration

<i>The Netherlands</i>	In most schools teachers work independent of each other. There is more collaboration in primary schools than in secondary schools.
<i>Finland</i>	In a learning organisation as the school should be, it is always necessary that every individual learns more. Because of the growing challenges however individual learning is not enough. Staff members must learn how to learn from each other. Both individual and collegial learning are needed.
<i>Belgium (French Community)</i>	Teachers work mainly independently of each other rather than in teams and they are individually inspected and controlled.
<i>United Kingdom</i>	Whole school collaboration is more easily achieved in primary schools than in secondary schools.
<i>Spain</i>	The most successful ESI experiences are clearly those in which teachers have worked collegially.
<i>Portugal</i>	Teachers are not used to work in teams. School-based inservice training for teachers is very rare.
<i>Italy</i>	-
<i>Greece</i>	There is no strong sense of being a team in teachers. They are not used to collaboration.

Improvement history

Schools that have succeeded in bringing improvement about will easier start new efforts. On the other hand, for schools that are hardly used to improvement it is hard to find their way (table 20).

Table 20 Improvement history

<i>The Netherlands</i>	Improvement history may influence improvement efforts positively when the school has a positive history (successful efforts in the past). When the factor has a negative meaning for the school, its influence may be negative though.
<i>Finland</i>	Information from the past and the present is needed to realise and choose one of the possible alternatives to bridge the gap between the present and the future.
<i>Belgium (French Community)</i>	-
<i>United Kingdom</i>	A school's improvement history may be a positive or negative influence. A positive previous experience is more likely to lead to further improvement efforts
<i>Spain</i>	In Spain, there are not many schools with an improvement tradition. But in those cases in which schools are used to carry out improvement processes, this element has proved to be especially relevant.
<i>Portugal</i>	An improvement history is not seen as an important condition to start improvement.
<i>Italy</i>	-
<i>Greece</i>	Improvements are designed at the central level and passed on to schools in the form of school reform, equally applicable to all schools. In this form improvement is a continuous process. However schools do not have a history of implementing improvement programs at the school level designed to meet particular school needs.

Ownership of improvement, commitment and motivation

Ownership of school improvement refers to a feeling in the school that improvement is needed and surely must be undertaken, and that the activities that are planned are the right activities. Ownership will be more common in schools that are able to influence or fully define the focus and the type of improvement that they will engage in. Improvement will be very hard when the school does not feel the necessity to actually start and continue improving. Ownership issues are strongly related to issues of commitment and motivation of the school staff. Teachers must show at least some motivation and commitment to the improvement plans of the school. When commitment is not automatically present, the school should try to develop it after all before the improvement process goes on (table 21).

Table 21 Ownership

<i>The Netherlands</i>	Although ownership seems important, in practice improvement sometimes starts before ownership has been established. This is because the decisions about improvement are not always taken by the persons who will have to perform improvement activities.
<i>Finland</i>	It is widely known that performance (P) is the function of motivation, readiness and circumstances { $P=f(MxRxC)$ }. If one of them is weak, performance is weak. If one of them is totally missing, performance is missing. In a learning school, every member must be committed and willing to act.
<i>Belgium (French Community)</i>	-
<i>United Kingdom</i>	Successful school improvement often happen in schools where time and energy have been spent on creating a climate of shared ownership.
<i>Spain</i>	Teacher ownership and involvement in the school are important.
<i>Portugal</i>	Even schools with an improvement history do not really feel that they have ownership of improvement processes.
<i>Italy</i>	-
<i>Greece</i>	-

Leadership

Without leadership, improvement efforts are unlikely to succeed. Often the school principal is seen as the most appropriate leader, but this depends to some extent on his or her professional role. Sometimes the school culture simply does not allow for a strong leader who clearly guides the other staff members. This may happen for example in countries where the relationships between principal and teachers are based on equality and collegiality rather than functional hierarchical differences and teachers will not easily accept authoritarian behaviour of the principal. It is important however that at least one person or a cadre (a group of people) is qualified to take the lead in improvement efforts of schools and subsequently is clearly acknowledged as the leader (table 22).

Table 22 Leadership

<i>The Netherlands</i>	Leadership is becoming more and more important in Dutch schools.
<i>Finland</i>	Leadership and management are both needed. The principal can be seen as a conductor in an orchestra. Sometimes he has to be more visible, sometimes he is more in the background.
<i>Belgium (French Community)</i>	Leadership (by the principal) is not an obvious concept in Belgium, where teachers are still rather isolated and principals mainly have administrative tasks.
<i>United Kingdom</i>	Leadership, particularly of the principal, is seen as important. Improvement however is also generated by other staff members in an informal leadership role.
<i>Spain</i>	The democratic model in the election of the school principal makes him/her to be the natural leader of the school, with a high capacity to put energy into teachers. The management team has always had a core role in change processes.
<i>Portugal</i>	Although leadership by someone in the school is clearly important, leadership by the principal is not so important in Portugal, because principals have mainly administrative tasks.
<i>Italy</i>	Principals in Italy tend to be managers in the first place, not educational leaders.
<i>Greece</i>	Leadership of improvement efforts is exercised by the Ministry of Education. The principal has an administrative role.

Staff stability

Some stability in the staff should be guaranteed when schools are improving. It is not only inefficient but also often rather useless to start improving when the continuity of the improvement efforts is at stake because of staff turnover. However, a static staff can also act as a block to improvement efforts (table 23).

Table 23 Staff stability

<i>The Netherlands</i>	-
<i>Finland</i>	Staff stability may promote or hinder improvement. Sometimes staff turnover may bring about new ideas that facilitate improvement initiatives.
<i>Belgium (French Community)</i>	-
<i>United Kingdom</i>	Staff stability can have a positive or negative influence. A balance of new and more long standing staff is needed.
<i>Spain</i>	If there is not a minimum staff stability, it is impossible to develop ESI processes.
<i>Portugal</i>	Staff stability was not seen as particularly important.
<i>Italy</i>	-
<i>Greece</i>	In the public school sector staff stability is a problem, because teachers are centrally placed at schools and are often moved. In the private school sector staff is more stable, as the school has the ability to hire personnel.

Time for improvement

The school organisation should grant all staff members involved in improvement some additional time for their improvement activities, for example for consultations with colleagues or trainers. Improvement should be considered a professional task that simply cannot depend on the goodwill and spare time of the school staff (table 24).

Table 24 Time for improvement

<i>The Netherlands</i>	Sufficient time is important for the initiation and continuation of improvement. However, time for improvement will not guarantee the actual start of improvement efforts.
<i>Finland</i>	Improvement needs time. Short steps are necessary so that as few as possible give up trying.
<i>Belgium (French Community)</i>	There are continued professional training sessions but usually teachers are not stood in, which is quite perturbing for the school organisation.
<i>United Kingdom</i>	Time is definitely an issue for school improvement in English schools. There is concern that the pressure exerted on teachers by national policy decisions has a negative effect on improvement implementation.
<i>Spain</i>	It is necessary that people involved in ESI processes have additional time available.
<i>Portugal</i>	Time for improvement is not seen as important, because secondary school teachers can have class hours reduced in order to work in improvement projects.
<i>Italy</i>	
<i>Greece</i>	The time teachers spent in school is seen as crucial for improvement. The working conditions of public school teachers are a reason for spending limited time in schools. This is not the case in private schools.

Improvement processes

Some schools perceive improvement, in as far as they will get engaged in improvement efforts at all, as an occasional task. Whenever some problem arises, something is done , but after that business goes on as usual. These schools hold a rather static view on improvement. More dynamic schools will consider improvement as an ongoing process and as a part of everyday life. Improvement efforts are continuous, cyclical by nature, and embedded in a wider process of overall school development.

Although improvement processes will rarely move neatly from one phase to the next there are clearly identifiable stages in any successful improvement process . These stages may overlap or return repeatedly before the full cycle of improvement is at its end. Planning for example will often not be a one -time activity that takes place relatively early in the improvement process, but instead planning activities and adaptations of earlier plans may be needed on a continuous basis. This is especially so for complex improvement efforts that involve many staff members and cover more than one school year.

- The cycle of improvement processes starts with a phase of need assessment. Before a school can start improving, it must be clear why improvement is required in the first place and what the starting situation of the school is. Such an assessment can be made by representatives of the school (self-diagnosis, self-assessment) or by others, in the form of an audit.
- The assessment phase ends when a diagnosis of the problems of the school that need to be solved is delivered. Sometimes the improvement processes are merely mandated by the educational context, for example by educational laws. However, then too needs assessment in the school is needed in order to fit the general requirements sufficiently to the particular needs of the school.
- The next phase concerns the phrasing of detailed goals that the school wants to achieve in the improvement process. General goals (for example, higher achievement

of students, a better attitude of students, and the introduction of information technology in the school) must be specified into more detailed goals and subsequent activities that are linked to these detailed goals. These can function as support for the persons involved in the improvement efforts. The goals must be phrased in terms of student outcomes or as indicators of success e.g. school or teacher characteristics that promote outcomes.

- The next phase concerns the planning of the actual improvement activities. In this phase, commitments must be made about the time needed for activities. Also, the person(s) in charge of the planning have to face:
 - decisions about priorities and the order of activities (tackling visible issues first, especially when the improvement undertaken is very complex),
 - strategies that will be applied (such as inservice training facilities for teachers, professional courses outside the school, or coaching by staff members),
 - the (possible) contacts with external agents and the tasks of these agents in the school,
 - the (possible) appointment of internal agents and their tasks in the school,
 - the division of tasks among other persons in the school,
 - the use of incentives (will there be specific rewards for persons involved in the improvement efforts),
 - the role and authority of persons involved in the improvement efforts, so that there will be no misunderstanding about these roles and the power relations in the school,
 - the role and influence of students, parents and the community in the improvement efforts,
 - the way in which results of the improvement efforts will be communicated to everyone involved during and after the improvement process.
- The implementation phase follows directly after the planning phase and may also influence the further planning of activities, when developments take another turn than was initially expected. The precise focus of implementation depends on the goals that the school wants to achieve in the improvement process. Generally speaking, the implementation phase is the most substantial phase in the cycle of improvement. When implementation is not successful, all preceding efforts have been in vain and the pursued goals will not be achieved. Also, the implementation phase will generally involve more persons in the school in improvement activities than the other phases do. Teachers are central in this phase. When they do not implement the essential elements of the improvement plans, effects cannot be expected. For successful implementation, regular feedback is necessary.
- The final phases of the cyclical improvement process, that may form the input for a new cycle of improvement, are evaluation and reflection. The school assesses by means of self-evaluating procedures whether the goals of improvement have been achieved sufficiently. External agents can also perform these procedures, if this was defined in an earlier stage as one of their tasks.

In effective school improvement, the cyclical improvement processes will be coordinated at the level of the school, the department or a subset of involved persons. In actual educational practice phases may sometimes be mainly executed at the context level (for example, when the national government sets goals and schools are obliged to follow)

or the teacher level (for example, when the school level is not strongly developed and improvement is left to the initiative of teachers). In principle however we assume that effective school improvement needs co-ordination at the school level in all phases of the cyclical processes (table 25).

Table 25 Improvement processes

<i>The Netherlands</i>	Regularly school improvement is co-ordinated by persons outside the school, such as school counsellors. This may not promote the sustainability of improvement.
<i>Finland</i>	When co-operating no one can have a journey free of charge. Everyone needs a ticket. Co-ordination in the cyclical processes is inevitably needed.
<i>Belgium (French Community)</i>	-
<i>United Kingdom</i>	There is a strong culture of school development planning in English schools and school self-evaluation is becoming increasingly important. This necessitates being comfortable in using school data, both quantitative and qualitative, including evidence of student voice.
<i>Spain</i>	A previous diagnosis, a detailed planning, an adequate implementation and the evaluation of the process of change are elements considered essential by teachers involved in change processes
<i>Portugal</i>	Involvement in cyclical improvement processes, opportunity to learn and cohesion among staff members are seen as the main conditions for effective school improvement.
<i>Italy</i>	-
<i>Greece</i>	Improvement processes are found at the context level to some extent, but are only passed on to schools as top-down improvement programs. Improvement efforts at the school and teacher level merely reflect instances of self-regulation that can be performed in the absence of supervision. This kind of improvement (which is not always explicitly considered as intentional improvement by teachers) mostly is executed by some teachers without involvement of the principal.

Improvement outcomes

Improvement efforts of schools ideally focus on a clear set of goals that should be achieved in a certain period of time. When goals are vague or unclear, improvement efforts are more bound to fail simply because it is not clear where they should lead to. The goals for effective school improvement should be stated in terms of student outcomes (the effectiveness criterion) or in terms of school and teacher factors that are supposed to influence student outcomes positively (the improvement criterion). This means that schools that want to improve pursue:

- Goals that are directly phrased in terms of student outcomes. These student outcomes reflect a wide range of knowledge, skills and attitudes and are not narrowed down to cognitive basic skills achievement only. For example, to enhance the role that students have in their own learning processes can be an improvement goal.
- Goals that are phrased in terms of changes in the quality of the school or the teachers. This type of improvement goals concerns for example changes in the school organisation, teacher behaviour, or the materials used by students. In this type, student outcomes still are the ultimate goal but the improvement efforts are focused

on effective school and classroom/teacher characteristics that will enhance outcomes (table 26).

Table 26 Improvement outcomes

<i>The Netherlands</i>	Goals in terms of student outcomes are becoming more common in improvement efforts.
<i>Finland</i>	Without a focus on outcomes, improvement processes can easily become entertainment and seeking of pleasure during school hours. The role of students has to be clear, perceivable and important to all of the teaching and learning processes.
<i>Belgium (French Community)</i>	There are no data available to evaluate the system and its improvements. There are no national evaluations that might be used as tools.
<i>United Kingdom</i>	Goals are important. Externally set goals need to be worked with in order to meet the schools own goals of improvement.
<i>Spain</i>	-
<i>Portugal</i>	Learning environment, classroom climate, positive reinforcement and feedback are considered as particularly important.
<i>Italy</i>	-
<i>Greece</i>	-

4. Conclusions and policy implications

As we stated earlier, we developed a draft model for effective school improvement based on an analysis of theories and case studies. The draft model needed revisions, as we concluded particularly on the basis of the country conferences. The function of the model needed clarification, its representation should be more dynamic, the context should be emphasised much more strongly and the focus on outcomes derived from the effectiveness literature was considered too narrow. The model should also allow for more general societal goals to be pursued by schools, simply because schools are supposed to do so by the governments of their countries.

Therefore we revised the model and decided to change its name to 'comprehensive framework', because we were not able to construct a model in the strict scientific sense. The state of the art in the international literature on improvement issues still makes it very hard to build a model which can predict success or failure of improvement efforts. Also, the variety of context factors in the ESI countries makes it hard to fill the key concepts in a model with factors that apply for most countries.

As a consequence, we have presented our framework as an abstract, basic picture which shows the main concepts and relations between concepts that play a part in improvement efforts in all ESI countries, albeit in different ways. We have put the improving school in the centre of the picture, embedded in the wider educational context of a country. The context exerts pressures to improve in various ways, offers resources and requires the achievement of certain educational goals. However, the expectations of the educational context must be accomplished in the schools. In schools, we must study the improvement culture, improvement processes and improvement outcomes to find out why some efforts succeed and others fail.

We have divided the concepts in the framework into more specific factors, which together constitute the main concept. We have presented an explanation per country per factor, because of the sometimes massive differences between countries. By this procedure we have tried to clarify elements of effective improvement practices in all countries by means of a similar set of factors and concepts. Moreover, this procedure clearly shows similarities and differences between countries and their potential influence on improvement efforts.

The functions of the framework

The comprehensive framework for effective school improvement is neither fully descriptive, nor fully prescriptive in character. Instead, it contains descriptive elements such as the factors, which constitute the national educational context but also prescriptive elements. For example, the central place of the school in the framework is based on effectiveness and improvement theories and research that have shown that effective improvement requires school level processes. Although the importance of teachers and their work in classrooms is certainly acknowledged, individual teachers are generally not considered the main lever of change for effective whole school improvement. Even when teachers succeed in achieving major changes in their classrooms with strong effects on student outcomes, this is not an example of effective school improvement as we have defined the concept.

Although isolated teacher efforts can surely enhance student learning outcomes (the effectiveness criterion of ESI), they cannot really be expected to have a lasting impact on the school as an organisation (the improvement criterion of ESI). As a consequence, the most important level in the model is the school level. For some countries, improvement efforts in secondary education or in large primary schools may also concern specific departments or other subsets of school staff. In that case, we suppose that the factors for the departments will be essentially the same as the factors that we have depicted in the framework for the school. A second prescriptive element in the framework is the focus on student outcomes as important improvement outcomes. For improvement to be effective there must always be a link, at least at the conceptual level, with student outcomes pursued by the school.

The comprehensive framework aims at three different target groups: practitioners, researchers and policymakers.

- For practitioners, the framework can be useful in the design, planning and implementation of school improvement. The framework gives an overview of all factors that may promote or hinder effective school improvement and as such it can be used as a way of exploring educational practice. However, schools must translate the factors in the framework to their own situation and tailor them to their own needs. The framework can never prescribe how a specific school in a specific country should act in order to achieve effective school improvement.
- For researchers, the framework is especially important for further research in the field of effective school improvement. The framework can be used to generate hypotheses and to select variables that should be investigated and further operationalised. It presents an overview of relevant variables but does not specify criteria (such as how often school evaluation should take place to have an impact on improvement outcomes). The international dimension of the framework, reflected in the ample attention for the context factors, provides insight in the influences of these factors across countries but also within countries. In traditional improvement research, the educational context is often excluded. Its importance is rarely acknowledged and analysed.
- Policymakers have to be aware that the framework can never be used as a recipe for effective school improvement or as a ready-made toolbox for the implementation of improvement in schools. The framework merely clarifies which factors must be taken into consideration in the planning of improvement processes in schools. It also shows which conditions must be taken into account, both at the context and the school levels. The framework may help policymakers to see how important school improvement is for student outcomes or how important the school is as a meaningful unit for improvement. Also, the framework shows policymakers how strongly schools are influenced by the context. This implies that adequate context measures will often be needed in improvement efforts. Leaving the school to improve on its own will often not be a realistic option.

The statements above make clear that the framework will always need interpretation whenever it is used, whether it is used for practice, research, or policy. Keeping this constraint in mind, the framework may have the following functions for practitioners, researchers, and policymakers:

- it can start a debate and it can contribute to ongoing discussions about effective school improvement,
- it can introduce new arguments in a debate and thereby assist in decision -making,
- it can act as an eye -opener about improvement factors which are different in different countries,
- it can be used as a tool for the planning, designing, implementation, evaluation, and reflection of improvement projects and research on effective school improvement,
- it can be used as an input in teacher training.

The exact functions of the framework will, however, always be dependent on the context in which it is used and the persons who use it.

We will now go into more detail about the policy implications of the ESI framework.

Policy implications

The school as centre of improvement

Effective school improvement requires school level processes aiming to enhance the quality of instruction in classrooms. Individual teachers can never promote lasting changes in the school. The school organisation may add or subtract value to that of its individual members. In schools with little team collaboration, we might expect to find a large variation in the performance of pupils. In a well led and managed school the chances of seeing less variation and greater consistency across the school are higher. In this way there is a 'school effect', adding value to that of individual teachers.

The school as the central level for effective improvement is by no means self -evident in the participating countries. In some countries policymakers use effective school knowledge, which point at the importance of the school as organisation. Schools are held (more or less) accountable for results (to be controlled by the inspection; to be published in newspapers and the internet) and the development of schools as learning organisations is fostered (e.g. peer coaching, team staff development, schools receiving ear -marked funds for staff development).

In most countries the school as organisation does not play a major role in effective school improvement. The teachers or the context are the most important units. Some examples show the relative low importance of the school as d rive for ESI: teachers work independently (without a school plan of common goals and methods); inspectors assess only teachers (not the schools); teachers are placed centrally at schools (which might reduce their involvement in school improvement); the pri ncipal's main function is administration (educational leadership is not fostered); the principal is elected for a short time period (in this way reducing his/her central role in managing school reform).

The context level is the most important in one of the participating countries. Teachers are supposed to apply educational policies. In this situation schools and teachers are not supposed to initiate improvements on their own.

The ESI model shows that an improving school is firmly embedded in the educationa l context of a country. The improving school is always confronted with three main contextual factors: educational goals, pressure to improve and resources for improvement. Even when schools are free to decide about their improvement outcomes,

these will always have to be in line with the wider educational goals that are determined in the context.

Educational goals

The model stresses that improvement efforts will always have to fit within the national educational goals. How global or specific national goals should be is a matter of debate. The development of many, highly specific, goals may result in complaints about overloaded curricula and has a tense relationship with school autonomy. Global goals do not function as frame factors for schools and teachers. National goals should be realistic and not too detailed, allowing schools and teachers a certain autonomy in order to adapt goals to school's needs.

Pressure to improve

Schools often need some form of external pressure from the educational context to start improving. In the model four types of pressure are distinguished.

b. Market mechanism

The market refers to competition between schools. The idea is that competition will be an impetus for schools to improve. In an educational system where decentralisation leads to more autonomy for schools, competition between schools is likely to increase. The positive side is that the consumers (parents) will be better informed about the schools' quality. Participants also mention a lot of dangers of schools as a market place, such as parents preference for traditional schools, the creation of white and black schools, inequality between schools. Policy makers should try to reduce the negative aspects of market mechanisms.

d. External evaluation and accountability

External evaluation generally concerns the measurement of student outcomes with a national validated test (related to national objectives). When schools are held accountable for their results in terms of student outcomes, and when these outcomes are made public, schools often feel the pressure to change student outcomes in a positive way. External evaluation is valued positively by scholars (not by teachers) but it can also lead to negative consequences (e.g. helping students with the test; approval of cheating) if sanctions are high (closing down of schools) or when evaluations are not fair. Policymakers should facilitate external evaluations at regular school periods, present the evaluations in a fair way (value added) and use the information especially for the improvement of schools.

e. External agents

External agents such as inspectors, policy makers, educational consultants and researchers may push schools to improve by giving suggestions what and how to improve. Policymakers should encourage the existence of (high quality) external agents and their function as facilitators of effective school improvement.

d. Participation of society in education and societal changes

The society influences schools in many ways and demands school improvement whenever necessary. These influences are often mediated by government policies responding to these influences. These influences are visible in for example changes in national educational objectives, ways of learning (learning to learn how to study), new themes (information technology), etc. Sometimes these changes are receiving wide support (ICT), but there is a limit to the amount of changes schools are willing to perform. Policymakers have to be careful not to overload schools with innovations.

Resources (support) for improvement

Material and non-material forms of support are essential for effective school improvement. In the ESI model three forms of support are distinguished:

d. Autonomy granted to schools

Autonomy of schools relates to several domains such as: educational goals, educational means, organisation (personnel, management, administration) and finances. For effective school improvement some autonomy is necessary because improvements which do not tailor to school's needs, are likely to fail.

e. Financial resources and working conditions

With sufficient financial resources and time, improvement will succeed more easily. Large classes, a large amount of teaching hours and instability of education policies do not contribute to the motivation to improve.

f. Local support

Local support refers to the support from parents, district officials, school administrations, and school boards.

Implications for policy makers in different countries

The different country teams have been asked to draw conclusions for policy making if they compare the suggested context factors in the framework with the existing educational policies in their countries. They report the following implications.

Belgium (French speaking Community)

A monitoring service and a juridical frame are available in the French Community of Belgium, which help it, at least theoretically, to make progress in the domain covered by the ESI project. The major part of the implementation of these services remain still perfectible. University services help, including in those fields, to spread abroad, to support and to encourage initiatives which are, for a large majority of them, under the responsibility of schools themselves. The Belgian education system is indeed based on education freedom. It is thus usually proper to act on the persuasion mode, which leads sometimes to very important heaviness and delays. The ESI project fits with the general

options presently promoted by the education authorities and the most progressive currents. A particular effort will need to be made by the concerned authorities and services, in order to manage to offer to schools the instruments necessary to the improvement of local practices. For instance, the number of external agents is still quite reduced. Till now, there are very few solutions to get those external helps, as there are very few professional individuals trained in that field. Some particular training should be implemented and a real expertise net should be easily available for every school which asks for it.

The notions of quality and improvement of practices are still very vague for a great number of the system actors. The lack of communication in that field is sorely felt. The freedom of choice of the school does not favour a true will, among parents, to contribute to the improvement of the school where their children were enlisted at a given moment, and a consumerist logic too often spoils the relationships between parents and teachers.

Quality control made by objective but benevolent means is almost non-existent. It should be developed in the current legislative frame by a reinforcement of the administration capacities in that field. The part of the inspection should also be questioned. This subject will undoubtedly be an inescapable area in the next years.

Continuing training of teachers, currently very orientated towards school disciplines and aimed at teachers as individuals also needs to be re-defined, in order to fit better to the spirit given by the legislative reforms and the acquired knowledge, included in the frame of the ESI project. Related initial training is presently reviewed. It is reorganised in the perspective developed by the "Mission Decree" and is reinforced for future teachers of the upper secondary education.

England

Policy in England has been drawing on and adapting findings from research on school effectiveness and improvement for some years. The results of this study will provide a useful addition to existing research knowledge with implications for policy in that the ESI comprehensive framework emphasises the close but dynamic relationship between context and capacity. Within the current policy climate of accountability, the current instrumental approach to school improvement favoured by policy makers tends to be at odds with this evidence. The sole focus on student outcomes (and particularly a particularly narrow range at primary level) as a measure of school success inhibits schools at different stages of development from engaging with the improvement process and building on small successes. The ESI project demonstrates that real improvement takes time and needs to be nurtured and schools need this to be in their action plans for improvement rather than being decried for not attaining ultimate goals immediately. The capacity for continuous improvement has to be built in relation to the school's context, whether internal or external, political or cultural.

There was a real indication from the ESI project that control of the improvement/change agenda needs to come from within, and be retained in, the school even if the motivation for that change has come from external policy changes. This is particularly important in the English policy context where there is a teacher recruitment problem: teaching is not viewed as a desirable profession by many at present. Empowerment is, therefore, a real issue for teachers working within an increasingly centralised system. In England, the ESI project has also identified that there needs to be greater use of pupil voice in understanding the process of improvement and a role for them in its development.

Finland

The components in the ESI model are considered worthwhile for Finland. In Finland equity is an important theme. For that reason the affects of market mechanism are considered more negative than positive. After the economic crisis the role of municipalities has been more important. If municipalities have a different education policy, this can create undesirable differences between schools. Teacher unions can create positive effects (staff stability and reduction of workload) but also negative ones. External agents are not so important because teachers are highly trained (university degree). The role of information technology will be an important one for Finland in the near future.

Greece

The particularities in applying the ESI model in Greece need to focus mainly on contextualising each process and step, since the main feature of the Greek education system appears to be its centralized organization and function. The context level factors identified by the model appear to be fully functional, while the (public) school, as a unit (or level), appears quite “weak”. One could argue that in the Greek educational culture (public) school improvement is primarily related to centrally planned and initiated educational reforms. It is certainly anticipated as such, not always, but quite often.

Given the above, a centrally initiated reform could allow public schools reorganization in a way that would make the school level factors identified by the ESI model functional. Assuming that the Ministry of Education (MoE) is more than often willing to pursue reforms, changes, restructuring and the like, the following would be appropriate policy recommendations:

In the Greek case both *resources for improvement* and *educational goals* are set and handled at the context level (i.e. the MoE). The research undertaken indicates that in order for the ESI model to function, it is imperative that schools are granted a higher degree of autonomy. This could be achieved through a variety of measures, such as:

- It is rather important that at least part of the curriculum (say 10%) is “freed” in practice, by providing to the teachers both the means as well as the incentives to “invent” the additional activities for their own students and the environment of the school. The national curriculum should set specific educational goals for each grade and give incentives to the teachers to depart at least partially from the set content/task allocation. Such action would make it possible to tailor their teaching practice to the needs of the specific pupil population of each school.

- It is significant to devise a procedure of both internal and external evaluation, in order to monitor schools' outcomes. Internal evaluation could especially help the teachers to better understand how they could adapt their teaching practices in order to achieve the desired results. In this respect, the precise steering of an external change agent could direct the efforts of teachers in the desired way.
- Change of teachers' terms of employment. Teachers are presently employed for 18 hrs/week and are paid rather low wages. The few hours they spend on the school premises combined with frequent transfers upon their own request from one school (or geographical area) to another, hampers the function of the school as a unit and prevents the development of a common purpose among the school staff. Public School teachers' reaction to their terms of employment formulates a climate not conducive to the improvement of teaching practice as motivation is lacking. On the other hand such transfers are definitely contributing to the well-being of the teachers, since it is practiced on the basis of their own will.

Pressure to improve (at the context level) seems at present to be related to a definition of "school efficiency" which suggests a specific role for secondary education, the main purpose of which is to "prepare" pupils for the highly competitive university entry examinations. School's main function is to provide the necessary skills and qualifications that will allow the pupils to compete successfully in the university entry examination. This pressure for school improvement is directed primarily towards the MoE and affiliated agencies (mainly the Pedagogic Institute) that are responsible for the design and the implementation of educational policy at the context level. It is, also directed at the school and the teacher level, especially as students move towards the end of basic education.

As long as secondary education has this specific role it seems improbable that social pressure will focus more actively, than it is now, towards effective school improvement (in the sense specified by the ESI model). This would presuppose a dissociation of success in secondary education and successful entry into the higher education level. As long as replication of the content of the nationally distributed textbooks is a prerequisite for success in the Panhellenic university entry examinations, there will be pressure on the teachers to restrict their practice to the full implementation of the national curriculum and on students to direct learning towards mastering of content knowledge.

So, it seems inevitable that the most important recommendation addresses an issue which at first site is situated outside the obvious realm of the school improvement thinking and practices. This recommendation addresses the question of the structure of the university entry examination and demands a change there, in terms of both content as well as teaching/evaluation approach. It requires the radical re-visiting of the selection procedure. It is possible though that such a change, which happens often but keeps the same premises, will inevitably appear as a result of the drastic reduction of the numbers of students in the cohort (reduced births), and, therefore, a complete change in the current fierce competition for university places.

Italy

The Italy education system is nowadays realising a deep transformation process, which involves both administration organisation structure and school organisation structure, specially: administration, curriculum, teachers, etc. The most important principles which

have guided this transformation are the de-centralisation of system education and the autonomy of schools.

The autonomy allows all schools to take many decisions in aspects concerning curriculum, financing and administrative organisation, time organisation, but not in human resources management. This higher degree of autonomy intends to consolidate the school as the basic educational unit.

The ESI Model is important as a general model, with others, to improve the school internal evaluation; it fits with the general model promoted by the institution Cede too, in order to manage and to improve the school service.

Portugal

The educational reform going on in Portugal during the last decade has been particularly concerned by ensuring school democratisation and mainly to avoid early drop-outs, i.e., still during the nine years of compulsory education.

The autonomy granted to schools by this reform have been slowly implemented mainly due to a long tradition of a very centralised educational system where teachers are centrally allocated, school leadership is limited by legislation and teachers culture. Curriculum is determined by national syllabi but classroom practices are considered to be the decision of individual teachers, whose advancement in the career is determined by in-service training that, in spite, of some political recommendations is still a teachers' decision and not, in general, school centered.

This situation explains how schools' change has been more stressed, in Portugal, than school's effectiveness.

There are however some recent changes. Some developments of the reform, to be implemented next school year, give more responsibilities to schools on curriculum management at school level and classroom level. If this policy is still centered in school improvement, it reinforces schools' autonomy. There are, however, other evidences that show that school effectiveness is becoming a political and public concern.

At political level we can trace this trend by the importance given to the implementation of national tests for monitoring purposes in Portuguese and Mathematics at the end of school "cycles". This policy initiated, two years ago at the end, of Primary Education, has been extended, this school year, to the pupils at the end of 2d cycle of lower secondary, and will involve, next year, all pupils at the end of compulsory education (3d cycle). Other political decisions following this trend are, for instance, the new role given to inspection on school assessment and the implementation of a national agency that controls initial training in private and public Polytechnics and Universities.

The interest of public opinion on school effectiveness can also be traced by recent debates, largely diffused by the media, about giving or not more publicity to schools results, establishing school's rankings etc. It seems that there is a growing public pressure to move from the global information given about the system, to more detailed information about individual schools. Last month a national newspaper have published all inspection reports on the individual schools assessed last year, what is quite new in Portugal.

This background and these recent developments show the importance of ESI project for Portuguese policy and the need to introduce a greater balance between the accent on school improvement school effectiveness, and to explore the relationships between effective improvement at school level and classroom level.

The issue of improvement vs. effectiveness and if there is a real need of a greater concern with effectiveness in Portugal was also debated on Portuguese national conferences, mainly on the one held with policy decision makers and researchers. To held three separate conferences with different publics - decision makers and researchers, teachers, and inspectors - was a decision made by the Portuguese team intended to make the ESI approach more useful to the ongoing debate and future political decisions.

The Netherlands

Schools in the Netherlands are free to determine what is taught and how. The Ministry of Education, Culture and Science does, however, impose a great number of statutory standards to guarantee the quality of education. Since the 1980s, there has been a trend towards reducing the complexity and amount of regulations. Many central government powers have been transferred to the level of the school or local authority (municipality). In July 2001 the Ministry of Education, Culture & Science and organisations of school personnel agreed to give schools more freedom in relation to the content of education and personnel and management policy. The Ministry decides what student should have learned (goals) and the inspection checks whether schools accomplish their tasks. Central government control is increasingly confined to the area of broad policy -making and to creating the right conditions for the provision of good quality education. This continuous trend towards decentralisation is received well by practitioners, but there are also warning about inefficiency and inequality between schools who are increasingly dependent of the financial policy of municipalities.

What is the relationship between existing policy measures and the proposed context factors in the ESI framework?

The *school* is the central level for checking the quality of education. The inspection checks all schools between 1999 and 2002 on 13 school based quality indicators. The school (or officially the school board) is responsible for the quality of education.

External pressure is believed to be important because especially low performing schools do not change from within and feedback and stimulation are necessary for reflection and continuity of change. The existing policy is directed at:

Market mechanisms

The policy of deregulation, decentralisation and autonomy leads to larger differences between schools. The government stimulates this variety which has advantages as well as disadvantages. Schools as a market place offer parents the possibility to choose a school according to their expectations. The existence of white and black schools can be considered a disadvantage of market policies. The government acknowledges the

disadvantages by means of financial regulations (schools with pupils from low SES and ethnic minorities receive more funds), national goal setting and by checking the quality of schools. Schools have to justify the choices they make and the work they deliver to the parents and the government. The inspection performs this task. Whether these measures are sufficient to prevent or diminish inequality between schools remains to be seen.

External evaluation and accountability

External evaluation of the performance of individual schools is still a rather new development. The inspection in primary and secondary education visits all schools between 1999 and 2002. Schools are assessed on 13 standards and the school reports are public (on the internet). The inspection has developed a system for fair comparisons between schools (value added). Low performing schools are stimulated to work on their perceived failures. In this sense the inspection has a dual role: accountability and quality enhancement. National tests are developed by the National Institute for Educational Testing (CITO). Experience in the Common Core Curriculum Reform (first phase secondary education) indicate that policy makers hesitate to force schools to use these tests. The amount of national tests performed during the life time of a student is (too) low.

External agents

From the external agents, the inspection is most powerful. The role of school counsellors is debated because their influence is quite different, depending on their quality and their skills in taking account of school's needs. Lately, schools received a budget for staff development, so they are able to choose their own agents.

The participation of society

Many nationally initiated reforms are dropped at the schools. Practitioners complain that policy makers do not allow sufficient time for innovations. Also, many innovations are expected to be performed at the same time. This policy interacts with the work load of teachers which is one of the highest in Europe. Policy makers are encouraged to allow more time for innovations and less workload. The extra finances spent in 2001 on education are, however, spent primarily at salaries, computers and school buildings.

Resources/support for improvement

The growing autonomy of schools is generally acclaimed. But the effective use of this autonomy depends on the motivation and quality of the principal, the school team and the school boards. The lack of stability in educational policy, increased parents pressure and a high workload for teachers are not considered positive conditions for school improvement. Policy makers are recommended to reduce the workload of teachers.

5. Dissemination and exploitation of results

Dissemination and exploitation of results have been performed as a co-operating effort of different country teams and as an effort within the participating countries.

5.1 Dissemination as a joint effort of country teams

Publications

De Jong, R. & Stoll, L. (Ed.)(forthcoming). School Effectiveness and School Improvement in a European Context. *Educational Research and Evaluation* (special issue).

- De Jong, R. & Stoll, L. Introduction (pp. 1 -5)
- Creemers, B.P.M. From School Effectiveness and School Improvement to Effective School Improvement: the Background of the Study (pp. 6 -25).
- Wikeley, F., Stoll, L. & Lodge, C. Effective School Improvement: English Case Studies (pp. 26-60).
- Murillo, F.J. Five Effective School Improvement Programmes in Spain: Description and Analysis (pp.61 -96).
- De Jong, R. de., Houtveen, Th. & Westerhof, K.J. Effective Dutch School Improvement Programmes (pp. 97 -150).
- Stoll, L., Wikeley, F. & Reezigt, G. Developing a Common Model? Comparing Effective School Improvement across European Countries (pp. 151 -172).

Reezigt, G.J. & Wikeley, F. (in preparation). School Effectiveness and School Improvement: the ESI project. *School Effectiveness and School Improvement* (special issue)

- Creemers, B.P.M. & Reezigt, G.J. Introduction.
- Scheerens, J. & Demeuse, M. The theoretical analysis
- Wikeley, F., Stoll, L., De Jong, R., Munoz -Repiso, M. & Murillo, F.J. The case studies analysis
- Reezigt, G.J. & Creemers, B.P.M. The construction of the ESI framework.
- Comments by a policymaker, a researcher and practitioner

Creemers & Stoll will edit a book on ESI (Series: Context of Learning)

Conferences

The papers prepared for the special in *Educational Research and Evaluation* are presented at the ICSEI conference in Hongkong (January, 2000).

A symposium on ESI will be planned and chaired by Stoll and Creemers for the International Congress for School Effectiveness and Improvement (ICSEI) in Copenhagen (January 2002).

Some members of the Spanish, the Portuguese and the Belgian teams will make, in French, a common communication, entitled: *Un modèle pour l'amélioration des processus éducatifs conduisant à une plus grande efficacité des établissements scolaires*

(DEMEUSE, M., GOIS, E., LOPES DA SILVA, M.I., MUNOZ REPISO, M.) during a symposium about the ESI project, in the frame of the *4e Congrès international de l'AECSSE* and of the European Conference on Educational Research (ECER 2001) in Lille (France) on the 5, 6, 7 and 8 of September, 2001.

During this symposium, coordinated by Marc DEMEUSE, the Belgian team will present a particular communication about one of the case analysis made in the frame of the ESI project: DE LANDSHEERE, V. & DEMEUSE, M. *Pour une école sans échec: implanter une innovation en partenariat, et après ?*

This symposium will welcome other contributions of the ESI team members, as well as other teams.

5.2 Dissemination within countries

The Belgium (French Community) Team

ESI European team's Belgian members have paid a particular attention to the adaptation, translation and diffusion of the results of the research work made in the frame of this project. In addition to the three national meetings organised in October 2000 with some actors of the French-speaking Belgian education system, some initiatives have been and are still organised, either in the form of meetings (conferences, symposiums, ...), or in the form of publications and electronic diffusion.

* DEMEUSE, M. & DENOOZ, R. (translation and adaptation, 2000). *Un modèle pour l'amélioration des pratiques éducatives conduisant à une plus grande efficacité des établissements scolaires*. Liège: Service de Pédagogie théorique et expérimentale (Theoretical and experimental Education Service, University of Liège), Serie "Etudes et Recherches". (53 pages)

This document is the French version of the document developed in English by the European research team which works on the *Effective School Improvement*, and of which Belgian correspondents are Marc DEMEUSE and Régine DENOOZ. This French translation and adaptation is introduced by a note related to the French translation, in order to facilitate the concept understanding.

The French text of the document can be downloaded (.pdf. file) at the following address: <http://www.ulg.ac.be/pedaexpe/pub/pubdoc.html> or ordered at the address : pedaexpe@ulg.ac.be with the following reference: 2000/4. This document was freely given to the amount of 150 exemplars to the guests of the three national meetings.

* DEMEUSE, M. & DENOOZ, R. (2001). De l'accroissement de l'efficacité des pratiques éducatives: le cas du programme "Success for All" mis en œuvre par Robert Slavin et l'équipe de la Johns Hopkins University". *Cahiers du SPE*. 7-8.

This paper is the translation of one of the case studies published in English in DE JONG, R., DEMEUSE, M., DENOOZ, R., REEZIGT, G.J. (2001). *Effective school improvement: Programmes in the United Kingdom and the United States of America. A re-analysis of school improvement programmes*. Groningen: GION, Institute for Educational Research, University of Groningen. The *Cahiers du SPE* are meant to

diffuse the scientific research led in the University to teachers, managers and policy decision makers. This text will also be available in electronic version as from the publication of the next issue of the review.

* The text "*A Framework for Effective School Improvement. Final report of the ESI project*" by G.J. REEZIGT (Editor) will be translated and adapted into French by the Belgian team (DEMEUSE and MATOUL) in the year 2001, in order to be diffused in early 2002 at the latest.

* Belgian members of the ESI team will also present the project and its outcomes during the second congress of education researchers (13th and 14th of March 2002) which is meant, among others, to make known to teachers and practitioners the different research works led in Belgium or which involves Belgian teams.

The Dutch Team

Publications

Creemers, B.P.M., & Hoeben, W.Th.J.G. (1999). *From effective schools and school improvement to effective school improvement*. Paper prepared for the AERA Annual Meeting, Montreal, Canada. Groningen: GION.

Creemers, B.P.M. & Hoeben, W.Th.J.G. (1999). *From macro reform to the effective classroom*. Paper prepared for the symposium 'Systematic reform' at the annual meeting of the International Congress for School Effectiveness and School Improvement (ICSEI), San Antonio (USA). Groningen (NL): GION.

Creemers, B. & Jong, R. de (2000). Effective school improvement projects. Two case studies from the Netherlands. in *Studies on researches in school effectiveness at primary stage*. (pp. 342-355). New Delhi: National Council of Education and Training (NCERT), publication division.

Reezigt, G. & De Jong, R. (forthcoming). Kenmerken van effectieve schoolverbeteringsprojecten (characteristics of effective school improvement projects). *Onderwijskundig Lexicon*.

The English Team

The English research team has several means of disseminating the research findings:

Publications

see the publications of the ESI team

We also intend to publish some of the English case studies and the lessons learned from the wider project as examples of good practice, and are seeking a suitable publisher. These will be written in a form that is both accessible and relevant to practitioners. The team has a history of producing research summaries for practitioners.

Conferences and courses

A symposium about the benefits of cross-national research projects, including ESI, is planned by Stoll (who is President of ICSEI) for the American Educational Research Association Conference (April 2002).

Findings have and will be disseminated within keynote addresses to national headteachers and Local Education Authority adviser conferences, including the Local Government Association annual conference in England (November 2001 – Stoll). Internationally, keynote addresses incorporating findings have and will include the European Council of the National Association of Independent Schools, Paris (March, 2001 - Stoll) and the British Council Estonia Improvement Project Conference (October 2001 – Stoll) in Europe, as well as presentations to practitioners, policymakers and researchers in New Zealand (August 2001 – Stoll) and Taiwan (December, 2001 – Stoll).

Findings are also drawn on in the English team's work with English and international students studying for Masters degrees and Doctorates at the University of Bath and the University of London, and will increasingly be drawn on by academic colleagues as the forthcoming articles are published.

Furthermore, workshops for practitioners, through the Centre for Leadership, Learning and change at the University of Bath will be developed.

Policy evaluations

Stoll has incorporated findings from the ESI project into the model she developed for the evaluation of the Government's national pilot for their Key Stage 3 strategy for 11-14 year olds. As this strategy is being rolled out into all secondary schools, the inclusion of the dimension of capacity in the evaluation is significant, and will allow Stoll and colleagues to look at schools at different levels of readiness to participate in improvement.

ICSEI and British Educational Research Association School Improvement Special Interest Group

Team members are closely associated with these organisations and will be feeding findings into them, including a link that will be established on the ICSEI website.

The Italian Team

Most of results of Cede's project research are publicised for decision making in politics; as well the ESI project results are publicised.

ESI Italian team members have paid a particular attention to the adaptation, translation and diffusion of the results of the research work made in the frame of this project.

A special book has been edit by Roberto Melchiori,

"Per accrescere l'efficacia dell'istruzione - Il progetto di ricerca Effective school improvement, a cura di Roberto Melchiori, Milano, Franco Angeli, 2001.

The Portuguese Team

Publications

- A text about ESI has been published in a Review addressed to teachers: Silva, M. I & Gois, E. (2001). *Melhoria Eficaz da Escola*. In *Noésis*, nº 57, pp.77-78.
- A more developed text centered on ESI approach, the development of ESI projects and its main lessons for the Portuguese situation is to be published at the end of 2001 in the Review "*Inovação*".

Conferences

- National conferences were a first way to disseminate the products of ESI project. In order to do so, the text was translated to Portuguese. Silva, M.I & Gois, E. (translation and adaptation, 2000). *Um modelo de desenvolvimento da qualidade da escola*. July
- The translation and the concepts related to some key -terms were also discussed during these conferences. The case studies produced were used to illustrate the difficulties of ESI in Portugal.
- At another national conference, organised by the Institute of Educational Innovation at the end of the year, the ESI approach is also to be presented.
- A symposium about ESI entitled: *Un modèle pour l'amélioration des processus éducatifs conduisant à une plus grande efficacité des établissements scolaires*, will be presented by some members of the Belgium, Spanish and Portuguese teams at the 4ème Congrès (Demeuse, M; Gois, E, Silva, M.I.; Muñoz -Repiso, M).

Support to schools

The ESI framework is going to be presented and debated, next year in a project including about 50 schools (primary, lower secondary and secondary) developed by the Institute for National Innovation and aiming to support schools in implementing self -evaluation devices.

The Spanish Team

Most of the researchers of the Spanish ESI team work in the Centre for Educational Research of the Ministry of Education, Culture and Sports of Spain. In fact, their job consists in offering information for decision making in politics, what places them in a privileged position to optimise the use of the ESI project results.

The actions developed by the Spanish team can be grouped into four categories concerning the use of information for decision -making; presentations; publications; and promotion of research activities.

1. The process and results of the project have been very useful as support materials in the elaboration of different documents for *political decision-making*. The most remarkable

one is that they have been used in the preparatory Report of the Law on Quality in Education, which is being prepared at present by the Spanish government

2. The results of the ESI project have also been useful for different *conferences* (such as the ones developed in Bogotá -Colombia-, La Paz and Cochabamba -Bolivia-, National Congress of Pedagogy in Madrid -Spain-) and *courses* in the University of the País Vasco, Asturias, Bilbao, etc.
3. Different *articles and books* on ESI have been published:
 - § Muñoz-Repiso, M. *et al.* (2001). Aportaciones de las Teorías de la Organización al nuevo movimiento teórico-práctico de Mejora de la Eficacia Escolar. *Revista Española de Pedagogía*, 218, 68-84. (*Contributions of the Theories of Organisation to the Effective School Improvement new theoretical-practical movement*).
 - § Muñoz-Repiso, M. y Murillo, F.J. (2001). Un balance provisional sobre la calidad en educación. Eficacia Escolar y Mejora de la Escuela. *Organización y Gestión Educativa*, 3. (*A provisional balance of quality in education. School Effectiveness and School Improvement*).
 - § Murillo, F.J (Coord.) (2001). Mejora de la Eficacia Escolar. Tema del mes de *Cuadernos de Pedagogía*, 300, 47-74. (*Effective School Improvement*).
 - § Muñoz-Repiso, M. *et al.* (2000). Mejora de la Eficacia Escolar: un estudio de casos. Madrid: CIDE. (*Effective School Improvement: a cases study*).

Moreover, a book in Spanish presenting the whole ESI research project is being prepared at present.

4. Finally, the ESI project has also influenced the realisation of some activities aimed to promote new research projects:
 - § Creation and coordination of the Iberoamerican Network for Research on School Effectiveness and School Improvement (RIEME), among whose activities are a journal on SE and SI, the organization of a Master, etc.
 - § The coordination of the international research project “Towards a Model for Iberoamerican School Effectiveness”, in which 8 research teams from Latin America and Spain are taking part.

6. Acknowledgements and references

We wish to thank the European Commission for delivering the grants for the project.

We want to thank all the members of the project and the participants of the national conferences for contributing to the results of the project. We all learned a lot of the characteristics of each other systems which is an important condition for the integration in Europe.

The ESI team

Bert Creemers, Wijnand Hoeben, Rob de Jong, Gerry Reezigt, Jaap Scheerens, Hechuan Sun (the Netherlands), Marcel Crahay, Marc Demeuse, Regine Denooz, Anne Matoul (Belgium), Pentti Nikkanen, Jouni Valjarvi (Finland), Georgia Kontogiannopoulou -Polydorides, Yiouli Papadiamantaki, Georges Stamelos (Greece), Emilio Lastrucci, Roberto Melchiori, Rocco Postiglione (Italy), Isabel Lopes da Silva, Eunice Gois (Portugal), Mercedes Muñoz -Repiso, F. Javier Murillo, Josu Solabarrieta, Aurelio Villa, Lourdes Hernandez, H. José Pérez -Albo (Spain), Louise Stoll, Felicity Wikeley, Caroline Lodge, Jim Brown (United Kingdom)

7. Annexes

Reports of the ESI project team:

- W.Th.J.G. Hoeben (Ed.) (1998). *Effective school improvement: State of the art/ Contribution to a discussion*. Groningen: GION, Institute for Educational Research, University of Groningen.
- G.J. Reezigt (Ed.) (2000). *Effective school improvement: First theoretical workshop/ Contributions from relevant theoretical traditions*. Groningen: GION, Institute for Educational Research, University of Groningen.
- R. de Jong (Ed.) (2000). *Effective school improvement programmes: A description and evaluation of ESI programmes in eight European countries*. Groningen: GION, Institute for Educational Research, University of Groningen.
- R. de Jong, M. Demeuse, R. Denooz, G.J. Reezigt (2001). *Effective school improvement: Programmes in the United Kingdom and the United States of America. A re-analysis of school improvement programmes*. Groningen: GION, Institute for Educational Research, University of Groningen.
- R. de Jong (Ed.) (2001). *The validity of the ESI model in eight European countries: The results of national school conferences on effective school improvement*. Groningen: GION, Institute for Educational Research, University of Groningen.
- G.J. Reezigt (Ed.) (2001). *A framework for effective school improvement. Final report of the ESI project*. Groningen: GION, Institute for Educational Research, University of Groningen.