Three research questions are addressed in this paper: (1) What does school improvement mean in relation to the context of a research project? (2) Given particular developments in European society and the nature of primary research data, what should schools be like in the year 2001? (3) What steps are being taken in research and development to answer these questions? Because such fundamental questions have no easy answers, this discussion is limited to reflections based on educational research and development experiences in various Western European countries. Section 2 of the report analyzes characteristics of large-scale innovation projects in education. The context of school improvement is discussed, and the meaning of school improvement is interpreted. To provide an illustration to the second research question, the report's third section explores specific tasks facing schools in 2001 by referring to Belgium's comprehensive Renewed Primary School project. The processes involved in study of the large-scale innovation project are deliberated. The final section focuses on research and development questions that should be considered in the next decade. Methodological approaches to emerging complex research issues include design of long-term follow-up studies and use of multiple data sources. Twenty references conclude the report. (CJH)
1. Introduction

This paper centers around three questions. One: what does school improvement mean taking into consideration the context of my research? Two: given some developments in the European society and also looking at some of the main research data, what would you like to see schools in the year 2001? And third: what are the next steps in research and development taking into consideration the answers on the two other questions?

These are three fundamental questions and not easy to answer. We believe that all teachers, parents, principals and administrators would like to have clear and simple answers. But one cannot answer fundamental questions in such a way. So, we will limit ourselves to some reflections based on our latest research and experiences with developments in some West European countries.

In the next section, an analysis of so-called large-scale innovations is presented (Van den Berg & Vandenberghe, 1986). This will give the context in which school improvement takes place and allows me to present some main topics related to school improvement (see question 1).

Next, question two will be explored by paying attention to some specific tasks for the school in the year 2001. This section is mainly based on our research on the Renewed Primary School in Belgium.

In a last section, we will focus our attention to a limited number of research questions. Here too, it is not possible to present a detailed research agenda. Nevertheless, we will try to look at some "hot topics".
2. Characteristics and typical problems of large-scale projects

Compared to most of the American innovations adopted and implemented by American schools, the West European innovations are of a very different nature. First, a description of the main characteristics is given. Second, we will explore some problems from the point of view of the school as an organization and third from the point of view of the individual participants. At the end of section 2 attention will be paid to the meaning of "school improvement".

2.1. Characteristics and problems of large-scale projects from the point of view of the nature of the innovation

Most large-scale projects have a "reform-nature". In order to clarify the meaning of this characteristic it is useful to make a distinction between a "reform" and an "innovation" (Sack, 1979).

First: an educational reform generally can be related to a number of social and cultural developments. In the context of these developments attention at times focuses on what the consequences are for the subsystem education. When judging a reform, political, social and economic factors are predominant. In other words, in order to interpret the value of an educational reform, it is necessary to consider its relationship to social developments.

This is clearly illustrated in the Renewed Secondary School (R.S.S.) in Belgium (started in 1970). As in many other West-European countries, the R.S.S. is related to the political goal: secondary education for all. Pupils from different social classes should have the same opportunities. In other words: there was (and still is) the claim of equity meaning that each pupil has the same rights, e.g., in relation to the time spent at school, the time spent on subjects within the school etc. independently of race, sex and social class. But there is also the claim of equality. Equality means "equal in value". One could say that equity has a more instrumental meaning, equality has a more political meaning. Equality means that education has to provide everybody with the opportunity for access to knowledge, with similar experiences and to an irreducible minimum, as well as to contribute to every aspect of personal and social growth.
These general ideas of external democratisation of secondary education implies that the selection of pupils at twelve is replaced by a guided orientation of the pupils to different study domains.

That political and social aims are predominant in a reform is also clear from the four main principles underlying the so-called 'Middle School' in the Netherlands: postponing the choice for further study or a profession (at the age of fifteen or sixteen instead of twelve); offering equal opportunities for all pupils on all educational levels; broadening the scope of the curriculum for pupils aged from twelve to fifteen (or sixteen) by increasing the differentiation of subjects, and by offering more opportunities for the development of intellectual, social, artistic and technical talents; offering learning opportunities which create opportunities for individual development and the arousal of political awareness.

Second: presently in Western Europe most educational reforms are proposed and initiated by national governments. The consequence is that all those concerned with the field of education are confronted with a number of plans and descriptions of realisation. What exactly occurred at the governmental level in the creation of the policy options adopted cannot normally be traced by outsiders. For example, in the Netherlands there are innovation committees and advisory committees, which do important preparatory work regarding policy. The way in which decisions eventually developed cannot be gathered from reviewing the "polished" products presented to the outside world. This is also true in Belgium where there is the "Workgroup Objectives", which does preparatory work concerning policy for the R.S.S. (Catholic Schools).

Third: we want to draw attention to the fact that in the case of reform, long range policies are traced out and, in relatively general terms, the manner in which they will be put into effect is indicated. Such policies are also developed for the Middle School in the Netherlands as for the Renewed Secondary School in Belgium. These policies can be found in official records which emanate from the Ministry of Education. However, in most cases, there are no indications or suggestions in these records of the processes that should be employed in order to achieve the objectives. In a comparative study, in which Porter compares the influence of the federal government in the U.S.A. and in Australia, she points out the same phenomenon: "... the people concerned with creating the policy and
enacting the relevant legislation seldom look down the track to the implementation stage" (Porter, 1980, p. 75, own italics).

When quoting this third characteristic, we already made a remark about the stands which governments usually take. From the statement of Porter one might deduce that the central government assigns the task of implementation to others, which means that it has little or no dealings with implementation problems on the meso- and microlevel. Others must take care of the translation (and the implementation) once the general starting-points for school and classroom practice have been sketched. There may be a wide gap between the possible intention of the designers of policy and the perceptions of the implementers.

If we compare the notion "reform" to the concept "innovation", we can, in the first place, observe that a reform may be a "bundle of innovations". The Renewed Secondary School (Belgium) asks the school and the teachers to utilize student-groupings in a way that deviates, sometimes drastically, from the present graded system (problem of intra-class differentiation); at the same time the teachers have to implement a new kind of evaluation (so-called formative evaluation); new manuals must be put into use; teachers are expected to co-operate with one another more than before; the school and the teachers must arrange work relations with the external support system; even work relations with other schools must be entered into, etc.

The preceding example leads to an important characteristics of large-scale projects when observed from the point of view of the objectives. A large-scale project is characterized by its multidimensionality; a number of important objectives must be accomplished simultaneously and coherently. Each innovation, as a part of reform, points to a significant array of objectives and the expectation is that they will be adopted at the same time and used in interrelated ways which is extremely difficult if not impossible for schools and teachers. It is hard to avoid the impression that the authorities are not fully aware of this. This multidimensionality as a striking feature of large-scale innovation projects makes reduction in the size of the task justifiable. As a matter of fact, there are a number of indications which show that the school and the teachers spontaneously out of sheer necessity, limit the number of innovations to be instituted at a given time. For example, a lot of R.P.S.-schools are only engaged in one or two innovations out of the whole bundle. Furthermore, it is apparent
that in beginning R.S.S.-schools all attention is focused on intra-class
differentiation. The rest of the bundle is assigned lower priorities.

In the second place: some innovations are introduced by the central
government; others by a teacher, a group of teachers or a particular
school. In the third place, although in the research on innovations certain
external factors are not ignored - but more and more attention is asked for
them - one is still primarily guided by factors concerning the school, the
teacher, the team and the innovation itself. In the fourth place: those
who are chiefly interested in innovation especially aim at the process
through which an innovation-proposal gets actual configuration and
investigate which factors determine the nature and the quality of this
process.

Taking into account this multidimensionality and the connected multiplicity
and multiformity of objectives, it is not surprising that participants on
different levels often divergently emphasize different aspects of
large-scale projects. External change facilitators frequently stress other
goals than principals. Teachers are more interested in consequences related
to their class practice. This can result in a relatively wide gap between
the original plans as outlined by policy makers and the actual decisions in
a school. In other words, projects are filtered, stresses are laid, various
choices are made and at each school different realizations result. It seems
to us that the authorities insufficiently give heed to these facts.

Consequently, when investigating the implementation of large-scale
projects, it is to be expected that schools and teachers involved will not
give one clear answer. The schools involved will probably give priority to
different innovations in their planning. And in classrooms, even if the
same innovation is included (for instance continuous diagnosis and remedial
teaching), there will be very divergent configurations. Research on those
initial decisions and their influence on later implementation procedures,
the varied reactions, the diversity regarding plans for practical
realization, etc. must receive more attention in our opinion. This means
that the mobilization process as a research issue is as important as the
implementation stage which has elaborately been described for the last de-
cade. Many researchers have emphasized this recently. Referring to Majone
and Wildasky, Farrar writes: "Neither is implementation simply the
unanchored process of goal discovery: rather it is the development of the
capacities, potentialities and other dispositional qualities of a policy
idea. She further adds: "Thus the implementation of a policy idea will vary both because not all its many potentialities will be seen and because any given idea will be interpreted differently in different settings" (Farrar, 1980, p. 81). Berman also gives attention to the mobilization stage; more particularly he brings some structure in the various activities that can occur during this stage (Berman, 1981, p. 267-270). Via description and analysis of four groups of activities (policy image development, planning, external support generation and internal support generation) he reaches the following conclusion: "Research on mobilization has been quite limited, and much more needs to be done to understand how this subprocess works under different conditions" (p. 270).

In connection with the question concerning one's conceptualization of the implementation process, one should refer to the position taken by Farrar et al. They point out that there is not only the "implementation as center-to-periphery-movement" (R.D.D.-model) and the "implementation as a bilateral process" (mutual adaptation), but that there is also a conceptualization which can be defined as "implementation as an evolution". We shall illustrate this third concept both by means of two quotations and by indicating the metaphors used by the authors in that respect. They observe that: "The so-called implementation process is thus not simply one of federal managers and district managers struggling to reconcile two views of a program, but one in which various local individuals and groups bargain among each other as much as with external agencies - or each do as they like without much bargaining" (Farrar, a.o., 1980, p. 8). And furthermore they remark: "From our perspective, then, implementation is a misnomer; it is wiser to refer to a continuing process of policymaking in which various actors press their varied visions of policy" (Farrar, a.o., 1980, p. 83).

These quotations once more show that it is of paramount importance to intensively investigate the very first developments (i.e. the significance of the mobilization stage) in order to acquire a clear insight into the way local schools and school communities interpret policy, react and make decisions with respect to large-scale innovation projects.

In order to exemplify such an implementation process Farrar et al., use two metaphors, namely "the lawn party" and "variation on a theme". People go to a lawn party for very divergent reasons. They hope to meet someone; they go because others - V.I.P.'s - also go. The food they choose from the buffet may vary. Not everybody follows the same course along the tables. Some
leave the party quite early because they have seen and experienced enough. Others act as conspicuously as possible and stay longer. Everybody goes home taking with him his own experiences and relives the whole event in a personal way.

This metaphor underlines the importance of the local circumstances of the school, the innovation history of the school, the influence exerted by certain teachers or a group of teachers in making decisions and in realizing large-scale projects. This first metaphor also explains the idea of "implementation as an evolution". In other words large-scale projects are an interesting starting-point, but one should consider them as broad areas where schools can deploy their activities. They can be taken as a bundle of potentialities. They can be defined as an action domain. If one compares large-scale innovations to small-scale innovations, one can claim that the large-scale type mainly aims at making the small-scale ones possible. This brings us to the second metaphor: variations on a theme.

In this first subsection we have analyzed large-scale projects from the point of view of the nature of the innovation; we have mainly focused on the objectives. Starting from the distinction between a "reform" and an "innovation" we concluded that a multitude of objectives must simultaneously and coherently be realized in large-scale projects. This characteristic can best be summarized by the notion of "multidimensionality". Next we pointed out that this multidimensionality results in the presence of a variety of interpretations among schools and teachers, and variety with respect to the choice of priorities and to interpretations of various dimensions. Implementation, as a permanent form of negotiation and (actual) decision-making, thus originates in the mobilization stage.

2.2. Characteristics and problems of large-scale projects from the point of view of the school as an organization

This can be illustrated by looking at the Renewed Secondary School (R.S.S.) in Belgium. The implementation of the R.S.S. implies the introduction of new roles. Although there are a lot of differences among schools, there are at least two new roles. The first one is the so-called "internal coordinator" (sometimes called "grade-coordinator"). They all are former teachers who are responsible for a heterogeneous set of activities. They organize meetings for different types of workgroups of teachers; they are,
to some extent in collaboration with the principal, responsible for a long-term planning; they act as a linking person with external change facilitators and other organizations outside the school; sometimes they do a lot of clerical work, etc.

The "chair" of a subject group is a second new role. Take for instance all the language teachers of the first grade: they have a one-hour meeting every week. During this meeting teachers discuss the objectives and content of the next lessons; the chair introduces discussions about the assessment of pupils and the use of tests; sometimes available tests are presented and analysed; experiences with some topics and related learning materials are shared, etc.

In most schools there is a subject group for every main subject (language, mathematics, geography, history, sciences, etc.). Most principals try to plan these meetings during teaching time.

The subject group is a new structure introduced along with the implementation of the R.S.S. A second structure is the so-called class-council. Here, all teachers who teach the same group, have regular meetings (five or six times a year) during which they discuss the pupils' achievements. They look for remediation of some difficulties they observed. In other words: the class-council is directed toward a permanent evaluation of the pupils and is responsible for the organization of remedial activities.

Looking at the new roles and the new structures, related to the implementation of the R.S.S. in Belgium, it is clear that new expectations or new organizational norms are introduced. Implementing the R.S.S. implies that teachers are prepared (and able) to collaborate, that they are willing to decide in a collaborative way, that they are prepared to discuss their personal opinion about education in general and their opinion about their own subject in particular.

Besides this internal structural changes, the school should look for a way to build up a professional network with the external support system. Along with the implementation of the R.S.S. a new external support system is created. Schools and teachers are supposed to accept this support. They are supposed to look for strategies by which they can work with this support in an effective way.
This analysis of the organizational consequences of a large-scale project clearly illustrates the complexity, and also shows the need for research on this issue.

We refer to a well documented overview of the "common properties of schools" by Miles for those who are interested in a more detailed analysis of the school as an organization (Miles, 1981). Miles gives a very good overview of what seems to be known about the common properties of schools, on an empirical basis. But, he also evaluates in detail the explanations offered for the presence of such properties. In a last section he offers an agenda for future research, both to provide more descriptive data and to test competing explanations (Miles, 1981, p. 110).

2.3. Characteristics and problems of large-scale projects from the point of view of the individual participants

In large-scale projects different persons are involved on different levels (national, regional, local) and each person has a more or less specific task. In our opinion it is important to pay attention to the way in which all these people "personally define" the requirements and the consequences of participation in a large-scale project. In her so-called "interactionist perspective" Porter asks attention for a similar point of view. She is primarily interested in the reactions, experiences and opinions of those people who participate in the realization of a project. She puts it in this way: "What more researchers should try to do is to document the different interpretations for their audiences allowing those audiences to see the dynamic elements for themselves rather than simply summarize and report one 'correct' interpretation or description" (Porter, 1980, p. 83).

The answers to the question "what does it mean for an individual teacher to implement the objectives of the Renewed Secondary School (R.S.S.) (Belgium)" can illustrate the "personal definition"-issue. Since the class group is more heterogeneous (compared with a group in a traditional secondary school), a teacher has to make a distinction between minimum-goals and extra-goals. Maybe that is possible for some parts of the subject he teaches, but it isn't for others parts. The demand to make that distinction is experienced as an innovation by most of the teachers.

In order to reach an agreement about this distinction, a teacher is also faced with the fact that he - maybe for the first time in his career - has
to discuss in public the objectives of his subject with colleagues. Collaboration among colleagues is for most of the teachers a second innovation.

A heterogeneous class group implies the necessity to take into consideration the differences among pupils. Most teachers try to solve this problem by introducing new learning packages. In many cases, the use and sometimes the production of teaching material is a third innovation.

Very new for a teacher in the first year of the R.S.S. is the organization of remedial activities for pupils with learning difficulties. It is expected that teachers are trained to work with a small group or even to teach individually pupils. One can easily imagine that these activities are experienced as very difficult and indeed as an innovation.

It is also expected that teachers, in collaboration with other teachers, construct formative and summative tests for the different subjects. This means that a teacher is involved in difficult discussions about issues such as: how to construct valid and reliable questions; how to decide that the pupil has reached the minimum-goals, etc.

Another innovation for the teachers is the use of a new pupil-report. In many schools, this includes an explanation of the principles underlying the pupils' assessment. Many teachers point out that it is very difficult to explain to the parents the difference, for instance, between comparative and normative evaluation.

From this illustrations it is clear that a large-scale innovation, such as the R.S.S. is characterized by its multidimensionality. But it is also obvious that if we look at the R.S.S. from the point of view of an individual teacher, the implementation is a very complex process. For the teachers involved, the implementation of the R.S.S. is experienced as an ongoing negotiation process about many different new tasks. These negotiations and discussions sometimes lead to clear answers, but also to unclear decisions. In the latter case, it means that teachers have to make decisions individually. In other words, it means that they define in a personal way the general aims of the R.S.S. into specific teaching activities.
The "personal definitions" are determined - or are coloured - by strictly personal experiences (e.g. positive or negative experiences with earlier innovations; personal ideas about the objectives and functions of an instructional method; specific subject-schooling, etc.), and also by the organizational context in which one is working (see 2.2.).

2.4. School improvement in large-scale projects?

Given the problems of large-scale projects, what does school improvement mean? In order to answer this question, it seems appropriate to repeat the importance of some of the characteristics we already pointed out.

A large-scale innovation project is always related to a number of social, economical and cultural developments. As a consequence schools and teachers are informed about the new goals in a vague and broad way. The connection between these general goals and their daily school and classroom activities is mostly unclear. An analysis of policy documents in Belgium and the Netherlands revealed that policy makers pay more attention to the formulation of the goals than to the legitimation.

As we already pointed out, policy makers are mostly interested in the adoption of the project. They underestimate in a systematic way the difficult and complex tasks related to implementation.

Looking at the school level, we have learned that schools has to introduce new roles, structures and norms. They also have to create a workable network and a negotiation strategy with potential enemies of the innovation and with the external support system.

For the individual teachers, being involved in a large-scale project means many changes as far as their teaching behavior is concerned. According to our observations and data "personal" and "management" concerns stay high for a long time (Van den Berg & Vandenberghe, 1981).

Given this context, school improvement means an approach in which in a consistent way plans and activities are developed at different levels at the same time, but in a close relationship to each other.
2.4.1. School improvement at the policy-level

At the policy level, policy-makers must accept that it takes many years for important improvements to pass through the different stages of an innovation process. In other words: school improvement means the creation of a long-term implementation plan (Miles, Ekholm, Vandenberghe, 1987). Based on a written questionnaire and on informal talks with teachers of the R.S.S.-schools in Belgium, we believe that a long-term implementation plan should pay attention to the following issues (Vandenberghe, 1982). The policy-makers must support schools in their strive to create a local policy by which it becomes possible for the innovations to live and to survive in the system long enough to find their final institutionalized shapes. Second, policy makers should be aware of the fact that they have too much confidence in written messages as a tool for school improvement. The proposals and demands become much more effective when policy-makers meet schools on a personal level, when someone who is ready to embody the ideas of the policy participates in a dialogue with the school members. Third: policymakers can help schools develop a productive inner context for improvement by providing mechanisms for them to see and learn from other schools that have dealt with the same problems before. Such contacts are possible if policy-makers allocate resources for exchanges between schools via forums such as journals and conferences, where schools can tell each other about their solutions. Fourth: when improvement is there, when it has entered the schools and has become an accepted part of the existing context, there is always a risk that the new will lose its flavor and power. Becoming a dead routine and ritual can happen to the most spicy improvement when it is institutionalized. To save the flavor and power of the improvement, it is therefore advisable for policy-makers to take steps to build easy available "mechanical" memories, e.g. written material about intentions and the background of the improvement. If such memories are kept public in the future, it will be more easy for the school system to remember why certain routines exist, why people are doing what they are doing. And when people have reasons to do what they do, they are motivated to do it.

These four specific issues of an implementation plan are only four illustrations. At a more general level, one could say that the implementation process of a large-scale project is supported by policy activities which create messages to the educational system in general and
to the schools involved in particular that the innovation will continue and remains important for the future.

2.4.2. School improvement at the school level

Again, taking into account the characteristics of a large-scale project, we will further elaborate what school improvement is. Again we will present some issues as illustrations of school improvement, without having the intention to present a well balanced solution.

One of the most difficult task for a school is to translate the general goals and the many general suggestions coming from the external support system into goals and activities which are school tailored. Here, school improvement means the enhancement of the capacity to create an adapted set of school goals. An analysis of three cases (schools involved in the Renewed Primary school in Belgium; Vandenberghe, 1987a) has made clear that the implementation of an innovation is facilitated by support activities which create opportunities for an ongoing "vision building" that clarifies the change involved, and enables schools to develop meaningful organizational behavior. Here, the principal plays an important role.

Second: school improvement at the school level means the creation of a school-focused inservice program and the capacity to ask for specific support. Primary schools with a high level of implementation are able to organize their support activities in a very specific and adapted way. They always ask for specific support; by doing so they create a specific link with the external support system (Vandenberghe, 1987b, c.).

Third: school improvement at the school level means providing opportunities and establishing techniques by which it is possible to make visible the results of the project. For the teachers it is important to have the opportunity to demonstrate what they believe are the most important results of their efforts. In a school improvement project, the school should create room for activities through which the teacher feel they are "winners"!

And fourth: success is likely to occur if innovation related structures and procedures are embedded in the organization. We believe that the principal and other internal change facilitators have the task to control the way in which structures and procedures function.
These four issues are characteristics for Primary and Secondary schools in Belgium which are successful. Other issues related to school improvement could be added. But according to our data, schools which limit themselves to these four tasks, will survive and create a climate for continuing self-renewal.

2.4.3 School improvement at the classroom level

Improvements at the policy level and at the school level are ultimately aimed at changes in learning conditions in order to accomplish educational goals more effectively (Van Velzen, Miles, Ekholm, Hameyer & Robin, 1985, p. 48). This means that school improvement also included changes at the classroom level and in the behavior and attitude of teachers. It is very typical for large-scale projects that policy-makers and external change facilitators assume that teachers (and principals) are professionals who are able to install the needed changes immediately. Studies from a CBAM-perspective have made very clear that this is a wrong assumption. Policy-makers, external and sometimes internal change facilitators view specific teachers questions and concerns as unprofessional and typical for resistors. The alternate view proposed by the CBAM-assumptions, that personal and management concerns are natural stages (but not permanent conditions) of persons implementing an innovation, is not necessarily the common view among people outside the school (Hall & Loucks, 1978).

Taking into consideration personal and management concerns means that principals, internal and external change facilitators should create a support strategy which is adapted to the individual teachers and classroom activities. Here, systematic observations, face-to-face discussions, idiosyncratic clarification of the objectives and specific activities of the innovation involved, specific suggestions for teaching activities and above all suggestions for the way improvement in the classroom can be observed and assessed are important tools.

Emphasizing improvement at the classroom level does not mean that the school level activities become unimportant. According to Marsh and Jordan-Marsh personal concerns are resolved when teachers are networked to provide assistance to each other through peer observation, use of problem-solving meetings, and opportunities to give and receive advice and support (Marsh & Jordan-Marsh, 1985).
2.4.4. Keeping in balance the school improvement project

School improvement has been unraveled by looking at the process from three different levels. The main problem for school improvement in the context of a large-scale project is the establishment of effective links between these three levels. As far as we know, there are no European studies available in which the links between these three levels have been studied in an overall and systematic way. So, there is a need for a follow-up study in which attention is paid to the ways through which structures at the different levels cooperate.

3. A school in the year 2001

In order to avoid unreal speculations, a story of a school in 1985 will be presented. The school, which is situated near Brussels, is involved in the Renewed Primary School (R.P.S.) project. An analysis of the concrete activities in this school, will enable us to outline some characteristics which will be important also for a school in the year 2001. The data are based on a long (semi-standardized) interview with the principal and 5 teachers (total number = 19) for a first time in April 1981 and for a second time in April 1985. First, a description of the R.P.S.-project is offered. In a next section, an overview of the main results is presented. And in a third section, using a frame which was developed in a study on institutionalization (Miles, Ekholm & Vandenberghe, 1987) an image of a good school is described.

3.1. The R.P.S.-project is a large-scale project

Schools which are involved in the R.P.S.-project must cope with a bundle of innovations. The main goals of the R.P.S. are related to the following themes:
Enhanced integration and interdependence between the kindergarten (2 1/2 years - 6 years) and the elementary school (6-12 years). Also an enhanced continuity between the different grades of the primary school.
Increased and more effective individualization during the elementary grades, particularly in relation to reading and arithmetic. It is expected that teachers adapt their teaching activities taking differences among pupils into consideration.
Enhanced contact and collaboration between classroom teachers and a remedial teacher, so that pupils with special problems in regular
classrooms will be worked with more effectively. There is also an emphasis on more collaboration among teachers and pupils from different grades. Increased emphasis on the socio-emotional and creative development of the pupils. A more child-directed approach is one of the key ideas of the R.P.S.

Better interdependence with resources in the community environment, both in terms of the students going out into the community to learn and in terms of people from the community being used as resource-people on an ad-hoc basis within the school.

In summary: the main philosophical theme of this innovation bundle is more interdependence among educational resources to support a more individualized, humanized, and effective response to pupils.

In this context, we should expect at the classroom level new practices or adapted practices related to the integration between the kindergarten and the elementary school, to individualization, to collaboration between classroom teachers and the remedial teachers, etc... And given the general aims of the R.P.S., at the school level we should expect an institutionalized process through which the team makes choices (out of the bundle of innovations) and decides on the way the options will be elaborated at the classroom-level.

It is not surprising to see that schools emphasize one of the innovations. And one can also expect that taking into consideration the local situation and earlier experiences, schools will look for a local policy which leads to a locally adapted realization of the aims of the R.P.S.

From the evaluation data (collected between 1979 and 1981) we know, for instance, that the "individualization"-theme and the special attention for remedial teaching have led to many different activities at the school-level, and at the classroom-level. In other words, the general aims of the R.P.S. and the related themes have created different activities in the classroom and led to the use and development of different teaching material. But several changes are also observed at the school-level. School leaders develop in-service activities and staff development activities of a very different nature. In some cases they involve external change facilitators, sometimes they do not. In some schools specific activities involving collaboration with the parents are installed. In some other schools, a local steering committee is responsible for the coordination of all innovative activities in a school.
In other words, the adoption of the R.P.S. as a complex innovation has led to a local process which is characterized by a set of activities of a different nature at the classroom-level and at the school-level. And we have observed that schools react in a very different way. In other words, this local process— which we call the local innovation policy—differs from one school to another. A local innovation policy can be considered a style or an approach by which a local school implements the general goals and themes of the R.P.S.

In other words, we are interested in the school's capacity to cope with the demands of a large-scale innovation project. We have observed that the way schools cope with these demands differs from one school to another, but we also found some general patterns (Vandenberghe, 1987b).

3.2. School A and the R.P.S.-project

First we will summarize the main findings based on the 1981 interviews. This summary contains important information about the mobilization stage, and about the first and second implementation year. Second, the 1985 interview data are presented. Here the focus is more on institutionalization of the project.

First interview (1981)

In this school, it was obvious that the principal had taken the initiative to start with the R.P.S.-project. The decision to start was supported by the inspectorate. The principal immediately informed the parents and the local organizing body. She collected the needed information about the R.P.S.-project and organized for her staff several different initiation activities (for example, she asked them to read a text with general information about the R.P.S. and to write down remarks and questions; the principal made an inventory of these questions and used this during a staff meeting; the important conclusions and suggestions for beginning activities were formulated and distributed among the staff.)

This sample of activities indicates that right from the beginning the principal emphasized the necessity of a diagnosis and the importance of a school work plan. During the first interview, the teachers made it clear that they had been involved in the discussions about the R.P.S. and in the decisions about concrete developmental activities (first, we will improve the integration between the nursery school and the first grade of the
primary school; second, in some grades we will introduce individualized reading activities; third, we will look for activities to improve the collaboration between the staff and parents.

The teachers also indicated that these specific innovative proposals were compatible with the existing situation. In other words: the translation of the general aims of the R.P.S. (see section 3.1) into specific local activities was easily accepted because they were congruent with felt needs and with concerns brought forward during the previous two school years.

During the first as well as during the second year, the principal developed a well structured implementation plan, in collaboration with the teachers. The teaching activities related to the implementation of the main goals of the R.P.S. were discussed and written out in a report. There were clear agreements about which teachers would try out some activities. In contrast with the concrete planning, there was a lack of systematic evaluation. This does not mean that teachers did not discuss their experiences and some obvious results. But the interview data contain no indication of systematic evaluation activities.

All staff members were informed (by a written report) about the innovative activities going on in the different classrooms. They were also informed about the in-service activities followed by the principal or by a subgroup of the staff.

There were clear indications about the existence of formal and informal contact among staff members (a monthly general staff meeting between 16.00 and 18.00; a weekly short meeting between 12.00 and 13.30; all teachers underlined the importance of the coffee break during which they agreed on some very specific topics). These contacts were not limited to ordinary verbal communication, but included agreements of a practical nature, collaborative preparation of some activities, and dissemination of teaching materials among teachers.

Second interview (1985)

- Implementation level

The analysis of the second interviews with the principal and the same five teachers (as in 1981) made it very clear that the implementation of the main goals of the R.P.S. was at least at the same level as in 1981. The
nature as well as the frequency of innovative activities allowed us to conclude that "group 1" as an indication for the implementation level was still appropriate (*).

Besides that there were a number of indications that the teachers were developing interesting activities as far as individualized teaching was concerned, that the collaboration with the parents was improved and that the principal had some clear plans for the near future.

Related to the implementation level, it is important to underline the fact that the principal could give a very specific and systematic overview of the innovative activities going on in her school. During the interview, she regularly indicated that most of these activities could indeed be considered a result of the R.P.S.-project.

The same observation was true for the teachers: for them the R.P.S.-project meant some specific changes in their teaching behavior, the use of new teaching materials. They also underlined the changes in their relationship with the pupils and all of them considered this a very important positive effect of the R.P.S.-project. We also learned from more informal talks that the innovation process in their school should be considered an incremental process, characterized by small but specific decisions. One of the teachers explained it very clearly: "Don't expect spectacular changes, but we, the pupils and the parents can tell you exactly what has changed during the last two years."

- Local innovation policy

The observation that the nature and the quality of the local innovation policy (characterized as a policy emphasizing "planning") did not change along with the newly appointed principal in school A is one of the most important findings of the follow-up interview. The principal explained that she supported the implementation process in the same way and from the same point of view as her predecessor. That is echoed by the teachers, who added also that their relationship with the principal was now more open than in 1981, and also that they had wide range of opportunities to present and explain their own ideas.

(*) Group 1 means high implementation level for 4 or 5 aims.
The principal explained that she had a general long-term plan and strategy in mind, but that she especially emphasized short time planning in discussions and meetings with the teachers. She does not find it important to write down the plans, but considers ongoing communication and clear decisions more important. In order to enhance communications, she has created many opportunities for it (from 8 till 8.30 a.m. three days a week; during lunch time).

The five interviewed teachers certified that as long as they are in school A, the contacts among the staff have always been supportive. But they also made clear that during the last two years, all of them have experienced the professional relationship as very fruitful.

We asked the principal and also the teachers to give an explanation for the way the R.P.S. was implemented in their school. It is important to observe that all of them pointed out the same factors: the approach of the former principal; the clear expectations from the new principal ("my teachers know that they have to work very hard"); the positive contact among teachers and especially the opportunity to organize in-service activities in their school around professional issues and problems chosen by the teachers themselves. In most cases, the principal chairs these activities.

Finally, it is important to underline the fact that school A makes maximally use of external support, but in a way determined by the teachers. They invite an external change facilitator every time they need help and support. They never look for support when the problems they want to resolve are still unclear. As a result, the discussions and activities going on during the workshops are directly related to the teachers’ problems and concerns. This is a good illustration of school-focused in-service training.

3.3. Lessons for the future

What can be learned for the future looking at school A?

In other words: what is important for schools which probably will be involved in an improvement project? What is needed in a school in the future in order to be able to cope with new assignments and demands?

The most important characteristics for a good school are summarized in the next figure in which a distinction is made between context and process. Again we look at school A and indicate (+) the variables we found in 1981 and/or in 1985. A combination of all this variables can be considered as an image of an effective school in the near future (2001?).
School A in 1981 and 1985: an analysis of influencing factors

**CONTEXT**

<table>
<thead>
<tr>
<th>(1) Leadership</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>ability to plan</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>initiation</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>support of teachers</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>high expectations</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>legitimacy of principal's role</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>providing in-service training</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2) Assistance</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>use of assistance</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>staff control over support</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(3) Culture</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>change-minded</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>maintenance of harmony</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fear of loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mutual support</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(4) Need and perceived fit</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(5) Coupling</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>information communication channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>existence of a plan</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

**PROCESS**

<table>
<thead>
<tr>
<th>(1) Collegiality</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>teacher professional change</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>shared decision making</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>sharing information</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2) Planning activities</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(3) Steering activities</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(4) Experiences of success by the teachers</th>
<th>School A</th>
<th>1981</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


This analysis reflects the so-called management perspective which has been for the past two decades the dominant way of thinking about school improvement efforts. School A could be described and analyzed from for instance the cultural perspective (Holly, Wideen, Bollen & Menlo, 1987). Using this perspective as a framework will probably lead to another explanation of the innovation process in school A. One main issue would be that there is a difference between implementation and institutionalization of practices which are products of the development work and the processes of staff collaboration and participative decision making through which the "team makes choices (out of the bundle of innovations) and decides on the way the options will be elaborated at the classroom level".

4. Research and development

Large-scale projects provide a rich and complex background for several interesting research questions which can be considered in the next decade. On the other hand, the richness as well as the complexity of these projects create sometimes serious limits for val'd studies.

What follows is a mixture of methodological considerations and research questions worthwhile to study. As in the foregoing sections, it is not possible to give a balanced picture of research and development issues. This part of the paper is mainly based on Ekholm, Vandenberghe and Miles (1987).

What kind of methodological suggestions are important given the context of a large-scale innovation project?

4.1. Consider a wide range of "frames"

The complexity of a large-scale project requires a researcher to consider a wide range of "frames". It was already pointed out that in the past years many researchers used the "management change"-frame. But, looking at school improvement from three different levels (see section 2.4), means also that for instance, considering more "inside out" frames - those which take a participants' eye view, should be very illuminating. An "inside out" perspective is more likely to take account of real experiences of schools as they struggle with the implementation of a large-scale project. Considering "inside-out" frames will often lead to novel research
questions, but will also indicate the need for a broader range of instrumentation.

In this area of study one could pay attention to gains and losses (Watson, 1986). In a school, who expects to gain what, and who expects to lose what? In other words, studies should focus on what the prospect of implementation means to various actors. Attention should be paid to the bargains and trade-offs between actors as well.

Another question relates to the power distribution. What is the role of differential power within the school and between the school and its context in affecting implementation and institutionalization? In the European context we need more studies which describe and explain the impact of the general policy and central administrative regulations on implementation and institutionalization at the school level.

Related to the power-question, it is necessary to consider the vulnerability of schools. It is clear that implementation is a long-term process (5 to 10 years). During this period schools are influenced by general societal expectations, and by specific demands coming from national and local pressure groups. How does a school handle these demands, and what is the impact on the implementation process? For some schools, such demands are a welcome legitimation for a status quo. For others they are a good reason to establish ongoing discussions and negotiations without changes. In still others outside pressure may lead to an abrupt halt of the change process. We need to understand how such pressures serve to support or hinder implementation.

4.2. Design long-term follow-up studies

One of the most favorite expressions used by students in educational change is: "change is a process and not an event". In sharp contrast with this frequently used slogan is a serious lack of well designed follow-up studies.

The study of the innovation process in the comprehensive school in Sweden (Ekholm, Univ. of Linköping) is a good illustration of a follow-up study. Intensive studies have been made of the internal life of three schools during four years (1977-81). The aim was to understand the process of innovation in compulsory school but, since few innovations have been observable, the study has explored the stabilization process in school. The
project also included a ten-year follow-up of the school climate at twelve senior-level compulsory schools.

Designing a follow-up study of the developments of schools and teachers involved in a large-scale project is a difficult task. Within a research team we need researchers who collect data about all expected and unexpected events and outcomes. It is important for the explanation of the "process" to pay attention to the natural unfolding of the organizational and personal developments. Besides this overall view, there is also a need for an analysis of some specific processes. Given the context of a large-scale change project we believe it is important to study the interaction processes between schools and the local and national administration, and between the schools and the external support system. It is important to document the different kind of interactions for a deeper understanding of the improvement process.

Another question which should be looked at in a careful way in the context of a follow-up study relates to the development of the school as an organization. From the data on the Renewed Primary School (Belgium) it is obvious that schools react differently as far as the organizational development is concerned. A long-term study creates room for a well planned description of these different developments and also for the factors which explain these differences.

A similar question concerns the development of individual teachers within the school. What we need are well documented studies which give a deeper understanding of factors (interventions) which ultimately enhance the professional quality of the teachers.

Other questions could be added. We want to underline the fact that follow-up studies can lead to rich descriptions of expected and unexpected developments, but also to the analysis and explanation of more particular processes and development.

From a methodological point of view, two considerations are important. Within a follow-up study we should try to gain validity through multi-frame approaches. Deliberately using more than one frame within the same study is a useful approach to validation. The same development can be examined from different perspectives; convergent findings will increase the researcher's confidence in the results. This tactic is familiar in qualitative research.
as "triangulation" (Miles & Huberman, 1984, p. 234-235), but often has involved only multiple data sources. Using multiple frames is a deeper approach. A practical way to proceed involves asking different staff members of the research project to act as "advocates" for a particular frame as they proceed with design, data-collection, and analysis. That will usually mean more intra-staff conflict, but of an unusually productive sort.

Second, the use of a broad range of research methods is the counterpart of the complexity and richness of a follow-up study of a large-scale improvement project. School improvement processes and the institutionalization of processes, products and practices will be better understood when studies include both qualitative and quantitative data, when long-term historical/retrospective information is included along with current snapshots, when observations and interviews are both pre-structured and unplanned, when data displays are both descriptive and explanatory, and when hypotheses are tested as well as generated (Smith & Louis, 1982).

So far, some considerations about research questions. Maybe we should look for the establishment of an international network which enables us the use of the power of multi-national studies. Collecting comparable data across improvement efforts in different countries is very valuable. Such studies lend a good deal more confidence in their findings; we are much more likely to detect the general mechanisms underlying the change process than in any single study, bound by its own culture and educational structure.

5. Literature


Hall, G.E. & Loucks, S.F., Teachers' concerns as a basis for facilitating and personalizing staff development. Teachers College Record, 1978 (80), nr. 1, 36-53.


