The general meaning of research data drawn from study of school improvement programs creates the opportunity for sound theory building. By emphasizing the principal's role in policy development, this paper analyzes the characteristics of large-scale educational innovation projects and their explanatory foundations. Belgium's comprehensive Renewed Primary School project involving 275 schools illustrates the link between theory and practice. Vaguely formulated project goals encourage differing innovative configurations among schools, which are additionally influenced by the principal's role. Interviews with teachers from 24 schools revealed 4 types of local innovation policy emphasis: planning, interaction, risk avoidance, and cooptation. Each school's level of implementation was assessed from teaching activities data and project ratings. Analysis indicates that principals intervene differently in schools with a high level of implementation compared to schools with a low level of implementation. The search for the relationship between interventions and implementation involves locating an underlying explanatory factor that "creates meaning." Perceiving leadership as a language game suggests that language is the vehicle conveying meaning. Understanding the interconnections between explanatory factors provides a conceptual basis for prediction and for action-oriented studies because research and practice are linked—and are testable—through mutual feedback. Seventeen references are appended. (CJH)
THE PRINCIPAL AS MAKER OF A LOCAL INNOVATION POLICY
LINKING RESEARCH TO PRACTICE

SYMPOSIUM: DIFFERENT CONCEPTIONS FROM RESEARCH OF THE PRINCIPAL'S ROLE IN SCHOOL CHANGE

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April 1987

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The characteristics of large-scale innovation projects are described and analyzed. The Renewed Primary School-project in Belgium is chosen as an illustration. This project is a comprehensive and complex reform. At this moment 275 schools are involved. Primary Schools react differently to a large-scale project; as a consequence one can observe different local innovation policies. The principal plays an important role in the establishment and development of a local innovation policy.

We know from research data that principals intervene differently in schools with a high level of implementation compared to schools with a low level of implementation. In this paper attention is paid to the way these data must be interpreted and linked to an in-service program for principals.

As a general rule, the suggestion is made to take into consideration two different forms of explanation of the influence of the principal: a nominalistic one and a causal one. Linking research to practice is supported by an approach that pays primary attention to the general meaning of research data.
1. Introduction

During the seventies, in many Western European countries, national large-scale educational reforms were launched, at the Elementary School and at the Secondary School level. These large-scale innovation projects are characterized by a number of important characteristics. We described these characteristics in a detailed way in another publication, in which we also looked for acceptable solutions (Van den Berg & Vandenberghe, 1986).

The project "Renewed Primary School in Belgium" (R.P.S.) which started in September 1973, is a good illustration of such a large-scale innovation project (Vandenbeuche, 1987a, b). The R.P.S., as a large scale innovation project is characterized by its multidimensionality: a number of important objectives, of a different nature, must be accomplished simultaneously and coherently. Each innovation, as part of a bundle, points to significant objectives such as: enhanced integration and interdependence between the kindergarten (2.5 years - 6 years) and the elementary schools (6-12 years), increased and more effective individualization during the elementary grades, etc. In other words: the change is a more general reform, where the boundaries are wide, the tasks are general and amorphous, the goals are multiple and complex, and the changes required for the school as a whole are substantial (Van Velzen, Miles, Ekholm, Vansyver & Robin, 1985, p. 58).

The R.P.S.-project is also characterized by a large number of participating schools (in 1973: 9 schools; in 1985: 275 schools) and by a complex support structure. It is typical for a large-scale innovation that along with the development a complex support structure is created. At the national level as well as at the regional level, different types of change facilitators are involved. The role of these different change facilitators is not always clear. And it is not unusual to observe conflicts between an existing support system (e.g. inspectors for the primary schools) and the new support structure created in the context of a large-scale innovation project.

As a consequence, one can expect that schools will react differently. In other words: the way a large-scale project is elaborated and presented to the potential clients (schools, teachers, principals, parents) can create a so-called "management-reaction". So, one principal explains it as follows: "What we need in our school are clean rules and procedures, an open
communication among staff members, regularly organized meetings and if possible a generally accepted view on the main objectives of our school". In another case, we observe that the school reacted in a way which can be labeled as a "meaning-creating reaction". Interviews with teachers make clear that they are interested in activities in the school which lead to an ongoing negotiation process among the staff. They are looking for opportunities which enable them to build up incentives for themselves to implement the innovation. And in a third case, we observed a more "formal-administrative reaction". At the school level, many activities (staff meetings, writing small progress reports, meetings with parents and external change agents) are organized, but without a clear link with the activities in the classroom.

It is important to underline that the characteristics of a large-scale project create a space for reactions of a very different nature at the local school level. These different reactions are also determined by the local context. The school as an organization has a certain size, a characteristic climate, certain procedures, particular groups. To understand the change process you always need to know that you are speaking of a Belgian Primary School, with 150 boys, whose parents mostly work in a local brewery, where the teachers are older, the principal is mostly concerned with the "image" of the school, where teachers teach in a way that is very isolated from the work of other teachers and where there is another Primary School 5 km away which has 450 pupils, mostly belonging to a higher social group.

The goals of the R.P.S., presented by the national authorities and developed by a National Committee are vaguely formulated. As a consequence, schools have the opportunity to elaborate these goals in a way adapted to the local situation. Looking at different schools, one can expect that the innovation will take on different configurations. It is not unusual to observe important differences between schools implementing the same innovation. As a consequence, it is difficult to assess the level of implementation in an uniform way (see section 2).

Given this context, one can also expect that the principal is an important factor. In section 3 we will explore this role by comparing schools which implement the R.P.S.-goals on a different level.

Based on this exploration, we will focus - and that is the main objective of this paper - on some conceptual and research issues. Given the complex
characteristic of a large-scale innovation project, we think it is necessary to reconceptualize the change process and to look for specific research questions (see section 4). It is clear that good research and evaluation of an innovation cannot be simplistic, looking at one or two variables only. "Local implementation of school improvement represents a complex web of causes and effects that need to be looked at carefully over time. We need long-term, developmental, follow-up studies, focused at the school level, rather than only large-scale statistical studies aggregating data from many schools". (Van Velzen, Miles, Ekholm, Hameyer & Robin, 1985, p. 67).

2. The R.P.S.: assessing the level of implementation

We already pointed out that concepts such as implementation and institutionalization become less clear and more complex when we analyze large-scale changes in educational settings. For instance: we frequently observe that schools engaged in the R.P.S.-project choose one or two innovations out of the bundle of innovations. This first reduction is complemented by a second one: once the staff has chosen one specific innovation (e.g. individualized reading instruction in grade 1-4), it is still necessary to develop specific teaching strategies and to choose among available teaching material. Here the principal can play an important role or the staff can look for support outside the school (e.g. by members of a regional support team). From a research point of view, one can try to trace the implementation process. But it is typical for R.P.S.-schools that after a while the staff will add other innovative activities (e.g. we will organize once every trimester a special meeting with parents). This decision can disrupt the activities related to the first innovation or can lead to events which develop independently. In other words an appropriate image of a R.P.S.-school consists of one or two innovations surrounded by a lot of other activities which also belong to the "bundle of innovations". These last activities are less well planned, will differ from one year to another, will take on different configurations one year to another, will disappear after one year, etc...

Nevertheless it is important to develop a method by which we try to grasp the level of implementation. During the school year 1981-1982 we interviewed 101 teachers from 24 R.P.S.-schools. We used these interviews for the elaboration of the concept "local innovation policy" (see Vandenbourghe, 1987a). It was possible to distinguish four different types
of local innovation policy (policy emphasizing planning; emphasizing interaction; emphasizing risk avoidance; emphasizing cooptation).

The same material was used for the assessment of the level of implementation. It is important to emphasize that the determination of the implementation is based on interviews. During these interviews, we tried to collect clear and useful information about the actual teaching activities in the classrooms.

We already underlined the fact that the "official" aims in the R.P.S. were formulated in a broad and vague way. From the first interview, it became obvious that teachers don't talk about the R.P.S. using the official wording of the aims. They mostly talk about concrete teaching activities, perceived by them as typical for or as a result of the introduction of the R.P.S. in their school. We decided to use these concrete answers and descriptions for the determination of the implementation level.

During the analysis of the interviews we tried as far as possible to group all the teaching activities reported by the teachers under the headings of the official aims. In other words we tried to reconcile the teaching activities described by the teachers to the "official" aims of the R.P.S. This rule made it possible to use almost all the activities described during the interview with the teachers.

A first inventory of all these teaching activities resulted in a long heterogeneous list. In order to grasp this diversity, we defined for each of the general aims, typical activities. Each activity is defined very concretely. In other words, using the interview data on the one hand and taking into consideration the general aims of the R.P.S., a well defined analysis scheme was developed. This analysis scheme contains a general formulation of the aims, a definition of activities typical for each aim and also a list of analysis rules. These last rules are the result of several try-outs. They explain what kind of information (out of the interview) is important for the determination of the implementation level, how to organize the data, and especially how one can assess the level of implementation.

Some examples will make clear this process of analysis as well as the assessment of the level of implementation. In the manual developed for the
measurement of the implementation, the five official goals of the R.P.S. are defined by the research staff as follows:

- **Integration**: activities aimed at the mitigation of the barriers between the different grades;
- **Individualized teaching**: activities aimed at the implementation of teaching strategies which take into consideration differences among pupils;
- **Promotion of a school community**: activities aimed at the promotion of collaboration among pupils from different grades;
- **Child-centered education**: activities by which the pupils have the opportunity to influence the teaching-learning process;
- **Full development of all capabilities**: activities aimed at the promotion of non-cognitive capabilities of every pupil.

As already indicated every aim has been further elaborated by indicating "typical activities". Thus, for the general aim "integration" we distinguished two categories: category a: contacts among a teacher and pupils who will attend his/her class. And category b: activities which have as a result that information about pupils is transferred from one teacher to another.

In the manual, each category is illustrated by several examples.

Besides providing a general definition of the aims, the clarification of the aims by typical activities (and typical illustrations), we also developed a rating system which enabled us to assess the level of implementation. We used a four-points scale: 0, 1, 2, 3. Each point has been defined as concretely as possible. This gave us the possibility to define an interscorer reliability. (The interscorer reliability was very high. Two researchers, for 264 scores, reached a 80 %-agreement.)

For example, as far as the aim "promotion of a school community" is concerned we developed the following rating-scale:

3: collaboration among pupils of different grades at least 14 times during two trimesters;
2: collaboration among pupils of different grades at least 8 times during two trimesters;
1: collaboration among pupils of different grades at least 4 times during two trimesters;
0: no collaboration;

or: less than 4 times during two trimesters.
Using this procedure, we were able to assess the level of implementation for every single teacher. These assessments have been aggregated for the school.

In a next step, we developed a procedure which led to the distinction of five groups of schools:
- group 1: high implementation level for 4 or 5 aims (7 schools);
- group 2: high implementation level for 3 aims (6 schools);
- group 3: high implementation level for 2 aims (3 schools);
- group 4: high implementation level for 1 aim (4 schools);
- group 5: no aim implemented on a high level (4 schools)

"High level" means here that at least 25% of the teachers get a "3" on the implementation scale and another 25% of the teachers get a "2" or "1".

3. Principal's interventions

In 1986 an additional analysis was made of the principals' interventions in two schools belonging to the implementation group 1 and in two schools belonging to the implementation group 5.

An overview was made of the interventions during the so-called mobilization year (the year during which the school did some preparation activities) and during the first and second implementation year.

The results are summarized in figure 1 and 2.
<table>
<thead>
<tr>
<th>Implementation group 1 (2 schools) (Substantial implementation)</th>
<th>Implementation group 5 (2 schools) (Minimal implementation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The principal gives clear information on several occasions during the school year (Teachers perceive the principal as a well-informed person)</td>
<td>1. &quot;Outsiders&quot; invited by the principal give information</td>
</tr>
<tr>
<td></td>
<td>- Teachers receive much, but rather unstructured information</td>
</tr>
<tr>
<td></td>
<td>- School teams visit other R.P.S.-schools in order to get information from experienced R.P.S.-teachers</td>
</tr>
<tr>
<td>2. Principal fills out the so-called &quot;school dossier&quot; (information about the school asked by the national change facilitators)</td>
<td>2. Principal fills out the &quot;school dossier&quot;</td>
</tr>
<tr>
<td>3. - During every staff meeting the adoption or non-adoption of the R.P.S.-project is discussed</td>
<td></td>
</tr>
<tr>
<td>- Whenever possible the principal introduces an informal discussion about the R.P.S.</td>
<td>3. Principal emphasises the fact that the school is already developing in the right direction</td>
</tr>
<tr>
<td>4. Principal pushes the teachers, but makes also clear to the teachers that he/she will support them</td>
<td>4. According to the principal there is pressure from outside (parents, the local organizing body, inspectors) to adopt the R.P.S. So, he/she tries to convince the teachers to start as soon as possible (&quot;The train is leaving the station&quot;)</td>
</tr>
</tbody>
</table>
### Fig. 2. Principal interventions during the first and second implementation year

<table>
<thead>
<tr>
<th>Implementation group 1 (2 schools)</th>
<th>Implementation group 5 (2 schools)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Substantial implementation)</td>
<td>(Minimal implementation)</td>
</tr>
<tr>
<td>1. Principal visits classrooms</td>
<td>1. No visits</td>
</tr>
<tr>
<td>2. Principal asks to discuss and to</td>
<td>2. Few/no discussions</td>
</tr>
<tr>
<td>legitimate specific teaching</td>
<td></td>
</tr>
<tr>
<td>activities</td>
<td></td>
</tr>
<tr>
<td>3. Discussions take place during</td>
<td>3. Monthly meeting after schooltime</td>
</tr>
<tr>
<td>schooltime (substitute teachers</td>
<td>(no substitute teachers)</td>
</tr>
<tr>
<td>in the classroom)</td>
<td></td>
</tr>
<tr>
<td>4. Principal gives specific</td>
<td>4. Support activities are organized</td>
</tr>
<tr>
<td>suggestions, elaborates examples/</td>
<td>by external change facilitator.</td>
</tr>
<tr>
<td>does some research in order to</td>
<td>Principal is not always present</td>
</tr>
<tr>
<td>answer teacher's questions</td>
<td>during these meetings</td>
</tr>
<tr>
<td>5. The principal is involved in</td>
<td>5. Involved in in-service training,</td>
</tr>
<tr>
<td>in-service training for heads;</td>
<td>if obliged</td>
</tr>
<tr>
<td>informs the teachers about these</td>
<td></td>
</tr>
<tr>
<td>in-service activities</td>
<td></td>
</tr>
<tr>
<td>6. Principal pushes teachers, and</td>
<td>6. Principal admits that teachers</td>
</tr>
<tr>
<td>supports them.</td>
<td>have expectations, but that she/he</td>
</tr>
<tr>
<td></td>
<td>is not able to fulfill them.</td>
</tr>
</tbody>
</table>
The findings summarized in figure 1 and 2 are not new. Our findings confirm what others have found about principals' behaviors. From these data, and also from other studies, we know for instance that there is a correlation between planning by the principal, vision building, coaching teachers, continuous support and the level of implementation (Hall, Rutherford, Hord & Huling, 1984; Hall & Rutherford, 1983). We will use these data (fig. 1 & 2) as a background for exploring a set of questions.

4. Exploration of important research issues

According to Griffin and Barnes, criticisms of educational research frequently center on the perceived lack of impact of research upon classroom and school practice. There should be an immediate and observable influence of research findings upon schooling, and the research should assist in making teaching and learning more predictable, economical, and effective (Griffin & Barnes, 1986). Their research-into-practice study was based on three assumptions: (a) research findings can be used to provide a systematic focus for teaching and schooling and thereby serve as a school improvement tool; (b) research findings can be transmitted to school practitioners if the findings are viewed as legitimate and useful guides to practice; and (c) research findings can be interpreted positively by school-based administrators and teachers if careful attention is given to style and manner of delivery, with particular emphasis placed upon situation-specific issues that vary from one school setting to another (Griffin & Barnes, 1986, p. 57).

These assumptions and the general underlying idea of using research data positively for the construction of an improvement program are important, especially in a period of no-growth, consisting of demographic, economic and psychological contraction.

There is a similar trend as far as the development of training programs for principals is concerned. These programs are also based, to a different extent, on research data (Van der Perre & Vandenberghe, 1987). But we should not overlook a problem. According to Gersten a.o. (1986) there is the past ten years an impressive increase in detailed descriptions of effective teaching practice and a few thoughtful approaches towards improving staff development (own italics). Several states developed training programs for principals which are loosely based on the research of
effective schools (own italics). Related to this development we want to focus on one particular problem.

As researchers, we observe during one or two years what principals actually do. We try to inventory in a valid and reliable way all the interventions. In the next step we group these interventions and give them a name (such as: vision building; active support; coaching teachers). This labeling activity is important, because by doing so we can talk in more general terms about the role of the principal in improvement efforts.

And sometimes, it is obvious that in connection with this labeling activity different frames are used. An effective principal focuses on clear planning, creates open communication channels, and tries to reach well developed agreements. Or an effective principal has a longterm vision, is a norm setter and creates a climate which increases the commitment of staff members. The former is a labeling activity related to the management-perspective; the latter is illustrative for the cultural perspective.

Recently one of the prevailing conceptions of leadership, is leadership as behavior. And according to Duke this is one of the most popular ways to think about leadership. Leadership is a set of behaviors or activities (Duke, 1986, p. 10). Unfortunately there is little evidence that most teachers think of leadership as a batch of discrete behaviors. When a complaint is heard about a lack of leadership, it is unlikely that it refers to the absence of a particular set of behaviors. What is perceived to be missing is not so easily observed or described.

We want to emphasize an important phenomenon. After a while we treat these labels as if they are causes. In other words: it is because a principal builds a vision about the future development of his school that there is a high level of implementation. It is because the principal creates active support that in this local school the improvement effort is of a high quality. Etc... And as a result we also claim that training programs for principals should focus on "planning behavior", because we have observed a correlation between planning by the principal and the level of implementation. This and other proposals are based on the assumption that there is indeed a causal link between "planning by the principal" and "implementation".
Is this a legitimate way of thinking? It's obvious that there is a tendency to translate research findings into actions in a way which is not always acceptable. In order to explore this problem, one can make a distinction between a causal explanation on the one hand and a nominalistic (*) explanation on the other hand. This distinction is well-known in the medical literature where a distinction is made between a causal and a nominalistic diagnosis (Bleys, 1984-'85; Campbell, Scadding & Roberts, 1979).

Causal means here: in any case factor A (or intervention A) will inevitably lead to reaction A. Nominalistic means: given a cluster and diversity of interventions (see: a syndrome) there is a chance that an expected reaction will occur. In many cases, the problem we overlook is that we assume by giving a name we are able to explain reactions in a causal way. Figure 3 gives an overview of the problem we want to introduce.

* The term nominalistic is derived from the Latin word nomen which means name.
Figure 3. Relationship between interventions and implementation: a causal and a nominalistic explanation

(name/label)

- MORAL SUPPORT
- SPECIFIC COACHING

(Causal Explanation)

(explanatory factors)

Nominalistic Explanation

\((^\circ)\): a specific intervention, such as writing a memo, providing reading materials for grade 1, having a one-leg conference with the remedial teacher, informing a parent about the next meeting on Monday evening, etc...
It is our assumption that we can improve the explanation of the relationship between interventions and implementation if we add another "box" between the daily interventions and the result (level of implementation). If we are interested in an explanation which creates a basis for an appropriate planning of in-service activities, then we should build in an additional block (see fig. 3: explanatory factors) which is still of a hypothetical nature.

In order to illustrate this flow of thinking and to specify a sample factor in this "box", I want to introduce one hypothesis:

"- some interventions by the principal (or a change facilitator in general) create a context by which the innovation gets an increasing meaning for all participants;
- other interventions don't." (*)

This hypothesis is illustrated in the research literature. Fullan has documented this issue in a well elaborated way. "The presence or absence of mechanisms to address the ongoing problem of meaning - at the beginning and as people try out ideas - is crucial for success, because it is at the individual level that change does or does not occur" (Fullan, 1982, p. 38, own italics). In his analysis of the implementation process, Berman underlines the importance of an activity he calls clarification. Many researchers have suggested that users need to be clear about the change effort if it is to be effectively implemented. Hence the suggestion that roles and tasks should be specified ahead of time, before implementation. But large-scale innovations are complex and at the same time unstructured. Implementation in that case implies activities during the implementation stage in which individual teachers become clearer about the project's philosophy as well as its operational objectives. According to Berman:

"... clarification is a process whereby each user develops his or her understanding of - and belief in - the innovation as it evolves during implementation" (Berman, 1981, p. 273).

(*) We want to emphasize here that for a good explanation we should look at a connected chain or network of several causal factors.
In their study on using research findings to change school and classroom practices, Griffin and Barnes observed that staff developers, who were trained (5 days) in using research findings from effective teaching and school leadership, paid more attention to teacher behavior as the focus of staff development work. "Also it can be seen that, in general terms, the treatment group staff developers paid more precise attention to the classroom and school variables in their work with teachers, dealt more directly with the issues of adaptation of ideas and plans in relation to those variables, linked teachers to sources of technical assistance, and provided more opportunities for teachers to work together on teaching and schooling issues" (Griffin & Barnes, 1986, p. 579). It is our assumption that all these characteristics linked together in a "syndrome", create a situation for the teachers by which their daily activities and problems related to a school improvement project become meaningful. In other words, we should not try to explain an increasing effectiveness (of the school) by referring to some singular factors (or interventions), but by looking for an underlying explanatory factor which seems to be here "creating meaning".

In an analysis of five case studies on institutionalization of innovations, Miles, Ekholm and Vandenberghe (1987) came to the conclusion that vision-building is a key aspect leading to institutionalization. Institutionalization of an innovation is facilitated by support activities (mostly by the principal) which create opportunities for an ongoing "vision building" that clarifies the change involved, and enables schools to develop meaningful organizational behavior. One can also hypothesize that creating meaning, as an essential part of the implementation plan, allows the school and the staff to evaluate expected and unexpected developments and problems.

In his interesting exploration of "the aesthetics of leadership" Duke points out that during the past decade organization theorists have increasingly applied the concept of cognitive psychology to the study of leadership (Duke, 1986, p. 11-12). He refers to Pondy, who taking up the challenge to think more creatively about the nature of leadership, propose that leadership is a language game. Language becomes a vehicle through which meaning is conveyed. The effectiveness of a leader: "lies in the ability to make activity meaningful for those in his role set - not to change behavior but to give others a sense of understanding what they are doing, and especially to articulate it so they can communicate about the meaning of their behavior". And in his analysis, Duke comes to the following statement: "Rather than riveting attention to what leaders
achieve, an aesthetic perspective would be concerned with the meaning attached to leaders and what they do. Leadership, in fact, helps bring meaning to the relationship between individuals and greater entities — communities, organizations, nations". (Duke, 1986, p. 13).

The importance of the hypothesis we gave as an illustration, also appears in our study of the Renewed Primary school. An analysis of the characteristics of the R.P.S. as a large-scale innovation (see section 1) underlines the necessity of interventions through which the tasks for teachers become gradually meaningful. The R.P.S. consists of many dimensions. The goals are generally stated. From interviews with teachers, we know that they repeatedly ask for more information. They keep wondering what the R.P.S. really is. Some of them claim that R.P.S. is nothing new and that they already do what is proposed, etc... (Vandenberghe, 1986).

In other words: multidimensionality and generally stated goals lead to a situation in which teachers and principals are forced to look for a translation of the R.P.S.-goals into activities which are adapted to the local context. This implies that the school and the teachers should constantly try to answer the question: what does the R.P.S. mean for me and for our school? So, it is our assumption that some principals do answer this question by intervening in a specific way and that other principals don't.

According to Hameyer school improvement is a learning experience for the adults who are staff members (Hameyer, 1984). Adults tend to resist or avoid new learning more than younger people; their world is already organized, and adopting and implementing new work habits or use of new educational methods take time. Adults also demand stronger reasons, need to know the meaning of what they are learning. Adults have many duties in their lives, not only learning, and are less able to focus and concentrate on learning as such. Thus weak or vague learning demands will often lead to avoidance of learning (Van Velzen, Miles, Ekholm, Hameyer & Robin, 1985, p. 62).

Through the elaboration and exploration of one illustration, we wanted to underline the importance of an approach which can be helpful in building a link between research and practice. Looking for an explanation, beyond a nominalistic one, is at least important for three reasons.
First: many school improvement studies are of a non-theoretical nature. They give (interesting) descriptions of change processes and determining factors, but without an analysis of the broader significance of the data. In other cases the research starts from questions which are not grounded in a theoretical framework. Looking for explanatory factors creates the opportunity for a sound theory building.

Second: a too narrow and mechanistic view about the relation between "factors" and "school improvement" success leads to a concept of a principal (and of a school) as a recipient of externally generated staff-development goals and activities. We need a framework by which it becomes possible to link research data and action in a less one-sided and more flexible way. We need an approach and a meaningful description of the role of the principal, which makes it possible to enhance the decision-making opportunities of the principal and to develop the self-regulating capacities of the principal and the school. In order to promote this, an explanation beyond a nominalistic one is needed. Doyle, in a paper on Teaching as a profession explores the same problem (Doyle, 1985). He argues for a clinical knowledge of teaching. Such a knowledge is grounded in the commonplace daily events and processes in classroom environments rather than in the problems and issues of a scientific discipline. Clinical knowledge is also interpretative and explanatory and not simply predictive. This is, clinical knowledge is not limited to information about validated practice. It also includes attempts to make sense of what goes on in the classrooms. It is our assumption that this is also true for the work of a principal at the school level.

Third: a deeper understanding of the influence of relevant factors and their interconnections creates a broader basis for prediction and action-oriented studies. In other words: a broader conceptual basis leads to more than sheer "wishes"; one can predict positive and anticipate negative outcomes. Action-oriented studies are desirable because research and practice are closely linked through mutual feedback. A series of "mini-hypotheses" can be tested. Good action research is a series of linked predictive studies — but they occur in a working relationship in which the results of prediction are used to plan the next action. Predictions are not the same things as plans — but better plans can be made after looking at the results of predictions (Miles, Ekholm, Vandenberghe, 1987).
5. Literature


