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ABSTRACT

During the 1970s, evaluation researchers realized that adoption of a curricular innovation does not ensure its implementation. This paper asks which strategies of educational policy and external support are relevant for implementing curricular innovations, particularly in the Netherlands. The first three sections discuss why and for whom implementation is a problem and describe policy instruments and support functions. Following this, section 4 summarizes available research regarding the actual effect of policy and support on implementation. In practice, policy goals are seldom carried out according to the crucial imperatives suggested in the literature. Such goals are seldom based on teachers' own knowledge concerning the need for curricular change and often lack implementation guidelines. Implementation is in the hands of noninfluential lower- and middle-level government officials who lack systematic control over financial and external support. Section 5 outlines the Dutch education system, which is predominantly pluralistic, decentralized, and autonomous regarding teacher appointments and textbook choices. The dissemination and implementation of innovations and curricula is a perennial problem. Section 6 summarizes study results concerning implementing the Netherlands' new primary curriculum during 1975-1988. Section 7 offers conclusions concerning implementation weaknesses (particularly involving enforcement), and section 8 recommends new research directions. Included are three references and three figures. (MLH)

NATIONAL EDUCATIONAL POLICY AND EXTERNAL SUPPORT SYSTEMS AS CONDITIONS FOR CURRICULUM IMPLEMENTATION*

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Abstract

In this paper we are asking which strategies and tactics of educational policy and external support are relevant for the implementation of curricular innovations. After an introductory discussion concerning the implementation problem, policy instruments and support functions, a short summary is presented of research findings in the international literature. The paper goes more deeply into the goals, means and results of four major renewal strategies in the primary education curriculum in the Netherlands in the period 1975-1988. After some conclusions on policy and support as conditions for implementation, recommendations are discussed for future research on this topic.

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1. Introduction

In the seventies evaluation researchers in the area of educational innovation became aware of the fact that once an innovation is adopted, its implementation cannot be taken for granted (Charters and Jones, 1973; McLaughlin, 1987). Many innovations in education are of the curricular kind, and curriculum implementation has become a research object in its own right (Fullan and Pomfret, 1977).

The first relevant question is to what extent curricula are implemented. This question has been refined more and more and today we are asking which parts of a curriculum are implemented in which way. The second question is how the degree and nature of the implementation can be explained. Determining factors are being sought in the characteristics of the curriculum itself, the characteristics of the teachers and the schools which are or are not implementing the curriculum, including characteristics of their students, the context in which teachers and schools are working, and the strategies used by those who are interested in implementation.

In this paper we shall deal with two aspects of the context: educational policy and external support, and the strategies and tactics used by policy makers and support agents for implementing curricular innovations. The question that we want to answer in this paper is which factors are relevant for implementation. In section 3 we concentrate on the ways policy makers and support agents could influence the implementation of educational curricula. Section 4 goes into the available evidence concerning the actual impact of policy and support on implementation. Sections 5 and 6 contain an outline of the Dutch situation as well as results from several empirical studies into the implementation of the new primary education curriculum in the Netherlands during the period from 1975 until 1988. We offer some conclusions in sections 7 and 8 concerning policy and support as conditions for implementation, and some reflections on theoretical and methodological issues which deserve more attention in research into curriculum implementation.

First of all we take a closer look at the problem of the implementation of new curricula.

2. Curriculum implementation as a problem: for whom and why?

Educational curricula are concerned with goals, content and methods. They are made more or less concrete in products such as documents and textbooks. They can be old or new, part of current practice or the substance of innovation. Reforming any given curriculum is a continuous problem. New needs in society, problems in schools, insights from educational research, policy priorities and the supply of ideas and products from pressure groups, professional developers and commercial organizations constantly lead to demands for curricular innovation.

Curriculum implementation has to do with the implementation of tangible products such as teaching materials as well as intangible products such as ideas. Implementation is needed on several levels: the macro level, the local situation, the school, the teacher, the classroom and the individual pupil. The task of getting a policy for curriculum reform implementated extends from obtaining national support to the performance of specific activities in the classroom by teachers and students.

Implementation means "putting into practice". It can and has to be measured. The problem is to distinguish between non-implementation (including symbolic forms of implementation), adaptation (resulting in all sorts of configurations) and hifi implementation (Fullan, 1982; Van de Grift, 1987; McLaughlin, 1987; Rice and Rogers, 1980, Stokking, 1986, 1988; Seashore Louis and Van Velzen, 1986).

The most serious problem in measuring implementation is one of criteria. Is what counts the implementation of a curriculum as such? Which adaptations can be tolerated, who decides what is essential? Or is it a matter of practical improvements or problem solving? But what if by putting a curriculum into practice some problems are solved but other problems are created, made worse or revealed for the first time? Is it possible for teachers to use the rationale behind the curriculum, discover new possibilities, invent or re-invent unorthodox procedures which might benefit pupils? Can an unintended positive side-effect outweigh an imperfect implementation of a curriculum?

Perhaps an imperfect implementation is only a problem from three points of view: (i) there is an inadequate return on the

investment in development and dissemination of a great deal of money, time, energy and idealism; (ii) the education and instruction that students receive is not as good as it should be; or (iii) educational equity is threatened.

In the first case there is a problem for policy makers, developers, support agents and tax payers. In the second and the third cases teachers, students and parents are among the parties concerned as well.

In all cases one might doubt whether putting strict demands on implementation is reasonable. The relevant frame of analysis is not the separate program or project, but the implementation unit as such, including all the conditions and possibilities. The ultimate criterion has to be found in the teachers' required sense of responsibility, in terms of which all their actions are ultimately for the benefit of their students.

3. Policy instruments and support functions

In our discussion about the potential influence of educational policy and external support on curriculum implementation it is helpful to determine the means that policy makers and support agents have at their disposal to achieve this.

Concentrating on national educational policy the following policy instruments can be mentioned (Hullenaar et al., 1987; Schaveling, 1984):

a) laws, rules and regulations;
b) financial means;
c) public discussion, legitimization;
d) experiments and projects;
e) information, persuasion
f) planning and organizing external support;
g) inspection and assessment.

Clearly several aspects in the use of these instruments must be considered important whatever the policy issue: being specific about the goals to be achieved, incorporating the new policy in the actual policy context, keeping a balance between centralising and decentralising decision making. Other aspects will depend on

the scope of the policy (e.g. narrow or broad reform, all schools or special target groups), the national context (economic, social, historical) or the strategy chosen (e.g. demanding uniform implementation, setting goals and holding schools accountable, aiming at the professionalization of teachers, enhancing the innovatory capabilities of schools and letting schools develop their own goals for improvement).

Whatever the circumstances, policy makers have to make a great number of decisions concerning, inter alia, the content and the number of rules as well as the degree of detail and the speed of change. The content of rules may concern the curriculum content, the time to be spent on the different subjects, the materials to be used, the organizational procedures, the didactic methods, the goals to be achieved, the way these goals should be assessed, the necessary teacher qualifications, training courses, the use of external support, etc. etc.

By the same token there is an abundance of functions and means of support (Hoeben and Stokking, 1986). By "external support" (see f) above) we mean here:

f1) the development, provision and distribution of products such as curriculum materials, diagnostic instruments and achievement tests;
f2) rendering services such as giving information, consults and advice, as well as testing and remedial teaching;
f3) knowledge dissemination, in-service training of teachers, staff development;
f4) research and evaluation;
f5) coordinating activities.

In investigating the influence of external support on curriculum implementation the important aspects are likely to be the characteristics of the support agents and agencies (e.g. reputation, knowledge about the client system, knowledge of the curriculum content) as well as the procedures and interventions used (such as supplying how-to knowledge, giving emotional support, organizing feedback and follow-ups).

The effects of policy and support on implementation can be described from at least two different points of view. First,

there is the kind of policy or support which explicitly aims at curriculum implementation. In such situations one can ask for the effects. Secondly, in stead of such a "top-down" approach one can start with the implementation efforts of teachers and schools. In that case policy and support, including activities not connected with the implementation of the curriculum at issue, are seen as conditions. In this paper we try to justify a mixture of both these approaches.

4. The relative consistency of research findings.

There is a growing consensus among researchers about what should be considered the relevant factors in the area of policy and support for implementation (Berman and McLaughlin, 1978; Firestone and Wilson, 1982; Fullan and Pomfret, 1977; Fullan, 1982; Fullan et al., 1986; Lafleur, 1986; McLaughlin, 1987; Olson and Burns, 1983; Seashore Louis and Van Velzen, 1986; Van Velzen, Miles, et al., 1985).

The following imperatives concerning the actions and qualities of policy makers are seen as crucial for promoting implementation:

- show real commitment and optimism;
- formulate and adhere to specific goals and clear priorities;
- keep a balance between pressure and support;
- organize communication, information, planning, logistics and coordination, consultation, in-service training training, feed-back procedures, possibilities for succes and obtaining incentives;
- avoid interference from other policy issues;
- choose realistic deadlines, do not expect too much at the same time, do not overload;
- do not rely too much on effects of funds alone, but do provide enough of them;
- show and push possibilities for local participation, experimentation and adaptation;
- do not neglect the importance of materials, textbooks. etc.
- do not rely too much on enforcement (because the effect will be opportunism, symbolic behavior, lack of real commitment etc.).

The list with regard to the activities of external support agents and agencies is quite similar:

- organise coordination among support agents/consultants;
- be informed about curriculum content and client;
- provide how-to knowledge;
- stress the need for concrete materials;
- show moderation in planning details;
- do not expect too much at the same time;
- let the client participate in decision-making;
- do not pursue trivial goals;
- show the importance of goals;
- strive for institutionalization from the beginning;
- allow for pressure as well as support;
- provide training;
- give support in the classroom;
- support the search for solutions to implementation problems;
- provide real (emotional) support;
- organize periods of feedback and reinforcement;
- do not let the client become dependent.

In practice policies are not very often carried out in accordance with the above recommendations. Several studies show that:

- policy goals are seldom based on knowledge concerning the way teachers are thinking about the need for changing the curriculum;
- policy goals are often not thoroughly considered, and there are not enough guidelines concerning the operationalization of these goals;
- policy implementation is actually in the hands of lower and middle-level government officials who do not have many possibilities for influencing the course of events;
- policy implementation is not very systematic and is likely to become the toy of political controversy;
- often there is no implementation strategy and a serious lack of attention to implementation detail;
- there is no control over the spending of financial means and with regard to external support it seems to be the case that supporters and consultants have difficulties combining enforcement and assistance roles.

Although the aforementioned research results are not all based on rigorous effect studies, the brief conclusion is warranted that most studies reviewed so far show that curriculum implementation is certainly a problem.

5. The Dutch situation.

The educational system in the Netherlands is predominantly pluralistic and decentralized. The "freedom of education" as laid down in the Constitution means in practice that representative bodies and national support organizations participate in policy formulation, that school boards are more or less autonomous in the appointment of teachers and the choice of textbooks, and that the development and production of textbooks must be left to free enterprise (especially commercial publishers). The dissemination and implementation of innovations and curricula is a perennial problem. Dissemination tasks and funds are the playthings of those who are part of various educational power structures. Individual external consultants, principals and teachers can decide more or less autonomously whether or not to adopt or implement an innovation or curriculum. In addition, the system is highly fragmented, along professional as well as denominational lines. There are various socially independent organizations for the coordination and financing of research, the carrying out of research, curriculum development, and testing, giving general support to primary schools (60 non-denominational regional and local school advisory centers, with 2000 consultants), giving general support to secondary schools as well as school advisory centers and teacher training (three national pedagogic centers, public, protestant and catholic), pre-service and in-service training of primary school teachers (60 colleges), and the same for secondary education (ten institutes). See figure 1.

Here figure 1.

Educational policies with regard to curriculum renewal were

made in the framework of an RDD-approach in the period between 1970 and 1975. In the period between 1975 and 1980 a shift occurred towards local problem solving, as well as towards projects and processes in autonomous schools (partly because of research results from the United States, partly in confirmation of the principle of "educational freedom" and the desire to limit the ambitions of national policy-makers).
In the period between 1980 and 1985 there was a focus on disseminating information about products and processes from project-schools to other schools. The regional institutes (school advisory centers and teacher training institutes) were given a more explicit linking role. Several research projects showed (e.g. see Stokking, 1986; Stokking, et al., 1988) that the quality of school-based products, the multitude of dissemination channels and the actual support for implementation became or remained serious problems. In the same period a law was passed concerning a new form of primary education (see the next section).

Since 1985 we have seen a (further) decline in the numbers of pupils, budget cuts (also for economic reasons), recognition of the importance of professional know-how, a shift towards operationalizing end-goals or outcomes for primary education and first-level secondary education and towards assessment and accountability, as well as a careful focus on basics (esp. on reading and mathematics).

The existing support system is fixed by law until 1995. The law states that external support is necessary. On the other hand schools are free in their use of products and services (in view of the "freedom of education").

6. Some aspects of implementing a new form of primary education in the Netherlands.

6.1 Goals and structure of the new primary school.

The new law on primary education enforced the merger on August 1, 1985 of the former infant school (for 4-6 year olds) and the existing elementary school (6-12 year olds) (Van Bruggen, 1987; Schaveling, 1984).

There are ca. 8000 primary schools (of four different "denominations", with 3000 school boards), 70,000 teachers and 1,400,000 pupils. A primary school has between 60 and 200 pupils, between 4 and 10 teachers, and a headmaster who is a class teacher for 3-4 days per week (exept in the larger schools).

In summary form article 8 of the Act states the tasks and aims of the primary school as follows:

- emotional development;
- intellectual development;
- development of creativity;
- acquisition of basic knowledge;
- social, cultural and manual skills;
- multi-cultural education;

Article 9 contains the content or subjects:

- sensory and physical training;
- Dutch language;
- arithmetic and mathematics;
- English language;
- some general education in which the following subjects are compulsory
- geography
- history
- natural history, including biology
- elementary social science including elementary political science
- elementary religion, philosophy and different world views
- arts and crafts of which the following are compulsory
- language as literature
- art
- music
- handcraft
- play and physical movement
- social skills, including traffic behavior
- the following options:
- Frisian language
- language of ethnic minorities

The basic assumptions behind the process of renewal in primary education were formulated in the nineteen-seventies and may - in abbreviated form - be stated as follows:

1) furthering the continuous development of pupils;
2) allowing for differences in individual development;
3) respecting the pupil's sense of identity including religious-identity;
4) developing creativity (social, verbal, manual);
5) improving diagnostic and remedial functions;
6) removing educational inequalities.

There is and has been a wide consensus about these principles. In fact the policy and the law concerning the new primary education have been developed through extensive discussions with representatives from the field of education. Other policy instruments are experiments, projects and national support services in the area of curriculum development, information dissemination and staff development. In the years before 1985 the dominant focus was on local problem solving (see the previous section).

In spite of the consensus about the need for renewal and its direction in primary education, within the consultation and advice circuits, parents and teachers are by and large satisfied with the existing form of primary (formerly elementary) education. Very few, for example, are in favour of changing the official time allocations for the various subjects, which shows on average the following figures:

language and reading 7 hours per week;
general education 5 hours per week;
arithmetic and mathematics 5 hours per week;
arts and crafts 3 hours per week;
other subjects 5 hours per week.

Research studies, however, show that there are serious problems in reading education (comparable with the problems in other countries, see e.g. for the United States: Carter, 1984; Pink and Leibert, 1986; for France: Cheauveau, 1985). In addition, these studies indicate not only that educational practice is rather traditional, much more so than curriculum documents suggest, but also that all the facilities for curriculum development, dissemination and in-service training do not lead to clear implementation results.

In short, curriculum renewal is not really wanted, but it sure is urgently needed. The official policy since 1985 has been that primary education should be moving from the adoption stage to the implementation stage. The instruments in use now are focusing on promoting the actual implementation of high-quality curriculum products (supported by the school advisory centers) and inservice training of teachers (organized by the teacher training institutes).

6.2 Four major strategies.

In this section we summarize the goals, means and results of four renewal strategies in the primary education curriculum, based on several research studies. An overview is given in figure 2.

Here figure 2

6.2.1 Contracting schools for projects.

Goals

The policy instrument "contracting schools for projects" was meant first to further the development of participating schools in the direction of the new structure (one primary school for 4-12 olds) and curriculum, secondly to let the project school have a function as a model and stimulus for other schools in the region, and thirdly to obtain process-information and curricular materials from these schools which could be used on a national scale by schools wishing to adopt and implement the newly developed procedures and materials.

Means

The Ministry of Education has given all infant schools and elementary schools several times the opportunity to apply for a position as project school. The schools had to register on the basis of a "theme for development" by way of a project plan. Possible themes were formulated by the Ministry as the separate starting points for the new primary school (e.g. "improving the diagnostic and the remedial functions", "creativity", etc.) and as the separate subjects (such as reading, Dutch, arithmetic, general education, arts and crafts). Schools could choose one of these themes, and were obliged in the course of the project to describe the process and the results of their activities, in the form of a "school work plan", a curricular document containing an overview of subjects, goals, methods, and evaluation procedures. The Ministry used a particular procedure to select the

participating schools in which the most important criterion was regional and denominational spread. Project schools were allocated special funds for extra materials and for participating teachers' special leave of absence from teaching duties for one or more days per week. In addition extra external support was available (for which the School Advisory Centres received additional funds).

Results

Schools subscribed primarily because of their motivation to work on a certain theme; the facilities were secondary. Headmasters and teachers had preliminary discussions concerning the time needed, the feasibility of the project and the potential results. In general the participating schools were the larger city schools with more contacts and more previous project experience. The formulation of the themes and goals was generally perceived as being vague. Once they had started, schools soon became aware that it was rather unclear what was expexted of them. The project plans appeared in a lot of cases to be over-optimistic. The policy goal which went under the heading of "school development" was difficult to assess because of its vagueness. This goal was more or less attained in the sense of more contacts between teachers, or discussions about curriculum content and the like, but hardly in the sense of specific implementations of curricular innovations in the classroom. The "project" in itself required a great deal of organization, which resulted in much paperwork. The external supporter or consultant only had a limited role. The goal of stimulating other schools in the region was in general not reached due to the fact that those schools as well as the project schools were busy with their own activities. The third goal, "generalizable" or "transferable" products, was not reached either. There were many doubts about the quality and applicability of the documents.

6.2.2 Providing school-based information concerning the implementation process from project-schools to other schools.

Goals

The idea behind providing information about the activities

in project-schools was based on the assumed need for such information, especially in schools. Providing and disseminating products of project-schools could be one way of checking the obligation for project-schools to report on their projects. Moreover it would allow the Ministry to reward the work carried out by projec schools in making their reports. Policy makers expected and intended an "impulse" from this for the process of renewal.

Means

During the period under discussion there was a growing supply of products from the project-schools. The main policy instrument was a so-called "Information Point for Primary Education", a national information and documentation center. This center had to collect, select, produce, document and publish the products. Consultants from the school advisory centers and teacher trainers from the teacher training institutes could give external support. The schools themselves had to decide whether or not they wanted the information and whether or not the information was applicable to their specific situation.

Results

After several years of negotiation a national information point was operating at one of the national pedagogic centers, on behalf of two of the three national (the Roman Catholic pedagogic center being against a national center for political reasons). The information center (a project group of some five people) decided to concentrate on information containing descriptions of processes and experiences, which were neither specifically denominational or scientific, nor instrumental (such as classroom materials). The group tried to build a base of "information documents" that would represent all the aspects of the new primary education (see articles 8 and 9 summarized in section 6.1.). They also produced a periodical, a catalogue and a computerized data base with document information. The documents themselves could be ordered at costprice.

In 1985 there were some 600 documents available, two-thirds of which were written by project-schools. Half of these documents focussed on school subjects, the other half on didactic methods,

differentiation, school organisation, observation and other topics. The national information point was known to 95% of all schools. Some 15,000 titels were ordered every year, on average two per school. About 75% of the schools possessed one or more titels. At 60% of the schools the documents had been read, whereas at 30% they were "used", primarily for team discussions.

The (regional) school advisory centers occupied a prominent place in the dissemination and use of the documents and the catalogues. Every center received a free copy of every document. The consultants, many of them somewhat bewildered at the amount of information and material from many sides with which they were confronted, gratefully used the school information documents to prepare themselves for contacts with their clients. The consultant's most useful function for the school was as a selector of helpful information. There was hardly any role for the consultant in supporting the implementation of information in the classroom. The result was hardly any implementation at all. The documents were usually characterized as 'good for "getting ideas", but not fit for immediate use'. Since the policy goal ("to give an impulse to the process of renewal") was so vague, the succes of the chosen policy instrument is difficult to measure.

There is general agreement among national policy and support circuits that the information center has been conducive not so much to the implementation of the new form of primary education as to its adoption.

6.2.3 Disseminating curricular materials for implementation.

Some Background

During the 'seventies there were several large-scale projects in the Netherlands connected with primary education. Two of these were the GEON project in Utrecht and the OSM project in Rotterdam. Both projects were primarily concerned with curriculum development and led a fairly isolated existence. They both had as much a political as an academic background.

GEON ('diagnostic teaching' - also called 'differentiated teaching') was a national project, in cooperation with the University of Utrecht and several school advisory centres. The National Pedagogical Centres were also represented on the

committee responsible for the running of this project. The project combined development work with in-service training and guidance, as well as evaluation research. In fact the GEON project did not fit in with the professionalized national structure, and was abolished in 1980.

OSM (project education and social environment) was a local project, connected with the Rotterdam School Counselling Institute. The aim was primarily curriculum and social development work in the local situation.

The GEON project was chiefly concerned with reducing the increasing numbers of children recommended to attend special schools; it wanted to encourage enthusiasm for main-streaming in primary education, and to develop a method of implementing and giving advice about mainstreaming, particularly in infant schools. To this purpose GEON developed in-service training schemes. There was a free choice of curriculum, with the emphasis on teacher attitudes and skills. Particular attention was paid to practical knowledge. Ideas in connection with independent learning and diagnostic teaching were new, especially for primary school teachers.

The OSM project originated because of the manifest social inequalities that could be observed in primary schools, and which subsequently took their toll in secondary school streaming. On the basis of studies carried out in the field of learning psychology, work was done in particular to develop teaching/-learning programmes. A fairly restricted view was taken of what was required in the curriculum, and programmes were constructed in a scientific way, with explicit learning targets. This was a new approach, especially for infant school teachers.

These two projects were regarded differently by the educational world. GEON was seen as practical. It was warmly received. Teachers were stimulated by the suggestions about how to handle specific problems in class. The suggested procedures were clear, and explained step by step. Although the initiative came from outside the schools, GEON had a good press, and it was developed in close awareness of school practice. Government policy was placing increasing emphasis on mainstreaming in schools and therefore GEON fitted well into this context. Of course the courses did require explanation and support.

In national terms the OSM project was less clear. Those who were working on the problems faced by schools with many underprivileged children came to realise that these schools in particular required well-structured programmes. Educational publishers started to bring more and more textbooks with modern methods onto the market, including books developed by the OSM project. However, great efforts were required to use these educational packages in their entirety, and they were far from cheap. However, the publishers advertised a great deal, and gradually the result was that when school staff bought a new textbook they increasingly chose modern packages, such as the ones from OSM.

The GEON project was directed more towards the teacher, OSM more towards the curriculum. GEON was more concerned with products which could be used as concepts, OSM was more concerned with instrumental use. In spite of these differences the situation in 1980 was about the same for both projects. There were products, support material was available, articles appeared in journals and papers. Both projects were aiming at being used in schools, with the support of the school advisory centres.

Goals

The Minister of Education decided at the end of 1979 that the results of the GEON-project had to be nationally distributed for use by infant schools and elementary schools. Because of their position in the national support structure the National Pedagogic Centers were instructed to carry out this distribution task; this being the first time they had received a ministerial instruction, which could not be refused.

Means

From 1980 onward the National Pedagogical Centres spread information about the GEON-project to the School Advisory Centres (OBD) and Teacher Training Institutes for Primary Education (PABO). It was expected that these regional institutes would apply GEON in their relations with primary schools. In addition, the GEON products could be bought by schools and others at cost price. Information about all these possibilities was given to all OBDs, PABOs and schools. Subsequently the National Pedagogical Centres concentrated on transfer meetings for school

consultants and teacher trainers.

The method used by the pedagogical centres, advisory centres and teacher training institutes for disseminating GEON was chiefly to make the products and support information available and to organize meetings at which this could be presented and discussed. There was nothing like a deliberate, target-oriented transfer (the Ministry of Education wanted to achieve wide availability of GEON ideas). Nor was there a high-fidelity transfer of content (the Ministry wanted to see link-ups with the more general positive discrimination policy in education). The meetings varied per region and per institute. Sometimes there was just one informative meeting to discuss the whole GEON project with supporters from several centres and sometimes there was a series of meetings with a team from one centre to discuss only one part of the GEON project.

The model of transfer looks as follows:

(1) transfer from the developer (GEON) to the disseminator (National Pedagogical Centres);

(2) transfer from the national disseminator to the second, regional disseminators (school advisory centres and teacher training institutes) (OBDs en PABOs);

(3) transfer from the second disseminators to the users i.e. the schools.

Our research projects

Our object of study in the period between 1981 and 1983 has been the above-mentioned dissemination project and a comparison between the process as well as the results of this project and the diffusion that GEON had already achieved during the experimental years (before 1980) by way of publicity and personal contacts on the one hand, and with the dissemination of OSM-materials - which in the 'seventies was hardly widespread - from 1980 onwards by way of commercial publications on the other. In the period between 1984 and 1986 we carried out a separate follow-up study into the transfer from school advisory centers to schools and the actual implementation by teachers of one of the GEON-courses, namely, 'Independent Learning' (a translation and modification of a minicourse issued by the Far West Lab.).

Reports on the GEON-project, the dissemination study and the

follow-up implementation study can be found in Stokking (1984, 1986), Stokking et al. (1988) and Leenders and Stokking (1987).

Results

a. The diffusion of GEON.

Distinguishing between dissemination (as planned and systematic) and diffusion (as a natural process) we can say that until 1980 we had hardly any experience with dissemination in the Netherlands. The ideas and products of GEON were diffused in the 'seventies by way of publicity and personal contacts (stimulated by the use of available copying devices!). The policy of "educational freedom" (see section 5) entails a multitude of distribution channels. Our research shows that when there is a completely free spread of information the following problems arise:

- the effects, in terms of initiation and implementation, are limited (by 1980 there was 50% awareness of GEON-products in primary schools, and less than 10% actual use);
- the effects depend on various other factors, at present unpredictable;
- the chances that schools and teachers get in touch with usable know-how depend, among other things, on the headmaster and the consultant, and are unequally distributed;
- there is a strong possibility that innovations turn into caricatures;
- confusion can arise because of the number of different channels (different messages).

The problem in using innovations and know-how for improvement is how to use these to maximum effect. Change is difficult. People show all sorts of tendencies to simplify demands, to crush innovative ideas. For instance: skills are at issue, it is easier to concentrate on individual learning time. This problem is the more serious because external support personnel shows the same tendencies.

b. The dissemination of GEON, compared with OSM.

With reference to the three transfer steps mentioned above, in the section concerning the means, the problems were the fol-

lowing:

- with regard to (1): the national dissemination task is difficult to get accepted, and a separate project construction attracts unsolved problems;
- with regard to (2): the question of transfer remains largely up to individuals, there is little commitment;
- with regard to (3): the supply of new ideas and products must be legitimized, and the need of schools must be clarified.

The only notable result from the transfer meetings was that participants (supporters and trainers) who were already active made more use of the products etc. afterwards than less active participants. This could be explained by considering the function that such meetings can have, which is to support each other's ideas and decisions. The transfer from participants to their colleagues in the advisory centers and training institutes was a difficult next step. In one-third of the organisations there was no further dissemination or diffusion, in another third there was some diffusion, without commitment, and only in the last third there was systematic attention given to the ideas and materials. The implementation of GEON and OSM in consultation practice was influenced by the fact that GEON focussed on teacher skills and attitudes and OSM on completely specified packages, i.e. textbooks for different school subjects. The GEON ideas could become part of the "mental baggage" of the consultant, who could use this in divergent contacts with schools and teachers. The OSM-products had to be purchased by schools, and teachers were supposed to ask advice about their use.

The external supporters proved to have some influence on initation and adoption, but hardly on implementation by teachers. In 1983, there was almost 100% awareness of GEON in primary schools (in terms of some familiarity with the project, the ideas and the existence of products), but the most popular course, namely 'independent learning', was used in only 20% of the schools (infant as well as elementary schools). The use of OSM-products amounted to roughly the same. (OSM diffused faster in infant schools, GEON faster in elementary schools, perhaps due to the effects of "relative newness"). Dissemination by way of

the publically financed support structure and dissemination by way of commercial publishing turned out to be "equally effective", as assessed amongst school consultants and teacher trainers as well as amongst schools and teachers. About 70% of the teachers who used GEON- and/or OSM-materials did not make any use of external support.

c. The transfer and implementation of the GEON-course "Independent Learning".

Independent learning can be seen as an important condition for individualization and differentiation, which are main goals of the new primary education (see section 6.1). In 1983 we saw that 75% of the school advisory centers had adopted the course, 50% of the schools knew of its existence and 20% of the schools were using it. In 1984 we started with a survey amongst policy-makers, inspectors, external supporters, teacher trainers and publishers. Many of them mentioned that the Primary Education Act would come into operation on August 1, 1985, and that independent learning was part of the spirit of the law. Civil servants of the Ministry, inspectors, supporters from the national pedagogic centers and publishers agreed that the consultants of the regional school advisory centers had an important role in transferring "independent learning" towards schools and teachers and supporting the implementation. A survey amongst these consultants showed that some 50% were using this specific GEON-course in contacts with schools and teachers.

Skipping all process information we can summarize some conclusions of this study as follows. The consultant has an influence on the adoption of independent learning through regular meetings with complete schoolteams. The more meetings, the more adoption. Also, the more meetings, the more the team as a whole decided to adopt the course and the more the team as a whole decided, the more adoption. But the more the team as a whole decided, the less the course was implemented in the classroom. Crucial factors in relation to the implementation of independent learning were the ideas of the teachers about this innovation and the practical support the consultant had to give in the form of concrete suggestions and solutions to problems that the teachers experienced in implementing independent learning in their

classroom (such as how to organize materials, what to do with 'problem children', and so on).

In addition we mention that the consultants were on the whole not very interested in the explication of goals, the impact of the innovation in the classroom or its continuation (i.e. the institutionalization in the curriculum).

6.2.4 In-service training of teachers.

Goals

Since the Primary Education Act has been in operation national policy has shifted its focus from adoption towards implementation of the goals. One of the goals has to do with "strengthening the diagnostic and remedial functions". Because there are serious reading difficulties amongst 7% to 14% of primary school pupils, the policy has been to take this subject as a first point of action. At first the idea was that schools and teachers with many children with reading difficulties should get more support from the (non-denominational) regional school advisory centers. Participation by the (denominational) representative bodies in the formulation of the policy (see section 5) led to another option: in-service training organised on a national scale by the (denominational) teacher training institutes (which are suffering from a decline in student enrollment).

This in-service training should, within a period of three years starting from 1985, reach every primary school teacher, with the aim, firstly, to improve teachers' skills, reading instruction and reading achievement amongst pupils; secondly, to decrease the number of children who are in special education because of a lack of a suitable alternative - special schools have been growing in size and number for decades and being more expensive the financial aim behind the in-service training operation is to stop this growth - and, lastly, to give a boost to the in-service training courses organised by the teacher training institutes.

Means

The National Pedagogic Centers collect and develop materials for the courses and transfer these to the teacher trainers. The

training institutes receive additional funds to organize the courses. They are obliged to work together with the regional school advisory centers (which know the schools better, have more know-how concerning reading difficulties and are required to support implementation during and after the course, but which do not receive additional funds). The regions of the (denominational) training institutes and the (purely geographic) advisory centers diverge to a large extent. The primary schools receive some funds in order to make it possible for teachers to attend the courses during teaching hours (for the first time in the Netherlands). (However, the funds are not enough on average to allow more than one teacher to attend once a week whereas the Ministry wants participation of complete teams). The course is fixed for thirty-two hours per year.

Results

Our research (which is still continuing) shows that the National Pedagogic Centers, supported by experts, have developed a great many materials, very divergent in topic, concreteness, attitudes towards reading education and quality. These materials are presented to trainers and consultants in meetings which are held several times a year and in several regions. About 200 trainers and consultants, from most of the training institutes and advisory centers, come to these meetings. Materials on differentiation are the most popular. The teacher trainers usually object that concrete suggestions are lacking, whereas school consultants want more opinions from the national supporters concerning the operation as a whole (i.e. its goal as well as the tasks of trainers and consultants). Schools are registering in the expected numbers (some 20,000 teachers a year, mostly in complete teams). Motives are partly intrinsic (e.g. difficulties in reading education), partly opportunistic (e.g. using the additional funds to keep a teacher who would otherwise be fired because of the decline in enrollments or because of economic cuts by the national government).

As might be expected numerous problems have arisen during this period. These have to do with the extremely short time perspective for the development of materials and the organization of training courses. In addition there is a lack of available

know-how at the national centers as well as a lack of agreement between experts on the causes and the treatment of reading difficulties. The full catalogue can be extended with at least the following problems: the difficulty of a centrali ed development policy in view of differences between regions, institutes and schools; the distribution of responsibilities between the Ministry and the national centers; the lack of experience at the training institutes in managing such large operations; the limited know-how of the trainers as regards reading difficulties; the immense differences between schools and teachers in the problems they experience and the knowledge and skills they possess; the difficulties in making the course concrete and relevant; the didactics of in-service training as such; the cooperation between the teacher training institutes and the school advisory centers.

In 50 per cent of the cases the trainers (and the participating consultants) are using the nationally developed materials in their courses. In the other half they use all sorts of input to develop their own "lesson materials". Of the participating teachers 50% are happy with the courses given by the teacher trainers, and 85% are happy with the support they get from the consultants. Implementation results, based on self-reporting, can be established as the purchase of new or additional materials (reading books, remedial material, diagnostic instruments), the use of these materials (especially diagnostic tests), and the spending of more time on individualized instruction for children with reading difficulties. The most reliable result of the courses so far is a 10% increase in the use of diagnostic reading tests (from 55% to 65% of the teachers). One of the most important policy goals, namely increasing the attention paid by schoolteams to reading development, has not yet been reached. Teams who attended the course are talking as much or as little about reading problems as they did before. One undesirable effect seems to be that teachers who participated, afterwards think less positively about the feasibility of the policy goal to educate more problem children at primary schools rather than at special schools. The reason for this may be that these teachers had expected the course to help them meet the problems they have in reading instruction with problem pupils children with difficul-

ties, and that they are disappointed afterwards. Moreover, the increasing use of reading tests could lead to an actual increase in the number of children sent to special schools: a truly dramatic result!

In view of all the problems mentioned above and the possible undesirable effects of these problems, our conclusion is that this policy implementation was insufficiently prepared. However, there may be a good reason for this since the policy makers faced a dilemma in 1984. Either there was a chance of getting available some funds without thorough preparatory discussions and at least some results or there was a chance of having thorough preparatory discussions but, in view of the pluralistic nature of society, no results at all and no funds.

7. Some conclusions on policy and support as conditions for implementation.

Comparing sections 5 and 6 we see that in spite of the differences in political and educational systems between the USA (and Canada) and the Netherlands, the factors that seem crucial for implementation are much the same. In figure 3 we outline some thirty factors in policy and /or support.

Here figure 3

It can be argued that the following factors are not really a problem in Holland, perhaps in contrast to the USA:

- setting clear policy priorities;
- allowing adaption;
- providing materials;
- real commitment amongst policy-makers and support agents.

In my opinion the following factors are most critical, on both sides of the Atlantic:

- the formulation of specific goals (goals are often vague and provide no secure basis for action);
- a proper balance between pressure (enforcement) and support;
- realistic deadlines (typically, too much is asked in too short a time);
- providing incentives (thinking about the mechanism of incentives for teachers);
- providing personal contacts (funds are allways too small);
- the planning of control and accountability (who is comparing plans with outcomes?)

The greatest difference between the situations in the USA and in Holland seems to be the almost total lack of enforcement in the Dutch situation. Paradoxically this does not entail that regional school advisory centers, local school boards and municipalities have a great deal of power. Quite the reverse! The "freedom of education" is politically defended through the absence of government pressure: vague goals are given into the hands of the autonomous schools.

8. Recommendations for research.

The factors in policy and support summarized in the previous section that are relevant for curriculum implementation need further analysis. The next step would be to determine precisely why these factors are important. What is needed, what has to be avoided, for curriculum implementation? What is lacking or wrong in actual policy and support practice? What is the relative importance of the factors?

This analysis could only be carried out in the context of more implementation research. Implementation research can have different functions (see also Van de Grift, 1987) such as describing the actual innovation process, contributing to the improvement of the curriculum, making clear the transferability (general applicability) of the curriculum, identifying the factors important for implementation and, lastly, explaining the effects of the curriculum.

Research is needed into the whole process of dissemination, implementation, impact (effects on students) and continuation (institutionalization). Perhaps this requires two types of research, focussing on two questions:

(1) how do we achieve the best implementation? (research into dissemination and implementation (c.f. Van den Berg, Hameyer, Stokking, 1988));

(2) how do we achieve the most impact and continuation? (research into implementation, effects and institutionalization (c.f. Rice, Rogers, 1980)).

This paper has focussed on the first question. Both questions have to be researched with enough methodological rigour to be

able to determine the effects of complexities such as:

- covariance (e.g. certain types of support are given only to certain types of situations, confounding the conclusions about the effects of support);
- interaction (e.g. some strategies for implementation are effective for implementing a new subject, but unsuitable for implementing a new didactic approach);
- recursive effects- (e.g. the demand for certain types of support effects the supply of those types of support; the effects of a curriculum on students effect the implementation of that curriculum);
- multilevel effects (e.g. the implementation of a curriculum as influenced by the attitude of the teacher towards that curriculum and the attitudes of the other teachers working in the school).

In addition, there is lot to be done in the field of theory construction. Recommendations for policy and support are usually based upon generalizations in stead of explanations. Two possible examples here are the factors of "keeping a balance between pressure and support" and "providing feedback and reinforcement". What precisely is their importance?

Whereas Fullan et al. (1986) ask for an integration of "authority and support" and McLaughlin (1987) asks for a combination of "pressure" ("control") and "support" ("incentives"), Firestone and Wilson (1982) conclude that "enforcement" and "assistance" are difficult roles to combine (by one person). What is the psychological significance of authority, pressure, control, enforcement on the one hand, and support, assistance and incentives on the other? Is there a conflict between enforcement (for instance by regulations) and autonomy? Is it autonomy that schools want if they do not like authority, or is it self-respect? Is it because pressure is needed that support alone is not enough, or is it clear direction that is needed?

Also, with regard to feedback and reinforcement, is the field of education "soft", or not? If the relationships between goals, activities and outcomes are not very firm and if people have difficulties in coping with vagueness and ambiguity, are policies, curricular innovations and support being judged by

teachers in terms of the extent to which they reduce or produce uncertainty? In one of our researchprojects (see section 6.2.3) civil servants and external supporters appeared to think that ambiguity is not very important, but the only aspect of the support actually given to teachers with regard to the implementation of independent learning was information about potential problems and suggestions for avoiding or solving such problems!

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Research on: dissemination, utilization and implementation of information and innovations, external support systems, and policy evaluation.

BIBLIOGRAPHY

Berman, P., M.W. McLaughlin. (1978) Federal programs supporting educational change, VIII: Implementing and sustaining innovations. Washington.

Bruggen, J.C van. (1987) Survey of trends in curriculum reform in the Netherlands. SLO, Enschede.

Carter, S.M. (1984) Materials and the disabled reader in the elementary school. Journal of research and development in education, 14,4, 8-84.

Charters, W.W., J.E. Jones. (1973) On the risk of appraising non events in program evaluation. Educational Researcher, 2,11.

Chauveau, G.E., Rogovas-Chauveau. (1985) Les processus d'acquisition ou d'echec en lecture au cours préparatoire. Revue Francaise de Pédagogie, nr. 70, janv/fev/mars, 5-10.

Firestone, W.A., B.L. Wilson. (1982) Assistance and enforcement as strategies for knowledge transfer and program reform. Research for Better Schools, Philadelphia.

Fullan, M., A. Pomfret. (1977) Research on curriculum and instruction implementation. Review of educational research, 47,1.

Fullan, M. (1982) The meaning of educational change. New York/London.

Fullan, M.G., S.E Anderson, E.E. Newton. (1986) Support systems for implementing curriculum in school boards. Ontario.

Grift, W. van de. (1987) Implementatie van vernieuwingen: de rol van de schoolleider. Den Haag.

Hoeben, W., K. Stokking. (1986) Onderzoeksprogrammering Onderwijsverzorging. SVO, Den Haag.

Hullenaar, R.H.J. van 't. (januari 1987) et al. Regelgeving in het onderwijs. MESO, 33-36.

Juli, A, L. van Zoelen. (1987) Een Select Gezelschap. Onderzoek naar de aanwijzing van projectscholen. Utrecht.

Lafleur, C. (1986) Concerns about implementing provincial curriculum documents within a county school board with modest program support staff. AERA-paper, San Francisco.

McLaughlin, M.W. (1987) Learning from experience: Lessons from policy implementation. Educational evaluation and policy analysis, 9,2, 171-178.

Leenders, F.J., K.M. Stokking. (1987) Overdracht van vernieuwingen: een kwestie van perceptie? Utrecht.

Olson, P., G. Burns. (1983) Politics, Class, and Happenstance: French immersion in an Canadian Context. Interchange, 14,1, 1-16.

Pink, W.T., R.E. Leibert. (1986) Reading instruction in the elementary school: a proposal for reform. The elementary school journal, 37,1, 51-67.

Rice, E.E., E.M. Rogers. (1980) Reinvention in the innovation process. Knowledge, Creation, Diffusion, Utilization, 1,4 499-514.

Schaveling, J. (1984) Beleid belicht: het innovatieproces basisonderwijs. Info, nr.4, 159-184.

Seashore Louis, K., W.G. van Velzen. (1986) Policies for school improvement: a comparative analysis of four policy issues. Paper presented at the meeting of ISIP, Toronto.

Stokking, K.M. (1986) Hoe bereiken we de scholen? Een studie naar de verspreiding van vernieuwingen in het Nederlandse onderwijs. Tilburg.

Stokking, K.M., A.Juli. (1986) Het functioneren van schoolnabije informatie in het basisonderwijs. Utrecht.

Stokking, K., T. Stoverinck. (1985) Onderwijs, informatie en organisatie. Utrecht.

Stokking, K.M. (1985) Diffusie en disseminatie van innovaties. Pedagogische Studiën, 62, 12, 500-512.

Stokking, K., T. Stoverinck, F. Leenders. (1988, in press) The spread of educational innovations at national, regional and school level. In: R. van den Berg, U. Hameyer, K. Stokking (Eds.), Dissemination revisited, demands for implementation. (ISIP), Leuven.

Stokking, K.M., E.M. Dekker, F.J. Leenders. (1987) Zorgverbreding of selectieverscherping? Nascholing Zorgverbreding Speerpunt Lezen: voorlopige conclusies uit het evaluatieonderzoek. Utrecht.

Stokking, K.M. (1984) The GEON-project and its evaluation. Studies in Educational Evaluation, 337-341.

Stokking, K.M. (1988, in press) Dissemination and implementation of educational innovations. In: R. van den Berg, U. Hameyer, K. Stokking (Eds.), Dissemination revisted, demands for implementation. (ISIP). Leuven.

Vegt, R. van der, H. Knip. (1987) Implementing mandated change: the school as change contractor. AERA-paper, San Francisco.

Velzen, W.G. van, M.B. Miles, M. Ekholm, U. Hameyer, D. Robin. (1985) Making school improvement work. (ISIP), Leuven.

FIGURE 1

Diagram of the Dutch Educational Support System

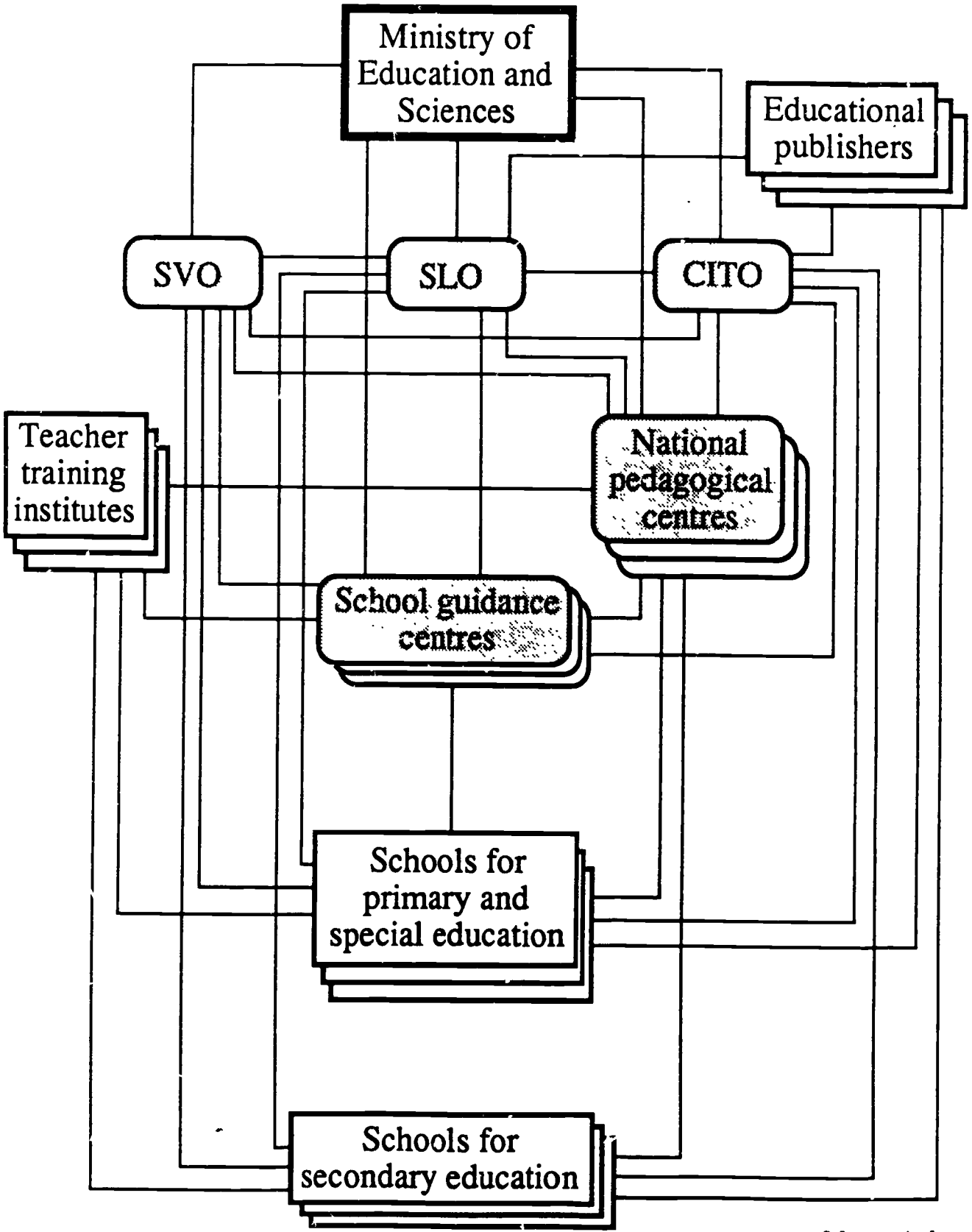

FIGURE 2

Strategy	Period	Section	Research	Methods and data*
Contracting schools for projects	1975-1985	6.2.1	Juli and Van Zoelen, 1987	Case-studies, 39 civil servants, curriculum developers, teachers trainers, school consultants, 95 primary schools. Survey, 617 primary schools
			Van der Vegt and Knip, 1987	Case-studies, 4 primary schools Survey, 24 primary schools
Providing school-based information to other schools concerning the innovation process in projectschools	1980-1985	6.2.2	Stokking en Juli, 1986	Surveys, 68 school consultants, 262 headmasters, 247 teachers
			Stokking en Stoverinck, 1985	Survey, 228 teacher trainers and school consultants
Disseminating curricular materials	1980-1985	6.2.3	Stokking, 1985,1986; Leenders and Stokking, 1986	Quasi-experimental design Surveys, 200 teacher trainers and school consultants, 650 headmasters and teachers
			Leenders and Stokking, 1987 Stokking, Stoverinck and Leenders, 1988	Case-studies, 14 School Advisory Centers, 30 primary schools Surveys, 65 school consultants, 164 primary schools
In-service training of teachers	1985-1988	6.2.4	Stokking, Dekker and Leenders, 1987	Quasi-experimental design Surveys, 200 teacher trainers and school consultants, 800 primary schools

* The surveys: written questionaires and/or oral interviews.
In all projects the relevant documents concerning educational policy and external support were analysed as well.

FIGURE 3

Crucial factors in policy and support for implementation

POLICY		
- a thorough problem analysis	- making an implementation plan	- know-how about he curriculum
- formulating specific goals	- being realistic with deadlines	- know-how about the client
- formulating clear priorities	- organizing communication and information	- not too detailed planning
- keeping goals/priorities constant	- providing materials	- no focussing on trivial goals
- avoiding interference from other policy	- coordination and logistics	- having personal contacts
- keeping a balance between pressure (enforcement) and support	- keeping a balance between equity and differentation	- providing how-to knowledge
- allowing local participation	- providing training and support	- giving support in the classroom
- allowing adaptation	- showing/asking real commitment	- helping solve implementation problems
- not expecting too much from funds alone	- organizing feedback-procedures	- creating the correct environment for real (emotional) support
- controlling, demanding accountability	- possibilities for success, incentives, reinforcement	- working towards institutionalization
	SUPPORT	