This paper presents findings of a study that examined the effectiveness of the guidance program used by change agents in the Dutch School Improvement Project (NSIP) on program implementation. Sixteen schools composed the experimental group and 13 made up the control group. The experimental variable was the guidance strategy of the NSIP. The two effect variables included: (1) the degree to which teachers increased the available task-oriented instruction and learning time; and (2) the effective organization of preventive care for low-achieving students. Data were gathered through a comparison of the program’s planning data with the change agents’ execution data, classroom observations, and a questionnaire. Findings indicate that during the program’s first year of adoption, the improvement strategy has been implemented, though insufficiently. Schools in the experimental group demonstrated a slight growth in task-oriented learning time; the control group exhibited no growth. Finally, the experimental group showed an increase in joint planning and remedial activities. A conclusion is that the program is off to a good start. (LMI)
Dutch School Improvement Project

- evaluation results of the first project year -
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Evaluation questions

The following questions are central to this evaluation research:

1) Does the guidance programme used by change agents in the National School Improvement Project lead to implementation of the school improvement programme?

2) Does instruction in which the programme has been adequately operationalized lead to the desired (cognitive and affective) learning outcomes of pupils?

The second research question, as represented above, has been formulated in conditional form: only if the school improvement programme has been adequately implemented can research take place into the effect of teacher behaviour on learner performance.

Research design

We planned two experiments. The first experiment is aimed at determining the effectiveness of the guidance programme used by change agents in the National School Improvement Project in implementing the school improvement programme.

The second experiment will concern the second research question: Does the adequately implemented school improvement programme lead to the desired learning outcomes?

In this paper only the design of the first experiment is discussed, since the second experiment was (of course) not yet scheduled for the school year 1991-1992.

In order to answer our first research question, concerning the effectiveness of the guidance programme for the implementation of the school improvement programme, we chose the interrupted time series design with a nonequivalent no-treatment control group time series (cf. Cook & Campbell, 1979). The measurement design is shown in the diagram immediately below.

The measurements were and will be taken in the months of January/February and May/June (01 = Jan/Feb 1992, 02 = May/June 1992, 03 = Jan/Feb 1993, 04 = May/June 1993, 05 = Jan/Feb 1994, 06 = May/June 1994). The permanence of the effect will be tested by means of a postmeasurement (07 = May/June 1995).

At this moment we (of course) can only discuss the first two measurements. So the measurement design for the situation at this moment looks as follows.

The experimental group was given the treatment, the control group received no form of treatment.

Each measurement consists of two observations of a reading lesson and a the completion of a questionnaire by the teachers. The observations take place in intervals of approximately four weeks.

Twenty-nine schools in all were involved in the research, sixteen in the experimental group and thirteen in the control group.
Dependent/ effect variables

The experimental variable in the experiment is the guidance strategy of the National School Improvement Project.

The experiment contains several effect variables. We will concentrate in this paper on two of them. The first variable relates to the degree to which teachers succeed in increasing the available task-oriented instruction and learning time. The second group of these variables concerns the effective organization of preventive care for pupils with poor results.

Degree of implementation

The implementation of the school improvement programme can be operationalised on the basis of the change agent activities.

We made detailed charts of the guidance activities of the change agents with the aid of a monitoring system (Timmermans, 1990). The monitoring system is a means of process control which consists of logbook registration forms concerning the planning, aims and execution of the guidance activities. The change agents complete these forms after each guidance contact. By comparing the execution data with the planning data a picture can be obtained of the guidance interventions of each change agent.

Planning data

The planning data are stated in two documents: the general task commitment and the project script. The general task commitment specifies that change agents should invest one half day per 14 days in the NSP. In addition change agents construct a guidance plan for each participating school.

The project script contains the activities that change agents undertake on two levels, namely the team level and the level of the individual teacher. This includes guidance meetings organized for teachers on the team level and classroom consultations with teachers. The guidance meetings are organized on the basis of the agendas provided by the project leaders. Although the change agents are supposed to follow the agendas in organizing guidance meetings, it is very well possible that after some time the meetings assume a more school-specific character; not every school has the same point of departure or the same need for certain forms of information. Change agents can therefore vary the form of the meetings at their individual school and can have certain subjects discussed to various degrees of depth. However, they are required to bring up for discussion all the essential parts of an agenda.

Execution data

In order to determine how far the intended guidance activities have in fact been executed, change agents are asked to produce detailed reports of all their activities. The contents of these reports are subsequently quantified to be able to examine, first, the degree of correspondence between the planned guidance activities and the actual guidance activities and, secondly, the possible differences between change agents in the degree of actual guidance and whether these differences lead to differences in project implementation or teacher behaviour.

We now give a summary of the amount and the themes of guidance between January 1992 and June 1992.
From the table above we have to conclude that this first project year was mostly an adoption year. This is clearly indicated by the guidance activities that were carried out. At most schools a great deal of time was spent in team consultation on clarifying the initial stage of the project. As a result classroom consultation and coaching of individual teachers was started somewhat late: too little classroom consultations have taken place.

The National Schoolimprovement script is to a large extent being followed by all change agents. But not all teachers have received approximately the same treatment. None of the teachers have had enough treatment yet. In other words the improvement strategy has been implemented, but not sufficiently yet.

**Effects**

The degree of execution of prescribed activities for teachers is measured by means of an observation instrument and a questionnaire.

**the observation instrument**

The effective learning and instruction time is determined by means of observations. The procedure goes as follows: During twenty minutes of a reading lesson the amount of effective time spent by teachers and pupils is charted by means of observations with a time sampling instrument (Veenman et al., 1988). This instrument
gives an estimate of the task-oriented learning time of learners. For obtaining a score for each class at least two measurements are made. The mean score becomes the score of each class. The mean scores of these class means for the experimental group and the control group are presented in the next table.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>exp. group</td>
<td>contr. group.</td>
</tr>
<tr>
<td>task-oriented learning time</td>
<td>70.3%</td>
<td>75.7%</td>
</tr>
<tr>
<td></td>
<td>72.1%</td>
<td>74.6%</td>
</tr>
</tbody>
</table>

We can conclude that there is a slight growth in the experimental group, while there is no growth in the control group.

**the questionnaire**

The project uses a model of preventive care for pupils with poor results as developed by Kool & Van der Leij (1985). In this model procedures for information processing and planning are integrated, as are the various levels which can be distinguished within the school, namely school level, class level and pupil level. This model formed the basis for the construction of a set of instruments for the measuring of joint planning. Scales were constructed for each of the stages that Kool & Van der Leij distinguish in their model.

The original model needed adjusting in two areas. There is a strong emphasis in the project on a wider range of preventive care. As a result the class level receives the most attention. This emphasis should obviously be reflected in our instruments. In addition, one of the first matters to be attended to in the framework of joint planning is the registration of the aim of school improvement in terms of desired learning outcomes. Our set of instruments contains specially constructed scales for this purpose.

The names of the scales and the mean scores are represented in the table immediately below.
Instruments for measuring preventive care

<table>
<thead>
<tr>
<th>Setting aims:</th>
<th>January 1992</th>
<th>June 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting aims:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting targets</td>
<td>.58 (.33)</td>
<td>.57 (.31)</td>
</tr>
<tr>
<td>Degree of completion of set targets</td>
<td>.49 (.27)</td>
<td>.47 (.23)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signalling:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree to which problems of pupils are signalled</td>
<td>.95 (.14)</td>
<td>.97 (.08)</td>
</tr>
<tr>
<td>Degree to which the teachers themselves diagnose pupils with poor results</td>
<td>.59 (.23)</td>
<td>.73 (.16)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analyzing/diagnosing:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree to which learning results are related to the instruction given</td>
<td>.72 (.15)</td>
<td>.62 (.25)</td>
</tr>
<tr>
<td>Degree to which the teachers themselves diagnose pupils with poor results</td>
<td>.59 (.24)</td>
<td>.73 (.19)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carrying out and evaluating results:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree to which activities are recorded in a group plan</td>
<td>.34 (.42)</td>
<td>.18 (.37)</td>
</tr>
<tr>
<td>Degree to which pupils with poor results are taken care of as a group</td>
<td>.56 (.16)</td>
<td>.50 (.14)</td>
</tr>
<tr>
<td>Degree to which activities are recorded in a plan for remedial activities</td>
<td>.49 (.48)</td>
<td>.36 (.48)</td>
</tr>
<tr>
<td>Degree to which the teacher gives adjusted instruction</td>
<td>.68 (.15)</td>
<td>.65 (.10)</td>
</tr>
<tr>
<td>Degree to which joint planning is a matter for the school team</td>
<td>.46 (.31)</td>
<td>.40 (.18)</td>
</tr>
</tbody>
</table>

We can conclude from the table above that in six out of ten measures there is growth in the mean of the experimental group while the mean of the control group remains more or less constant. In particular, the degree to which activities are recorded in a group plan and in a plan for remedial activities has increased considerably. Furthermore, there is an increase in the degree to which joint planning is a matter for the school team. The means of the other four measures remain constant for the experimental group till now.

Conclusions

The data that have been gathered allow us to conclude that the project is off to a good start. Implementation has started and the growth on the effect variables has started for the experimental group, while there is no growth for the control group. For the first project year, this is a good result.
Literature


Gemeenschappelijk Centrum voor Onderwijsbegeleiding (1990), Fries Schoolverbeteringsprogramma.


