ED 385 917   EA 026 941

AUTHOR   Szaday, Christopher; Bueler, Xaver
TITLE   Stimulating School Effectiveness and School
              Improvement Research in Switzerland.
PUB DATE   Jan 95
NOTE   21p.; Paper presented at the Annual Meeting of the
              International Congress for School Effectiveness and
              Improvement (Leeuwarden, Netherlands, January 3-6,
              1995).
PUB TYPE   Reports - Research/Technical (143) --
              Speeches/Conference Papers (150)

EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   Educational Assessment; *Educational Improvement;
              Educational Quality; *Educational Research;
              *Effective Schools Research; Elementary Secondary
              Education; Excellence in Education; *Foreign
              Countries; Research Methodology; *School
              Effectiveness
IDENTIFIERS   *Switzerland

ABSTRACT
              This paper describes a project undertaken for the
Swiss National Science Foundation to investigate the efficiency of
the Swiss education systems. The project entailed a literature review
of current international trends in school-effectiveness and
school-improvement research; a survey of 57 researchers in 10
countries; a survey of researchers in Switzerland, Germany, and
Austria; and an international workshop at which the future of Swiss
educational research was considered. Survey responses were received
from 25 researchers from the United States, the United Kingdom,
Canada, Australia, Hong Kong, Macau, and Norway and identified the
most significant lines of inquiry for school-effectiveness and
school-improvement research as the multilevel measurement of school
effects and the dynamics of school change. Forty percent recommended
a combination of qualitative and quantitative methods, although
school-effectiveness researchers tended to prefer quantitative
methods and school-improvement researchers tended to use qualitative
methods. They identified commitment, sufficient funding, networking
and collaboration as necessary infrastructure components.
German-speaking experts' recommendations include: future
investigations should examine the relationship between school quality
and oranizational structure; pay greater attention to comparative
research and theoretical development and conduct more case studies of
improving schools; utilize multilevel methods and theories; and
create links among theory, research, and practice. Three figures are
included. Appendices contain results of the 10-nation survey.
(LMI)

Stimulating school effectiveness and school improvement research in Switzerland

Christopher Szaday

Zentralschweizerischer Beratungsdienst für Schulfragen (ZBS)
Luzernerstrasse 69
CH-6030 Ebikon
Switzerland

Tel: (41-41) 36 59 13
Fax: (41-41) 36 00 12

Xaver Büeler

Pädagogisches Institut der Universität Zürich
Rämistrasse 74
CH-8001 Zürich
Switzerland

Tel: (41-1) 257 27 50
Fax: (41-1) 252 32 31
e-Mail: bueler@paed.unizh.ch

Presented at the International Congress for School Effectiveness and Improvement, Leeuwarden, The Netherlands, January 1995.

Collins Cobuild Essential English Dictionary

- To **stimulate** something means to encourage it to begin or develop further.

- If something **stimulates** you, it makes you feel full of ideas and enthusiasm.

Abstract

This paper describes a project undertaken by the authors for the Swiss National Science Foundation through its National Research Program 33 (titled "Efficiency of the Swiss education systems") involving: (a) analyses of current trends in international school effectiveness and school improvement research; (b) surveys of expert opinion concerning the most productive lines of enquiry, appropriate methodology and necessary infrastructure for the initiation and maintenance of a viable national research effort in school effectiveness and school improvement; and (c) an international workshop at which the implications of the trend analyses and surveys for future Swiss educational research were considered. As well as presenting the results of the formal, commissioned aspects of the project (i.e. the reports, workshop, recommendations) the authors describe some of its unintended, unpredicted outcomes.

Background

In 1990 the Swiss National Science Foundation (SNSF) established a SFr. 15 million National Research Program (NRP33) into the effectiveness of Swiss educational systems[1] at a time when reduced financial resources available to the Swiss education sector were giving rise to concerns about its efficiency as well as its comparative international standing[2]. At the time of writing (December 1994) 29 research projects had so far been funded by the program.

A goal of the program is to increase the existing educational research capacity in Switzerland through encouraging coordination among, and cooperation between, (somewhat isolated) educational researchers working in a variety of (usually small) university departments and other educational institutions[3]. An expansion in knowledge about educational effectiveness, the promotion of evaluation and self-evaluation in the education systems as well as an increase in its flexibility and potential for innovation are further goals of the program (Trier, 1993).

As a result of the relatively broad brief provided to applicants for research funding within the program, certain significant areas of educational research falling within its general framework were considered to be lacking by the expert committee appointed to oversee the program. In their desire to plug these gaps, the expert committee commissioned a number of trend reports to provide a basis for decision-making about more specifically targeted research activities. The present project is one of these.

The authors of the present paper and a third member of the project team (Bernard Favre) were commissioned to:

- produce and disseminate draft reports analysing current trends in school effectiveness and school improvement research as reported in the English-, French- and German-language professional literature;

- convene a two-day workshop[4] in which the deliberations of selected international and national researchers should stimulate the development of recommendations for suitable content, appropriate methodology and necessary infrastructure for future Swiss school effectiveness and school improvement research; and

- submit a final report (under the working title International trends in school effectiveness and school improvement research: A Swiss perspective) containing recommendations which are not only consistent with promising international developments, but also reflect the specific needs of, and parameters afforded by, the Swiss education systems.

---

[1] The existence of 26 autonomous cantonal school systems is reflected in the use of the plural form.

[2] Background material about education in Switzerland, particularly concerning the funding of Swiss educational research in comparison with that of other social and industrial sectors, will be distributed separately at the conference session in which this paper is presented.

[3] The Organization for Economic Co-operation and Development country report on Switzerland (OECD, 1991) and the Swiss Science Council (1993) have presented the state of educational research in this country in more detail.

[4] Held in Solothurn on 7th-8th November 1994.

Activities of project group

Although working within certain practical constraints imposed by relatively tight funding and duration parameters, the authors undertook the following activities:

- they conducted an exhaustive electronic and traditional search of English-, French- and German-language education data bases and located relevant documents;

- they held discussions and exchanged correspondence with colleagues in universities and other educational research institutes in a number of countries;

- they carried out formal surveys of expert opinion within and outside Switzerland;

- they attended relevant national and international seminars and conferences;

- they convened an international workshop in which Swiss educational researchers interested in school effectiveness and school improvement were joined by international colleagues; and

- they prepared the current paper as a preliminary basis for the introductory and synthesising chapters in the planned final report.

With their main work places scattered throughout Switzerland (Szaday at the Central Swiss Educational Consultancy Service in Lucerne, Büeler at the Institute for Education at the University of Zurich and Favre at the Centre for Sociological Research in Geneva)[5], their differing professional backgrounds and educational research approaches, as well as being personally unknown to one another prior to this project, the task of coordinating and synthesising the work has been quite a challenge!

The extent to which their collaboration has been fruitful is a reflection of the degree of attainment of the stated goal of the National Research Program to foster collaborative educational research efforts between individuals and institutions across the various language regions of Switzerland. At the interface of three major European cultures (French, German and Italian) and being increasingly influenced by an internationalism reflected in the use of English as a vehicle for intercultural communication, it seems quite apt that such a synthesis be attempted in Switzerland and that the project be lead by an Australian!

Analysis of current trends

The strategy chosen by the project team to fulfil the requirements of their brief involved, firstly, the production of separate analyses of school improvement and school effectiveness research being reported in the English-, French- and German-language professional literature. At this first stage, no attempt was made to find a common form for reporting our findings, however we held several meetings in which we clarified our understanding of the scope and focus of school effectiveness and school improvement work in the three linguistic, educational and cultural contexts. We believed that each of us should first get a

---

5   Zentralschweizerischer Beratungsdienst für Schulfragen (Szaday), Pädagogisches Institut der Universität Zürich (Büeler), Service de la recherche sociologique (Favre).

good grasp of the work being reported in his own language before attempting the desired synthesis.

The reports produced as background material for the international workshop held in November 1994 (Büeler, 1994; Favre 1994; Szaday, 1994) will serve as the basis for such a comparison and synthesis in the next stage of this continuing project. This current paper presents a summary of the English- and German-language reports and represents a beginning of our search for such a synthesis.[6]

English-language report

The title of the report by the first author Creating effective schools for all (Szaday, 1994) was carefully and deliberately chosen to:

- reflect his perception of the dominant direction of contemporary international educational research, policy, practice and development in school effectiveness and school improvement, as presented in English-language research publications;

- encourage the formulation of productive research questions;

- offer a useful framework for decision making about future educational research activities in Switzerland; as well as

- provide a conceptual structure for the report.

Each of the four elements in the title, accompanied by a simple but conceptually strong metaphor of travelling[7], were explored in turn in the report:

- "**creating**", expressing developmental considerations (a journey), emphasising research knowledge about the introduction and implementation of school improvement activities and organisational development strategies employed in effecting school change;

- "**effective**", including evaluative considerations (the destination), focusing on the school effectiveness research literature, often resulting in a set of criteria for effective classrooms, schools and school districts;

- "**schools**", implying analytic considerations (mode of transport), confirming the choice of the individual school as an appropriate unit of analysis and focus of intervention for researchers and policy makers; and

- "**for all**", highlighting equity considerations (travelling companions), pointing to the need to evaluate the educational experience of groups of pupils whose demographic characteristics or membership of particular social, cultural, religious or linguistic groups make them vulnerable to an unsatisfying school experience or school failure.

---

[6] Unfortunately we were not able to include the French-language report (Favre, 1994) in this analysis. This will appear in the final publication of the project team (Szaday, Büeler & Favre, forthcoming).

[7] The use of a similar metaphor by Reynolds, Hopkins and Stoll (1993) and Hopkins, Ainscow and West (1994) provided some confirmation of its utility.

A graphical representation of the above is presented in Figure 1. It was hoped that the exploration of these themes would promote the generation of productive questions for school effectiveness and school improvement researchers in Switzerland, as well as allowing such questions to be reviewed in the overall context of contemporary international work.

Insert Figure 1 about here

The report was deliberately written in a descriptive style, allowing the Swiss reader to "get a feel" of the work being done. "Letting the researchers speak for themselves" through the liberal sprinkling of quotations from the research literature, as well as an extensive use of footnotes, represented an attempt to convey the flavour of the work being reported. It was hoped that the level of detail contained in the quotations and footnotes would stimulate hypotheses for investigation in the Swiss educational context as well as serve as suggestions for readers interested in exploring for themselves the most important original sources.

German-language report

In comparison with Szaday (1994), the trend report by Büeler (1994) could be characterised as more conceptual than descriptive. He addressed certain theoretical and methodological considerations for the promotion of school quality and school development research in Switzerland, placing such research firmly in the context of a broad systems theory and current Swiss German educational thinking[8]. An English translation of selected components of his analysis is presented in Figure 2.

Insert Figure 2 about here

An examination of this analysis reveals consistencies with contemporary English contributions to school improvement theory, particularly as recently articulated by Hopkins (1994). Understanding issues of school quality and school development in terms of a growing professionalisation of the local school as a system, which itself exists within broader external support systems, Büeler (1994) argued for more competent development practices based on more complex theoretical models of how schools change. He maintained that an investment in school development research and practice could also have positive influences on classroom practice and teacher training.

The importance of school based enquiry and reflection is highlighted by both Szaday (1994) and Büeler (1994). Where they differ, however, is in the extent to which they emphasise the link between school improvement and improvement of curriculum delivery, that is, between the extent to which the school is

---

[8] The tendency towards the use of the terms Schulqualität ("school quality") and Schulentwicklung ("school development") in the German-language professional lii 'rature rather than literal translations of the somewhat orthodox English-language terms "school effectiveness" (Schulwirksamkeit) and "school improvement" (Schulverbesserung) is deserving of further attention.

conceptualised not only in organisational or system terms, but also as a place in which learning and teaching transactions between pupils and teachers occur. A concern for classroom and teaching effectiveness seems to be more pronounced in the report by Szaday (1994) than that of Büeler (1994). It would be premature, however, to claim that this difference in emphasis could be generalised to the English- and German-language school effectiveness/quality and school improvement/development literature.

In the coming months, the project team will attempt a deeper analysis of the similarities and differences in approaches to school effectiveness and school improvement in the three linguistic, educational and cultural contexts (English, French and German). It would be our ultimate goal that such a synthesis be operationalised within Swiss educational research.

Surveys of expert opinion

One approach taken by the authors in their reporting of trends in contemporary school effectiveness research and school improvement practice was to examine the published international literature. A second approach was to make contact with leading researchers and practitioners in the two fields to obtain a more direct expression of their perceptions and opinions. In this way, the most current ideas could be elicited, often in a more candid form than that emerging in print after the refinements of the review process required by journals and book publishers. It could also pave the way to the development of personal contacts and entry into existing scientific and professional networks.

English-language researchers

Surveys were therefore carried out with a selected sample of researchers in the areas of school effectiveness and school improvement. Those participating in the survey conducted by the first author were asked to express their opinions regarding the most significant research __questions__ in the two fields, the __methodologies__ required to address these questions and the research __infrastructure__ necessary to initiate and maintain research momentum in school effectiveness and school improvement.

The results of this survey (summarized in Figure 3) were not only intended to provide the readers of the trend report with another insight into the thinking of significant contemporary workers in these fields, but also to stimulate the development of an agenda for Swiss school effectiveness and school improvement research. A full description of the survey results can be found in Szaday (1994). A summary is appended to this paper.

Insert Figure 3 about here

German-language researchers

A similar survey was undertaken by the second author with respondents in Switzerland, Germany and Austria. Opinions concerning the most important publications, researchers, institutes and projects in the areas of school quality and school development were canvassed. Survey participants were also asked to

comment on the state of the research effort in these topics in the German-speaking countries.

The main findings from this survey, presented in more detail (in German) by Büeler (1994) are:

- there are particular researchers considered by others to have made, or be making, important contributions to school quality and school development work (e.g. Fend, Haenisch, Posch, Rolff, Steffens);

- there are particular institutions considered to be leaders in these fields (e.g. the Institut für Schulentwicklungsforschung at the University of Dortmund, the Landesinstitut für Schule und Weiterbildung in Soest, the Hessisches Institut für Bildungsplanung und Schulentwicklung in Wiesbaden, the Zentrum für Schulversuche und Schulentwicklung in Klagenfurt and Graz);

- there needs to be greater attention paid to comparative research and theoretical development (both intra- and international);

- the relationship of school quality and school organisational structures needs to be examined;

- series of case studies of improving schools should be conducted;

- multilevel methodologies and corresponding theoretical models are lacking; and

- dynamic links between theory, research and practice must be forged within the context of supportive research policy and infrastructure.

International workshop

A third component of this project was the convening of a two-day international workshop in the Swiss town of Solothurn in November 1994. The purpose of the workshop was to bring Swiss educational researchers together with selected international colleagues to reflect on the implications for Switzerland of trends in school effectiveness and school improvement in the English-, German- and French-speaking countries. The 25 Swiss participants, representing 16 educational research and development institutes, had the opportunity to listen to and interact with David Hopkins, David Reynolds and Louise Stoll (from the United Kingdom), Hans Haenisch and Ulrich Steffens (from Germany), Jean-Louis Derouet (from France), Werner Specht (from Austria) as well as Per Dalin (Norway).

A major challenge at this workshop was to minimise the language barriers. In view of the participation of colleagues from outside Switzerland as well as the existence of a vast English-language school effectiveness and school improvement literature, it was decided that in addition to French and German (the main national conference languages in Switzerland), English would play an important role. Invitations to the workshop were written in English, thus assuring the attendance of those who had at least passive competence in this language. From an analysis of the participants' responses to a question on the registration form concerning their self-assessed language skills, it was ascertained that 96% of the participants could understand spoken English, 85% spoken French and 85%

spoken German. The basis for a high degree of mutual understanding had been achieved!

Unfortunately, it was not possible to achieve at the workshop a high level of interaction between those experts coming from outside Switzerland. They were able to present their own work, engage in fruitful discussions about the implications of such work for the Swiss context as well as provide role models for inter-institutional collaboration. However, progress towards a synthesis of approaches arising out of distinct national, linguistic and cultural contexts (a goal of this project) did not really occur. This task will be attempted in the final report of this project (Szaday, Büeler and Favre, forthcoming), in which the proceedings of the workshop will also be published.

Recommendations

In their desire to stimulate school effectiveness and school improvement research in Switzerland, the expert committee coordinating the NRP33 requested that the project group provide recommendations based on their perceptions of contemporary international trends. These recommendations could then serve as a basis for the distribution of remaining program funds as well as providing an impulse for the Swiss educational research community in the future.

The individual trend reports by Büeler (1994), Favre (1994) and Szaday (1994) contain some initial recommendations following from their own analyses. A further source are the workshop contributions of those researchers from outside Switzerland who were invited to attend.

Although not yet systematically formulated at the time of writing this paper, Szaday, Büeler and Favre (forthcoming) will contain recommendations in three areas (corresponding to the structure of the English-language survey described above):

- the most significant questions to be researched in school effectiveness and school improvement;

- the methodologies required to address these questions; and

- the infrastructure necessary to initiate and maintain research momentum in school effectiveness and school improvement.

It is in the third area that the project group have already provided the expert committee with some suggestions. Among those mentioned were:

- targetted funding of school effectiveness and improvement research and development centres;

- the launching of a relevant German-language professional journal;

- the publication of a school development yearbook; and

- the subsidising of training programs for school development consultants.

It remains to be seen to what extent our ideas are accepted, and indeed acted upon!

Unintended outcomes

Although the terms of reference of the research grant received by the authors only mentioned the production of a report into international trends in school effectiveness and school improvement research and the convening of an international workshop, the actual outcomes flowing from this project have been much greater. And perhaps unintended by the expert committee commissioning this work!

These extended outcomes, not only for the authors as individuals but also for the institutions in which they work, fall into the following areas:

Research

Through the interest generated by his participation in this project, the second author has been instrumental in establishing a School Quality and School Development Research Area (<u>Forschungsbereich Schulqualität und Schulentwicklung</u> - FSS) at the Institute of Education of the University of Zurich. At the time of writing, 14 related research projects, most of which are being undertaken by students, are underway. One of these, a case study of the school changes brought about by a program to integrate children with learning difficulties into regular primary school classes, involves the evaluation of a project in which the first author is engaged as a consultant. This institutional collaboration between this school, the university and the Central Swiss Educational Consultancy Service has only occurred as a result of the personal contacts between the two authors arising out of their collaboration on the present project.

The involvement of the first author in a two-year European project concerning self-evaluation of schools, being sponsored by the Consortium of Institutions for Development and Research in Education in Europe (CIDREE), has also been an offshoot of the current grant.

Professional development

Through his attendance at a conference in Germany related to the theme of this project, the second author had the opportunity of becoming acquainted with Per Dalin, whose publications and training courses for school improvement consultants are well-known to a Scandinavian-, English- and German-language professional audience. As a result of this and other contacts, the second author has arranged to spend his upcoming sabbatical leave with IMTEC and the University of Oslo in Norway as well as with the International School Effectiveness and Improvement Centre at the Institute of Education of the University of London, in order to gain more experience of international school improvement projects.

The first author, through his position at the Central Swiss Educational Consultancy Service, is responsible for planning a training program for school improvement consultants in central Switzerland (possibly also in association with IMTEC). His association with the project described in this paper has certainly helped to focus his areas of interest at his own place of work.

International networking

The undertaking of this project brought the first author into contact with the publications and the people associated with the International Congress for School Effectiveness and Improvement (ICSEI). This contact has lead to his recent appointment as Editor of the <u>Network News International</u> of ICSEI, thus involving him in questions of school effectiveness and school improvement going far beyond the original brief of the commissioned research. It is hoped that basing this newsletter in Switzerland will benefit the Swiss educational research and development community.

Similarly, the second author has been included in the activities of the German-language network (<u>Arbeitskreis Schulqualität</u>) based in Wiesbaden and Constance. The opportunities for mutual exchange and collaboration offered by this network will be of both personal and institutional benefit!

Postscript

The project described in this paper has not yet come to an end. The formal aspect of the work will be completed with the final publication in mid 1995. However, the contacts developed and the associated projects launched during the past year will certainly continue and perhaps even spawn new ones.

The authors of this paper look forward to their continuing collaboration as well as the challenges and stimulation of intercultural approaches to the school effectiveness and school improvement enterprise.

References

Büeler, X. (1994). <u>Trendbericht zur Schulqualitäts- und Schulentwicklungsforschung im deutschsprachigen Raum</u>. Zürich: Pädagogisches Institut der Universität Zürich.

Favre, B. (1994). <u>Des écoles de qualité pour tous: Tendances et orientations de la recherche dans le domaine francophone</u>. Genève: Service de la recherche sociologique.

Hopkins, D., Ainscow, M. & West, M. (1994). <u>School improvement in an era of change</u>. London: Cassell.

Hopkins, D. (1994). <u>Towards a theory for school improvement</u>. Paper prepared for the ESRC Seminar Series on School Effectiveness and School Improvement.

OECD (1991). <u>Reviews of national policies for education: Switzerland</u>. Paris: Organisation for Economic Co-operation and Development.

Reynolds, D., Hopkins, D. & Stoll, L. (1993). Linking school effectiveness knowledge and school improvement practice: Towards a synergy. <u>School Effectiveness and School Improvement</u>, <u>4</u>, 37-58.

Swiss Science Council (1993). Revitalising Swiss social science: Evaluation report. Berne.

Szaday, C. (1994). Creating effective schools for all: Trends in school effectiveness and school improvement research (Draft report). Ebikon, Switzerland: Zentralschweizerischer Beratungsdienst für Schulfragen.

Szaday, C., Büeler, X. & Favre, B. (forthcoming). International trends in school effectiveness and school improvement research: A Swiss perspective. Swiss National Science Foundation.

Trier, U. P. (1993). Bildungsforschung ist ein interaktiver Prozess. (Interview with Ursula Schürmann-Häberli). Schweizer Lehrerinnen- und Lehrer-Zeitung, 23, 32.

Figure 1
Possible research questions reflecting the dominant direction of contemporary English-language educational research, policy, practice and development in school effectiveness and school improvement (from Szaday, 1994)

A JOURNEY

THE DESTINATION

developmental considerations

- what are the driving forces behind local school improvement initiatives in Switzerland?

- what hinders local school development or innovation activities in Swiss schools?

evaluative considerations

- What are the characteristics of effective schools in Switzerland?

- How is school quality defined in Switzerland by pupils, parents, teachers, school administrators, policy makers and educational researchers?

creating

effective

schools

for all

MODE OF TRANSPORT

analytic considerations

- how do the characteristics of the individual classroom, local school and cantonal education system contribute to educational quality in Swiss schools?

TRAVELLING COMPANIONS

equity considerations

- for which groups of pupils are Swiss schools effective?

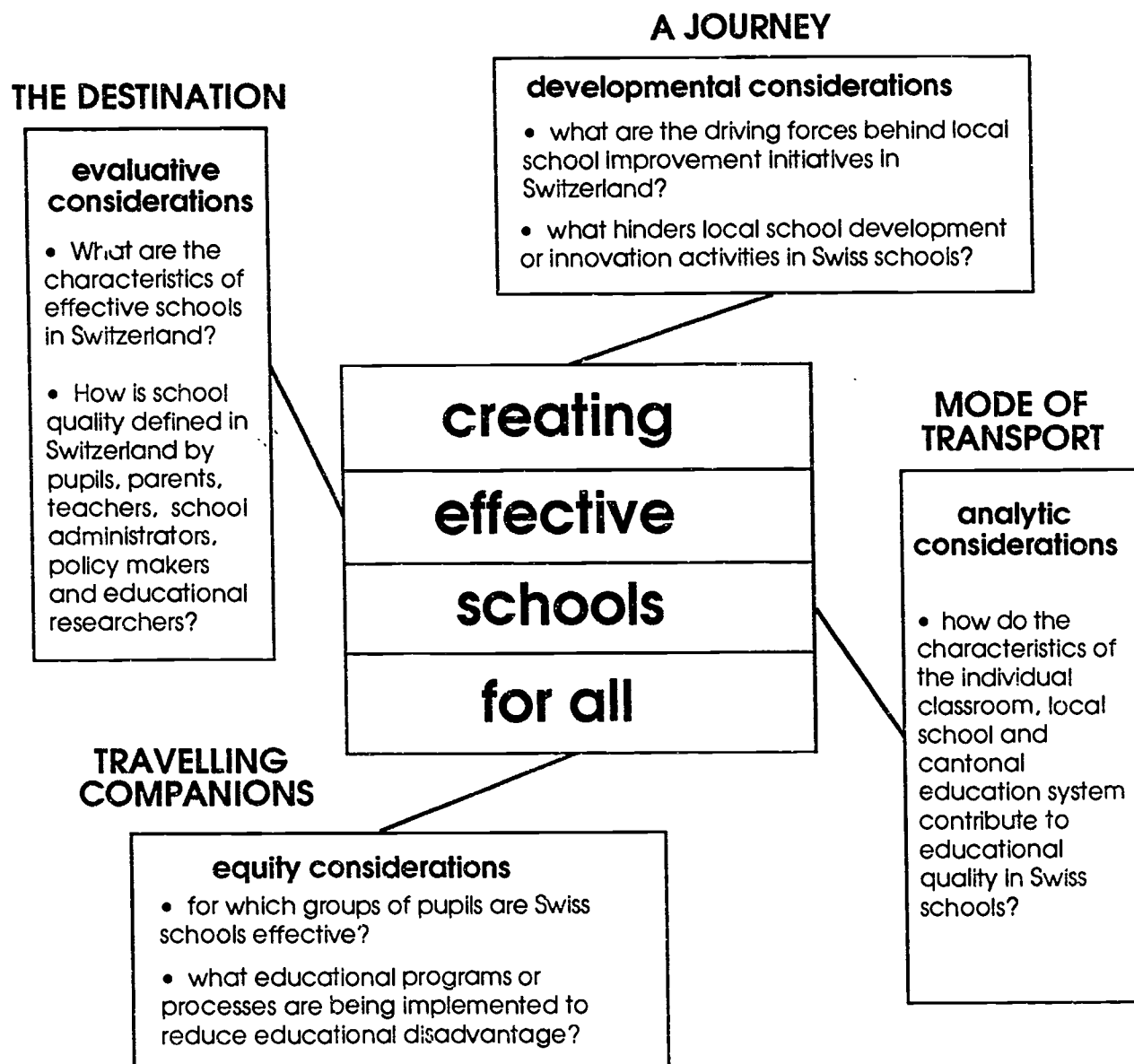- what educational programs or processes are being implemented to reduce educational disadvantage?

Figure 2
Theoretical and methodological considerations for the promotion of school development research in Switzerland (Büeler)

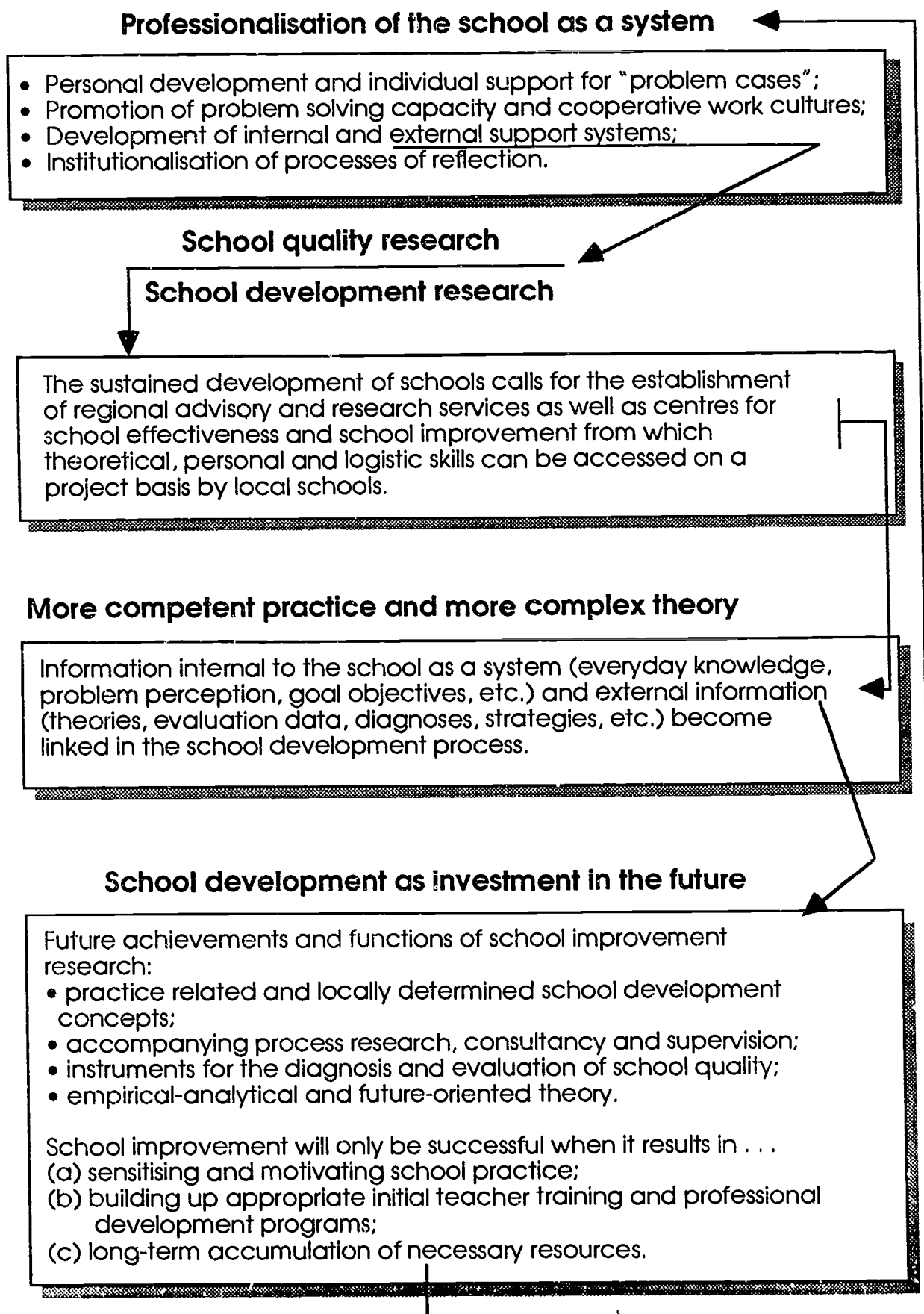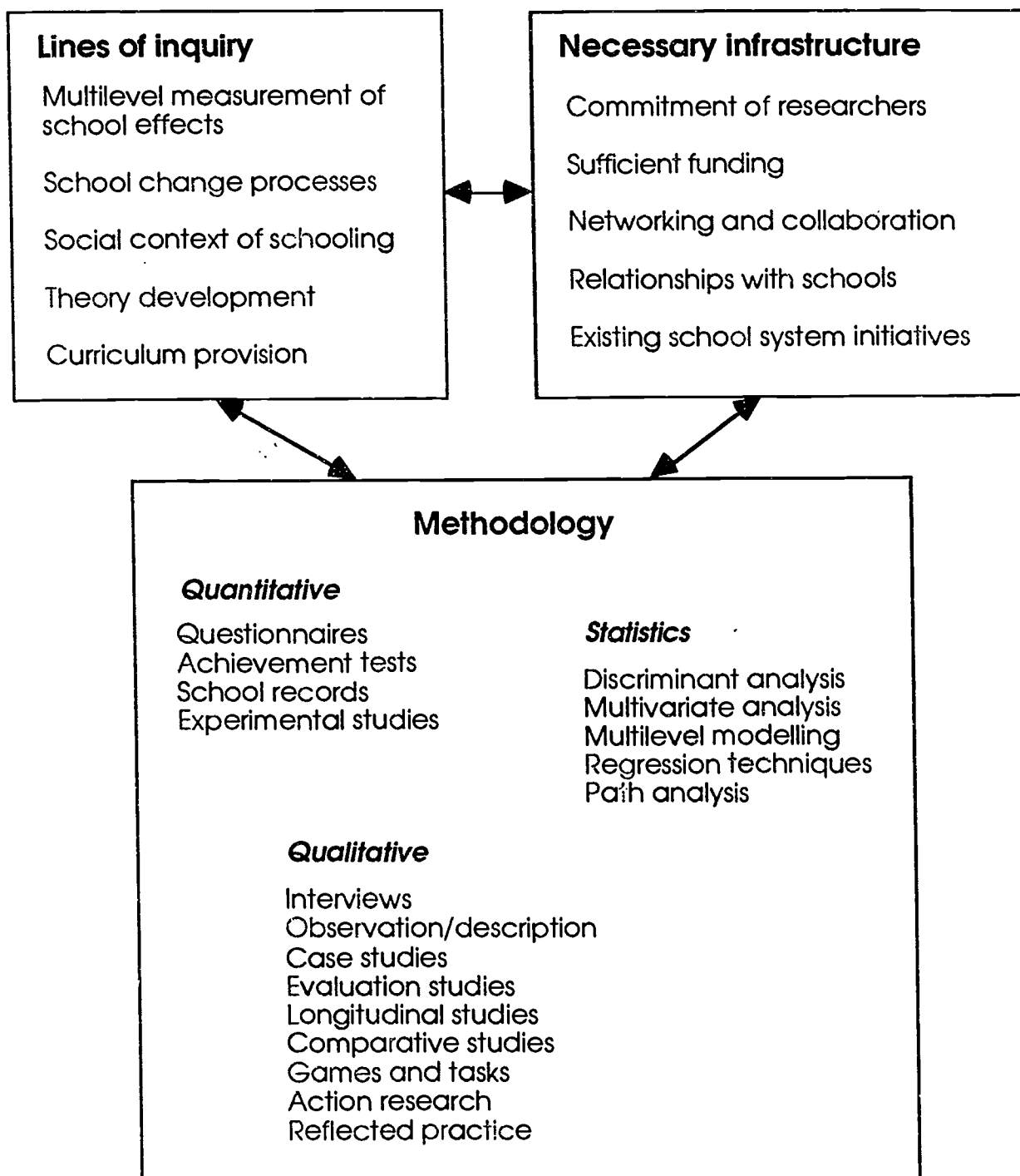## Professionalisation of the school as a system

- Personal development and individual support for "problem cases";
- Promotion of problem solving capacity and cooperative work cultures;
- Development of internal and external support systems;
- Institutionalisation of processes of reflection.

School quality research

School development research

The sustained development of schools calls for the establishment of regional advisory and research services as well as centres for school effectiveness and school improvement from which theoretical, personal and logistic skills can be accessed on a project basis by local schools.

More competent practice and more complex theory

Information internal to the school as a system (everyday knowledge, problem perception, goal objectives, etc.) and external information (theories, evaluation data, diagnoses, strategies, etc.) become linked in the school development process.

School development as investment in the future

Future achievements and functions of school improvement research:
- practice related and locally determined school development concepts;
- accompanying process research, consultancy and supervision;
- instruments for the diagnosis and evaluation of school quality;
- empirical-analytical and future-oriented theory.

School improvement will only be successful when it results in . . .
(a) sensitising and motivating school practice;
(b) building up appropriate initial teacher training and professional development programs;
(c) long-term accumulation of necessary resources.

Figure 3
Results of survey of expert opinion (from Szaday, 1994)

Lines of inquiry

Multilevel measurement of school effects

School change processes

Social context of schooling

Theory development

Curriculum provision

Necessary infrastructure

Commitment of researchers

Sufficient funding

Networking and collaboration

Relationships with schools

Existing school system initiatives

Methodology

Quantitative

Questionnaires
Achievement tests
School records
Experimental studies

Statistics

Discriminant analysis
Multivariate analysis
Multilevel modelling
Regression techniques
Path analysis

Qualitative

Interviews
Observation/description
Case studies
Evaluation studies
Longitudinal studies
Comparative studies
Games and tasks
Action research
Reflected practice

Survey of expert opinion (Szaday, 1994)

A covering letter explaining the current project and questionnaire were sent by the first author to 57 school effectiveness and school improvement researchers in ten countries. Included in the sample were the authors of papers published in the 1992 and 1993 issues of the specialist international journal School Effectiveness and School Improvement. Also included were a selection of writers of frequently cited books and articles (published within the past ten years), who were considered to have made a signficant theoretical or empirical contribution to the study of school effectiveness and school improvement.

The questionnaire contained open-ended questions eliciting opinions about:

- significant or productive research questions or lines of inquiry;

- recommended methodological approaches to answering these questions; and

- the infrastructure considered necessary for the stimulation and maintenance of a national school effectiveness and school improvement research effort.

Completed survey forms were received from 25 researchers from the United States of America (9 responses), the United Kingdom (5), Canada (4), Australia (3), Hong Kong (1), Macau (1) and Norway (1). The participation rate of 43.9%, while not especially high, was also not considered to be depressingly low.

Lines of inquiry

The first question answered by those responding to the survey was: "In your opinion what are currently the most significant or productive research questions or lines of inquiry for school effectiveness and school improvement researchers?"

A content analysis of these reponses revealed five broad clusters of productive or important lines of inquiry[9], the first two of which were mentioned by almost half the respondents:

- the multilevel measurement of school effects, i.e. unravelling the effects on school performance of individual, classroom, school and social contextual factors; and

- exploring the dynamics of school change, i.e. understanding the effects of organizational structures and processes on school improvement.

---

[9]   At the beginning of the content analyis, I tried to distribute the responses into the twelve subtopics of school effects research suggested by Teddlie and Roberts (1993): school change; teacher-school interaction; context isses; role of leadership; stability/consistency issues; curriculum issues; methodological issues; variance issues; theory; existence/magnitude issues; district/state effects; and international studies. Unfortunately, the attempted categorization of responses into this schema resulted in a high degree of overlap. The five clusters outlined above seemed to distinguish them better.

These two clusters clearly depict the different interests of the "scientists" and "humanists" described by Teddlie and Roberts (1993). They are also consistent with Scheerens' (1992, 1993) distinction between "foundational research" (i.e. directed at establishing school effectiveness as a scientific construct) and "applied research" (i.e. concerned with educational indicator systems and evaluation of school improvement projects). The separate traditions of school effectiveness and school improvement research are reflected here.

Issues of educational policy development are reflected in the third cluster of responses. They focus on the <u>social, political and economic context</u> in which criteria for assessing educational quality provision and school effectiveness are established. Approximately one quarter of the respondents mentioned research questions or lines of inquiry which could be included in this cluster.

A fourth cluster of responses advocated <u>theory development</u> in school effectiveness. Almost a quarter of the respondents mentioned the desirability of work directed towards the clarification of concepts, possibly within an interdisciplinary framework, and hopefully leading to practical outcomes. This cluster corresponds to what Scheerens (1992, 1993) describes as "fundamental research" (i.e. the further development of school effectiveness models and theories). It represents his third strand of "state-of-the-art" school effectiveness studies.

Investigation of the effects on pupil learning of specific <u>curriculum initiatives</u> was mentioned by a small number of respondents as a productive direction for school effectiveness research, and formed the fifth cluster of responses. The exploration of direct links between learning and teaching reflects an orientation already found in the instructional effectiveness literature.

Methodological approaches

The second question answered by those responding to the survey was: "Which <u>methodological approaches</u> would you recommend in order to address the research questions you outlined above?" The most common response (specifically mentioned by 40% of the surveyed experts) was that both <u>quantitative</u> and <u>qualitative</u> research methods were needed in school effectiveness and school improvement research. Terms such as <u>mixed-method</u> and <u>multimethod</u> were used to characterize such an approach. This view is most effectively represented in the following comment from one respondent:

> It is essential, in my view, that multiple methodologies are utilised to address the above 'cutting edge' issues. Quantitative data has its uses, particularly connected with the generation and testing of relationships between variables. Qualitative data also is useful in the exploration of why it is that these relationships exist. (Respondent #16)

An analysis of the specific research techniques mentioned by respondents is illuminating and points once again to the separate traditions of school effectiveness and school improvement research.

Quantitative approaches, usually associated with school effectiveness research, were mentioned by many respondents:

- <u>questionnaires</u> ("survey research", "survey methods", "opened ended surveys", "climate variables");
- student <u>achievement tests</u> ("academic tests", "achievement studies", "student performance");

- existing school records; and
- experimental studies ("planned variation studies", "quasi-experimental", "field experiments")

The specific techniques of statistical analysis recommended by the respondents for the generation and testing of quantitative relationships included discriminant analysis, multivariate analysis, multilevel modelling, regression techniques and path analysis.

Qualitative methods are most usually employed in school improvement research. Those mentioned by respondents as particularly appropriate were:
- interview techniques ("structured interviews", "student interviews");
- observation and description ("systematic classroom observation", "ethno-graphic studies");
- case studies ("intensive portraits of individual classrooms and schools");
- evaluation studies ("evaluation of school improvement projects");
- longitudinal studies;
- comparative studies ("cross case methodology");
- games and tasks; and
- action research and reflective practice.

Necessary infrastructure

The third question answered by those responding to the survey was: "What funding, institutional or professional **infrastructure** or processes do you consider necessary or important to both stimulate and maintain a viable national school effectiveness and school improvement research effort?" A content analysis of the responses revealed five underlying clusters.

The first requirement for a viable national research effort in school effectiveness and school improvement is a commitment within the research community to the idea that these questions are indeed worth exploring. Although mentioned by only two respondents, the importance of a desire to improve the effectiveness of schools[10] and a willingness to learn from improving schools, or from those already effective, cannot be overemphasized.

The expected issue of sufficient funding was raised by a significant number of respondents. Sources of such research funding could include national science foundations, federal and state governments or private bodies. However, the guarantee of long term funding of designated, specialist research centres which nevertheless worked collaboratively with other research groups was advocated. The interesting question of direct funding to schools for their participation in research projects was raised by one respondent.

The need for networking and collaboration among school effectiveness and school improvement researchers and practitioners, both at national and internatonal levels, constituted the third cluster of responses. It was mentioned by more than a third of the respondents. Such networks would encourage inter-

---

[10] Consistent with Fullan's (1993) discussion of the "moral purpose of education".

institutional links, resulting in increased communication of research strategies and results as well as promoting cooperative research programs. Linkages with related international projects and professional groups would support the development of comparative perspectives, resulting in greater insight into local conditions.

A fourth cluster of responses, mentioned by a quarter of the respondents, concerned the development of productive relationships with schools. The synthesis of research-generated knowledge and practice-based experience is perhaps the main challenge facing an educational research community which often finds itself ignorant of the day-to-day reality of life in schools. The production and dissemination of useful knowledge should be a criteria of effectiveness of school effectiveness research[11]!

A small number of respondents referred to the possiblities raised by linking a research effort in school effectiveness and school improvement to existing curriculum or school quality initiatives of government or responsible education authorities. This fifth cluster of responses supports the contention that research should be directed towards answering the questions that are being raised in schools and school systems. If seen to be doing so, the chances of the research effort being integrated into these initiatives would be so much greater.

References

Fullan, M. (1993). Change forces: Probing the depths of educational reform. London: Falmer Press.

Scheerens, J. (1992). Effective schooling: Research, theory and practice. London: Cassell.

Scheerens, J. (1993). Basic school effectiveness research: Items for a research agenda. School effectiveness and school improvement. 4, 17-36.

Szaday, C. (1994). Creating effective schools for all: Trends in school effectiveness and school improvement research (Draft report). Ebikon, Switzerland: Zentralschweizerischer Beratungsdienst für Schulfragen.

Teddlie, C. & Roberts, S. P. (1993). More clearly defining the field: A survey of subtopics on school effects research. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA, April 14.

---

[11] "There is nothing so practical as a good theory" (commonly attributed to Kurt Lewin).