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# The imperative of complementarity between the school level and the classroom level in educational innovation

FREDERIK MAES, ROLAND VANDENBERGHE and POL GHESQUIÈRE

The results are presented of a qualitative study on the implementation of special-needs provisions in four primary schools in the Dutch-speaking part of Belgium. It shows how primary schools deal with such an innovation as the extension of special-needs services. In the conceptual framework, the assumption that an innovation should be considered not only from a structural-functional perspective but also from an individual-cultural perspective is explored. The research data were subjected to within-site and cross-site analysis. The findings reveal the importance of complementarity between actions at the school level and the classroom level. An individual-cultural perspective is necessary if one wants to grasp the nature of this complementarity.

All educational reform initiatives should improve teaching practices and students' academic performance. For teachers, however, changing classroom practice is a demanding task. They have to acquire new knowledge and skills they are unlikely to have gained in their own education or in their previous classroom work (Knapp 1997). Researchers have suggested that changes in teaching practices must be complemented by changes at the school level; individual learning must be complemented by organizational learning. But such general statements do not clarify the *nature of the relationship* between both levels. According to Knapp (1997: 253–254), some researchers have begun to explore possible relationships between individual and organizational capacity-building: 'The frameworks and findings of this line of research point to the importance of communities of practice within the school, which can either enhance or inhibit teachers' ability to act on their personal knowledge, beliefs, and skills in their daily work'.

*Frederik Maes* is a researcher at the Centre for Educational Policy and Innovation, Katholieke Universiteit Leuven, Vesaliusstraat 2, 3000 Leuven, Belgium. e-mail: Frederik.Maes@ped.kuleuven.ac.be
*Roland Vandenberghe* is head of the Centre for Educational Policy and Innovation and a Professor in the Faculty of Psychology and Educational Sciences, Katholieke Universiteit, Leuven. He conducts research into educational innovation and teachers' professional development.
*Pol Ghesquière* is a Professor in the Faculty of Psychology and Educational Sciences, Katholieke Universiteit, Leuven. His research centres on learning disabilities and special education.

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Organizational changes, such as participation in school decision-making, have generally focused on non-instructional individual and organizational aspects, rather than on the particularities of teaching and learning (Conley 1991). An organizational change frequently does not support the individual professional learning needed for changing teaching practices. It is not yet clear how participation in decision-making, school-based management and strategies enhancing teacher empowerment (Marks and Louis 1997) impact teachers' expertise and, ultimately, students' achievement. In other words, the various strategies proposed by policy makers seem to be of two kinds: they can either enhance the professional learning process of teachers, or strengthen the bureaucratic control of instruction at the expense of teachers' working conditions (Rowan 1990, Firestone and Bader 1991).

In his analysis of 'problems of scale', Elmore (1996) underscores the importance of organizational structures that intensify and focus, rather than dissipate and scatter, intrinsic motivation to engage in challenging existing practice. In terms of complementarity between school and classroom levels, he suggests that the unit of work in an organization that wants to change its teaching practice should be small enough that the members can influence each other's practices.

> Certain types of structures are more likely than others to intensify and focus norms of good practice: organizations in which face-to-face relationships dominate impersonal, bureaucratic ones; organizations in which people routinely interact around common problems of practice; and organizations that focus on the results of their work for students, rather than on the working conditions of professionals. (Elmore 1996: 20)

Furthermore, Elmore (1996: 25) suggests that:

> if you ask teachers to change the way they deal with students and to relate to their colleagues differently, the incentives that operate at the organizational level have to reinforce and promote those behaviours. Encouragement and support, access to special knowledge, time to focus on the requirements of the new task, time to observe others doing it—all suggest ways in which the environment of incentives in the organization comes to reflect the requirements of learning.

Thus, teachers' individual learning and professional development are at the heart of the matter, but they should be supported by organization opportunities, structures and norms.

We believe that changes at the school level would have a positive impact on teaching practices at the classroom level if newly established or existing structures and procedures were to create learning opportunities for all those expected to change their knowledge, skills, beliefs and attitudes. This general thesis will be argued here using qualitative data collected in four primary schools which were expected to change existing teaching practices to pay more attention to special-needs children.

## Conceptual framework

The relationship between school-level changes and classroom practices may be examined and interpreted from two different perspectives, a structural-functional and a cultural-individual perspective (Van den Berg and Sleegers 1996). The first perspective is called 'structural' because its emphasis is on structural characteristics of school organization, and 'functional' because the functions or effects of those characteristics are examined. It emphasizes the importance of initiating innovation in a systematic and straightforward way. One looks for variables in the organization 'school' that influence the innovation process. By determining these variables, one expects to direct, more or less, this process. This leads to the belief that performances of students can be improved by changing some school variables.

This structural-functional perspective is closely related to the school-effectiveness paradigm (Scheerens 1989, Ainscow 1991, Creemers 1991, Creemers and Hoeben 1992, Scheerens and Creemers 1993, Croll and Hastings 1996). This research paradigm, mainly based on correlational studies, investigates variables that seem effective in enhancing students' achievement. This way of thinking, however, leads to a mechanical view of education (Stevens *et al.* 1996). Expected changes cannot be realized easily, because implementation of those changes is very complex. This perspective also suggests that if schools want to operate according to plan, they need to provide for intended activities, responsibilities, time-use, and use of means (Lagerweij and Haak 1994)—hence the attention given to instruments for school diagnosis, school-based reviews, school-based management, etc.

In these approaches (and instruments), a connection is made between the organizational-structural characteristics and the development of the school itself. Louis (1994) remarks that in these cases the conception of educational development and innovation used reflects the paradigm of 'managed change'. But Louis (1994), Louis and Miles (1990) and Van den Berg and Vandenberghe (1984) have made it clear that a structural-functional approach offers insufficient insight into innovation processes. After all, large-scale innovations have an unpredictable and non-linear nature. These characteristics render straightforward actions ineffective in the long term. In other words, creating structures, procedures, work-groups, etc., are necessary, but not sufficient; it is also necessary to investigate how they work, what purpose they are intended to have, how organization members handle them, how changes in structural characteristics are perceived by their members, and how balances of power are changed by innovations. School-effectiveness studies, for example, do not make statements about the significance or meaning of particular correlations between school characteristics and students' performances. In educational innovation, however, it is not only important to know that certain variables 'work', but it is also important to know how they work (Stevens *et al.* 1996). Teachers do not think in terms of variables; they think in terms of meanings!

Research on the nature and course of implementation processes has shown that the structural-functional perspective should be complemented

with a cultural-individual perspective. By stressing the importance of the implementation *process*, the significant role of the individual teacher and of cultural processes has become clear (Van den Berg and Vandenberghe 1984: 35). Implementation processes should be studied from the experiences and perceptions of the individual teachers—their involvement, changes in their teaching strategies (Van den Berg and Vandenberghe 1981, 1995), changes in their subjective educational theories and professional selves (Kelchtermans 1993), and changes in their perception of professional development (Clement 1995). But, such an individual-centred approach should also take into account the influence of the organization, i.e. the school. Joint experiences of individual teachers, for example, can lead to an alteration or confirmation of the goal-consensus of the school team ('we remain a cognitively-oriented school and there is not much we can do about children with learning problems', or 'we also succeed in motivating children with behavioural problems'). These joint experiences and daily comments can determine whether or not discussion in staff meetings is helping to solve problems in classrooms, whether or not co-operation in multidisciplinary teams is supporting classroom work, whether or not a remedial teacher is co-operating with class teachers, etc. In short, informal and formal structures at the school level are, or are more or less, or are not at all, connected to the classroom level. The nature of this connection reflects a certain professional culture.

We will look at particular schools from the point of view of these two perspectives. This duality enhances insight into the functioning of these schools and in the nature and quality of their special-needs services. The emphasis will be on a cultural-individual perspective in which the complementarity between the school level and the classroom level is essential.

## The study

### *Context*

During the last decade, many in Belgium and the Netherlands have come to believe that regular education should pay more attention to children with special needs. This conviction is based upon several observations. First, there are the high rates of students repeating grades in Belgian primary and secondary schools (Organisatie voor Economische Samenwerking en Ontwikkeling [OESO] 1991, Van Damme 1992–1993, 1993, Vlaamse Onderwijsraad 1993). Secondly, the number of students in special schools continues to rise in both countries (Van Dun 1990, OESO 1991, Van Dun and Ruijssenaars 1991, Ghesquière *et al.* 1996, Pijl 1997a, b). Finally, there is a growth of out-of-school forms of help for students with learning problems. Because of alarming reports about the failure of children in primary and secondary schools, creating or extending special-needs provisions has become a major task for regular schools. Success in responding to this task depends on the capacity of the school team or staff to detect, analyse and, if necessary, remediate learning problems. This capacity is closely related to the notions of special-needs provisions in regular schools,

and to extending those provisions. By the extension of special-needs provisions, we mean the adaptation and the broadening of the attention and the actions of the school to provide every student with maximum possibilities to develop.

This paper presents the results of a qualitative study, in which interviews were used to collect data in four primary schools. The study's main goal was to obtain a balanced and clear picture of the way primary schools operate in extending special-needs services, with a special interest in the relationship between the school and the classroom level.

### *Construction of the interview guide and data collection*

Interviews were completed in four primary schools in early 1997. The schools were selected with a view to gaining an understanding of how the extension of special-needs provisions is realized, rather than to obtaining generalizable results. Merriam (1988: 48) talks of 'nonprobabilistic' or 'purposive sampling', considering 'that one wants to discover, understand, gain insight; therefore one needs to select a sample from which one can learn most'. We agree with Schofield (1990) that research will be more informative if selected schools differ from each other on a crucial variable. Because the study was also intended to triangulate the quantitative data of a survey on the same theme, we based our choice of schools on the scores on the different scales of the questionnaire entitled 'Care for pupils with learning problems' (Maes *et al.* 1997b, c). This questionnaire assesses the diagnostic and remedial capacity of primary schools. It contains 123 items. Each item consists of a statement followed by a six-point Likert scale, ranging from 'does not apply at all' to 'does apply very well', to which each respondent offers a personal response. The questionnaire probes both the school level and the classroom level. After factor analysis, 10 scales were retained, six at the school level and four at the classroom level.[1] The six scales at the school level are: 'The principal and the shared concern for pupils with special needs'; 'Structural deliberation about pupils and registrations of problems'; 'Lack of care for children with special needs'; 'Co-operation with school guidance centres and with parents'; 'Across classroom initiatives and coordination'; and 'Continuity between grades'. The four scales at the classroom level are: 'Diagnostic and remedial teaching'; 'Support and co-operation'; 'Opinions and beliefs of the teacher'; and 'Within-classroom differentiation'. All scales are reliable and valid.

We selected two schools that had mainly low scores on the scales of the questionnaire, one school that had average scores, and one school that scored high. All four schools agreed to participate. In each school the principal, the remedial teacher, a class teacher of the first grade, and a teacher of the fourth, fifth or sixth grade were interviewed.

To obtain information that was comparable across the respondents and schools, an interview guide was constructed around the 10 scales of the questionnaire. Two versions of the interview were constructed: one for the principal and remedial teacher and one for the regular classroom teachers. The interview for regular classroom teachers included questions about the

school level as well as about the classroom level. Principals and remedial teachers were only asked questions about the school. Other differences between the two versions were not so much in the content of the questions as in the phrasing, which was adapted to the specific position of the principals and remedial teacher on the one hand, and of the classroom teachers on the other. We consider the interviews semi-structured: questions were open-ended, but the interview guides were clearly structured.

We asked both informative and evaluative questions. The former were about factual, objective situations and events—for example: 'How often is there a staff meeting?', or 'Do you work with across-classroom ability groups?'. The latter elicited details of the interviewees' experiences and perceptions and the meanings they gave to various activities—for example: 'How do you feel about the staff meetings in your school?', or 'Are you satisfied with the co-operation with school-advisory centres?'. These interviews took, on average, 90 minutes and were audio-taped.

## Data analysis

### *Subdividing the data*

Instead of keying the recorded interviews, we listened carefully to each tape and classified the information into different themes. Miles and Huberman (1984: 216) discuss tracing 'themes' that they consider as "'Gestalts'' which pull together a lot of separate pieces of data'. Goetz and Lecompte (1984: 192) examine 'emerging patterns'. The themes in our interviews are clearly linked to the interview guide. Figure 1 shows the nine themes on the school level (right side of the figure) and their relation to the scales of the written questionnaire 'Care for pupils with learning problems' (left side of the figure) that also served as a guide for the interview. There was no theme that corresponded with the questionnaire scale 'Lack of care for children with special needs'. The themes for the classroom level were also linked to the questionnaire scales (see figure 2).

While we listened to the recordings, we categorized the data according to theme. Relevant findings for each theme were written down in a scheme (see table 1). This was done for each interview.

It is important to distinguish the observation units (the respondents or interviewees) from units of analysis (the schools) (Knapp 1982). Although teachers and principals, the observation units $(n = 16)$, were interviewed, the study's focus was not their individual care for special-needs students. We were primarily interested in the *school's* diagnostic and remedial capacity. In other words, the unit of analysis is the school $(n = 4)$.

### *The within-site and cross-site analysis*

We analysed the categorized data in two ways: within-site and cross-site (Miles and Huberman 1984). In the within-site analysis (Miles and Huberman 1984: 79–150), each school is regarded as an entity in itself, in order to

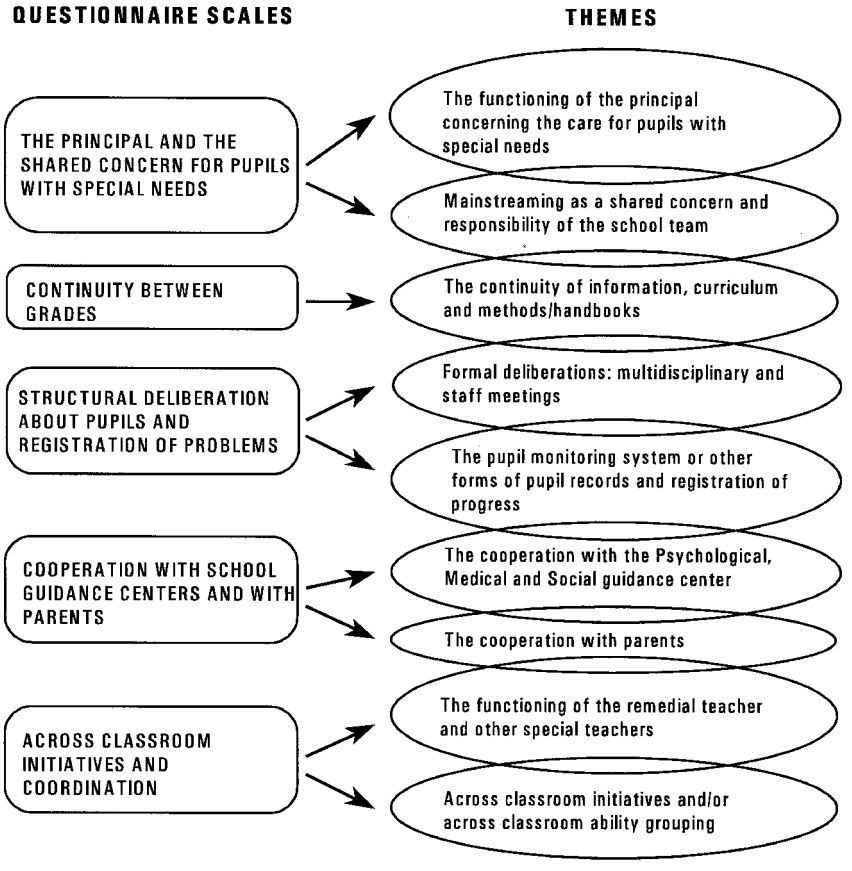



**Figure 1. Questionnaire scales and school-level themes.**

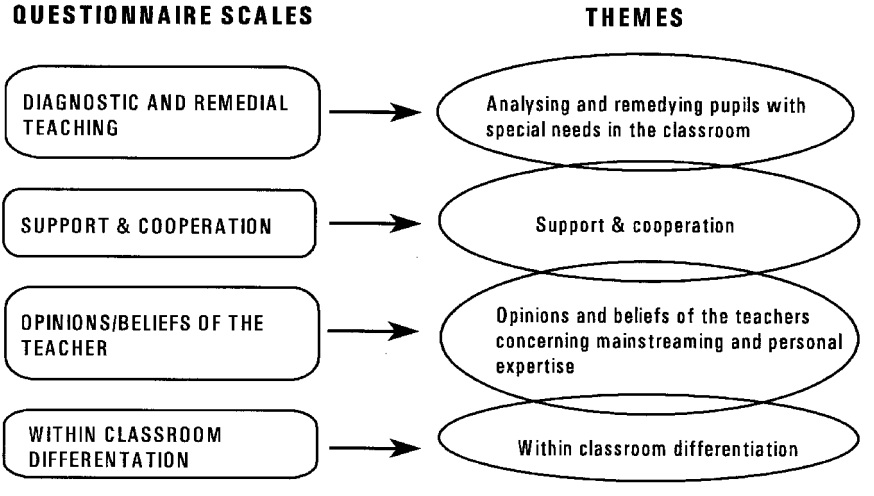



**Figure 2. Questionnaire scales and class-level themes.**

**Table 1. Example of an (empty) analysis scheme with themes.**

| The function of the principal concerning the care for pupils with special needs | Care for pupils with special needs as a shared concern and responsibility of the school team | The continuity of information, curriculum, methods and handbooks | The pupil monitoring system or other forms of pupil records and registration of progress |
|---|---|---|---|
| | | | |

understand and describe it. This means that for each school we assembled the interviewees' answers by theme. Next, the several themes were combined into an integrated, coherent picture of each school. This within-site analysis resulted in a written 'story' for each school, in which concrete statements and descriptions offered a valid picture of the school and the activities related to special-needs provisions.

After the analysis of each school separately, the four schools were explored from a comparative point of view in a cross-site analysis (Miles and Huberman 1984: 151). These comparisons were possible because, in our 'multi-site' research (Louis 1982), we used identical data-gathering and data-analysis techniques. Given the importance of this process, we described and examined similarities and differences between the ways schools render special-needs services.[2]

## Results

### *School A (a low-scoring school)*

In School A there does not seem to be any goal-consensus around care for special-needs students. Everything is dealt with as much as possible in the classroom. The continuity of information, curriculum and methods does

not extend beyond bare essentials. There are no staff meetings nor any across-classroom initiatives. Furthermore, the principal is not perceived as an expert in teaching practice, and is, therefore, seen as unable to support the teachers. His first priority is to maintain the number of students and to reduce the number of immigrant children in the school. Change occurs only if it is required, after a school audit, by the educational inspectorate. Co-operation with the psychological, medical and social guidance centre (PMS-centre) is minimal.[3] This centre offers very little support to the teaching practices of individual teachers. Collaboration with parents consists mainly of four meetings a year. Although these meetings seem to work well, there are almost no supplementary efforts for parents of special-needs children, despite teachers reporting that it is precisely these parents who do not attend the meetings. Parents of children placed in the remedial class are not always informed about this placement. Special efforts are limited to what teachers do in their own classroom, and they are not informed about what is happening in other classrooms. For example, the principal and one teacher did not even know that the remedial teacher had started a student-monitoring system. Although the remedial teacher makes some efforts (e.g. she is starting a student-monitoring system and attending a remedial-teaching course), she finds little support in her colleagues or the principal. This remedial class will probably be closed in 1998 in favour of a second class in the first grade.[4]

Teachers in School A report that they have become accustomed to a lack of support for their classroom activities. They have to solve their own problems, although they lack the expertise to do so. Efforts for special-needs children are limited to following those children more closely. No specific test instruments (diagnosis) or intervention plan (remediation) are used. Although teachers are aware of large differences in abilities among their students, no special efforts are made towards differentiation. Furthermore, no in-service training is provided, even about such significant topics as immigrant children. Because there is a risk of losing enrolments, students who probably would be better off in schools for special education are not referred (or referred only after governmental student surveys)[5] to such schools.

Seen from an individual and cultural perspective, what can we conclude from this description in terms of the complementarity between the school level and the classroom level? In School A teachers are professionally isolated in their work. Each teacher deals in his or her own way with special-needs children, and relies on his or her own initiative to solve problems. There is little communication with colleagues, and no functional collaboration with the remedial teacher, school advisory centres or parents. In terms of the structural-functional perspective, these findings indicate that it is not sufficient to create certain structures (e.g. a remedial class or a school guidance centre) to realize an innovation at the classroom level. The teachers' isolation also inhibits a shared view and responsibility for extending special-needs services. No attempts are made by teachers or principal to break through this isolation or to communicate expectations to each other about care for special-needs students. Thus, the school level and the classroom level remain separated, and a shared view on care for special-

needs children cannot emerge within the school team. Diagnosis and remediation rarely occur at the classroom level—they are not perceived as either a school task or a shared responsibility (Lee and Smith 1996, Louis *et al.* 1996).

### *School B (a low-scoring school)*

Although School B shows evidence of efforts being undertaken for children with learning problems, those efforts, i.e. a student-monitoring system (initiated in the year of our study), multidisciplinary team meetings, collaboration with the PMS-centre, and the remedial class, are limited almost exclusively to the first grade. (Teachers of both the primary grades and the intermediate and higher grades confirm that many initiatives are limited to the first grade.) The principal and a teacher even said explicitly, 'There is no continuity'. A feeling of being very much on their own exists among both teachers of upper grades, because they do not get as much support, and those of lower grades, because their efforts are not being followed up. There is little support or professional assistance.

Furthermore, some existing initiatives and opportunities have not been exploited. Deliberation meetings, which seem to depend on loose, verbal contacts, are not always functional. The multidisciplinary team only exists for the first grades and does not meet regularly. Co-operation with the PMS-centre is limited and, although it is possible to work across classrooms because of the parallel classes,[6] such cross-overs do not occur. Although there is a full-time remedial teacher, she is only in her second year and seems to follow rather than undertake initiatives. She follows the suggestions made by the principal and the PMS-centre consultants, but she seems unable to support professionally, or stimulate, her colleagues. As in School A, it is possible that the remedial class will no longer be provided. Although the principal, given his background in special education, is clearly concerned with special-needs children, his interest is obvious only to teachers of first grades and to the remedial teacher. In his first year of office, the principal was too much absorbed in administrative and organizational issues to initiate changes in his school. Finally, most interviewees were aware of problems in extending special-needs provisions in their school, and recognized that there is still a lot to be done. They name 'lack of continuity' as one of the most important deficiencies.

In School B, the teachers also work in isolation, but insofar as extending special-needs provisions is concerned, some isolated efforts are being made in the first grade. Consequently, dealing with special-needs children in this school is recognized and acknowledged as an important problem. However, there are no activities at the school level that make lasting efforts possible, and can address the concerns of individual teachers. In this school, too, the existing structures do not permit isolation to be broken down—shared experiences do not emerge and there are no changes in the professional culture of the school.

*School C (an average-scoring school)*

At first sight, School C gives a good impression around its provision of special-needs services. The principal, a dynamic person, makes the care for special-needs children a central topic, and he frequently communicates his concern to teachers and parents. The school team as a whole takes this theme to heart. This concern is supported by well-structured staff and multidisciplinary meetings at which teachers discuss continuity of information, teaching content, and methods. These meetings also account for the co-operation with the PMS-centre and other external school guidance centres. Between these meetings there are many informal contacts. Furthermore, the school has a very competent remedial teacher responsible for analysing and remediating learning problems. She administers norm-referenced tests, and she attends all staff and multidisciplinary meetings and all contacts with parents.

There is, however, another side to School C, best expressed by the principal himself: 'By "care for pupils with special needs" teachers in this school often understand "being helped by someone else"'. Many teachers in this school simply refer special-needs children to the remedial teacher or, to a lesser extent, to the PMS-centre consultant. Analysing and remediating problems, and differentiation, do not occur often in individual teacher's classrooms. In a sense, the school's diagnostic and remedial capacity is in the hands of a highly-competent remedial teacher. On the school level, some elements have not been fully developed. There is neither a student-monitoring system nor a standard student-record system (every teacher has his or her own system). There is no provision for across-class ability-grouping, and co-operation with the PMS-centre requires improvement.

To summarize, at the school level in School C certain aspects of the extension of special-needs provisions have been realized, and care for students with educational problems is an important concern. In the details of implementation, however, that concern has not been realized in each classroom. Paradoxically, the excellence of the remedial class seems to inhibit implementation in other classrooms.

In terms of the relationship between the school level and the classroom level, School C is an interesting case, because we may assume that there will be positive developments in mainstreaming efforts in the near future. This case is particularly interesting, because it illustrates very clearly the importance of the complementarity between the school and the classroom level. At the school level, the principal communicates the importance of care for special-needs children, and teachers know and acknowledge this priority. In this respect, we may speak of (incipient) pressure on the school team (Vandenberghe and Van der Vegt 1992: 49, 86). There is a beginning of collaboration, but it has no great influence on the activities of individual teachers and care for special-needs children is mainly perceived as the responsibility of others. There is still a tendency to relegate problems to external instances, and collaboration with the remedial teacher is very one-sided, i.e. she has to solve the problems. Although there are structured meetings and some initiatives for continuity and support, there is little impact on the actions of the individual teachers. In sum, the link between

school and classroom level is too one-sided structurally and too limited culturally. Because of the one-sided relationship between the remedial teacher and the team (structure), because of the lack of professional relations between teachers (culture), because of the absence of specific deliberation based upon the experiences in dealing with special-needs children, the diagnostic and remedial capacity at the classroom level is low.

### *School D (a high-scoring school)*

In School D, care for special-needs children is a vital concern and an important priority. The principal is a pioneer who can count on the respect of the entire school team. Care for special-needs students is so established that it is self-evident to the interviewees. 'It has always been like this', teachers report, showing the long-established tradition of care. That care becomes visible in examining efforts being done for individual children with problems. The positive atmosphere and the goal-consensus, significant parts of the school functioning, become apparent in such matters as the continuity of information, administration of norm-referenced tests, student records, multidisciplinary team meetings, staff meetings, co-operation with the PMS-centre, and collaboration with parents. These items work so well that they seem informal, implicit or taken for granted. For example, many tests are used, but they are not formalized in a student-monitoring system and there is no formal student record.

There is a clear vision in this school about education, learning, and students. This vision is expressed, for example, in the flexibility of the remedial teacher. Because the remedial teacher, wherever possible, helps in the classroom, she is involved in regular teaching practices, and the special-needs student does not have to leave his or her classroom. In addition, almost the entire school team completed in-service training on student differentiation. This way of working is clearly evident in the teachers' practices. Finally, both teachers and the principal emphasize the children's socio-emotional well-being. The openness in this school team encourages both the development of sound professional relations and the introduction of innovations. In-service training sessions are well attended, and new methods and certain difficult issues (e.g. bullying) are thoroughly discussed.

School D offers an interesting and instructive illustration of the coherence of the structural-functional perspective and the individual-cultural perspective. It is clear that this school scores best on diagnostic and remedial capacity. Care for special-needs children is part of the professional culture of the school. There is a shared vision: 'We want to make an effort and we are all responsible'. There is both pressure and support from the principal, and support from colleagues.

Consequently, there is no question of teachers becoming isolated. To understand this school, it is important to emphasize that the connection between the school and the classroom level is functional because *the activities at the school level support work in the classrooms.* It is possible to analyse and discuss individual professional experiences with colleagues and

the principal. This explains why attention to special-needs children is experienced as a reality, is seen as an essential part of shared responsibility of the school team, and becomes an important aspect of goal-consensus. In general, the school level becomes functional when attention is given in everyday reality to the individual professionality of the team members. It is not surprising, therefore, to find collective in-service training in this school. In contrast to the other three schools, School D offers conditions under which teachers can learn and find support in the school team to develop professionally. Innovations are, in other words, not so much realized by structural changes in a school as by supportive working conditions in which teachers are imparted knowledge and skills and show an enhanced concern for the school itself (Smylie 1994, 1995, 1996). Learning happens through shared experiences as teachers are confronted with daily problems and tasks. Each teacher becomes a part of a professional culture that considers learning to be essential. In this school, in-service training is very important, but only insofar as it is already part of the existing pedagogical-teaching priorities and is supported by the school as a work place. We did not find this 'continuous learning' in the offering of special-needs services in the other three schools.

## Conclusion

The interest in the diagnostic and remedial capacity of schools is part of a Belgian national policy to encourage schools (and teachers) to offer special-needs services. Schools and teachers should work in such a way that optimal opportunities for development are given to every child. This means that some children should be approached with 'special care'. To consider this concern as an 'innovation' implies that schools have to implement this concern. To do so, *schools should operate in a complementary way on two levels*. Implementing the extension of the special-needs provisions demands particular new activities—not only at the classroom level but also at the school level. We believe that working *simultaneously* at both levels is necessary for implementing such an innovation as the extension of special-needs provisions. But, it is important that working on both levels should happen *complementarily*. This means that at the school level working conditions should be created to make 'things' (changes, new activities, learning, etc.) possible at the classroom level. These working conditions (structures and procedures) at the school level support and stimulate teachers' work in the classroom. Complementarity between the two levels also means that the experiences and perceptions of individual teachers can be recognized at the school level, i.e. when joint experiences and problem-solving activities are discussed with colleagues, those discussions can lead to shared views and responsibilities.

Furthermore, we contend that to gain insight into a school process related to implementing an innovation it is insufficient to examine it solely from a structural-functional point-of-view, i.e. to look solely at the structures of the school and their functions. An individual-cultural approach is equally necessary to understand the implementation process and its effects.

Next to the mere structures and their functions, the experiences and perceptions of an individual teacher, and the way they emerge into a shared view and responsibility, have to be examined. Only when the structural-functional perspective on school processes is complemented with a individual-cultural perspective, is it possible to grasp the complementarity between the school level and the classroom level.

In short, the complementarity between the school level and the classroom level is imperative in order to innovate successfully. To understand this complementarity, a cultural-individual perspective on educational innovation, added to a more structural-functional perspective, is necessary.

**Acknowledgement**

We dedicate this paper to Stefan Bekaert (1969–1998), a good friend and an excellent anthropologist, who died in a ski gondola accident in Cavalese, Italy, on 3 February 1998; with special thanks for his remarks on a first draft of this paper.

**Notes**

1. In this paper we only name the several scales (for more explanation, see Maes *et al.* (1997b, c)).
2. For a complete description of the results of the within-site analysis and cross-site analysis, see Maes *et al.* (1997a).
3. The PMS-centre is a school advisory centre. Its primary task is to assess students with learning problems and to support those students, their parents and their teachers.
4. In Belgium, the school is free to use the teaching hours as they wish: they either organize a remedial class or, if there are sufficient hours to justify a full-time teacher, they can install a supplementary classroom.
5. The number of teachers and teaching hours depends on the number of students in the previous school year. In other words, the number of students (counted in February) determines the number of teaching hours for the next year.
6. Parallel classrooms are two or more classrooms of the same grade.

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