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Promoting quality from within: A new perspective on professional development in schools

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Abstract

Many attempts to improve the quality of education fail. In this chapter, we describe an alternative perspective on professional and organizational development, which has shown to have significant results, both in the Netherlands and in the US. This perspective focuses on the question of how professional teachers can optimally develop themselves without losing their personal strength, and how they can maintain their inner motivation to keep developing. From this perspective, an innovative approach for professional development has been developed called 'quality from within'. This approach is essentially bottom-up and starts from the qualities and commitment that teachers already have. In a study with a mixed-method design, we analyzed the outcomes of the approach for the teachers, students and school principals and for the school culture as a whole. Moreover, we analyzed which specific aspects of the approach stimulated or hindered these effects.

1. Introduction

For the past couple of years, the Dutch Institute of Multi-level Learning (IML) has been organizing innovation projects designed to start from the qualities, commitment and the ideals and concerns of teachers or students themselves. The intervention used focuses on improving educational quality at schools by what is called the development of 'quality from within'. The aim is to promote professional development of teachers based on the existing quality in schools. This is done by stimulating the teachers' awareness of their personal qualities, potential, and inspiration and to stimulate them to develop from there. Participants are also stimulated to reflect on their pedagogical views and to learn how to coach others.

Although the intervention is limited to a small number of workshop days for staff, and the promotion of peer coaching, it seems to be highly successful according to the participants (Korthagen & Vasalos, 2008). One primary school teacher formulates it this way:

> *I have never felt more at home in my team than I do now. We are really talking to each other. That to me is the biggest outcome. And add to this the wonderful fact that it has already been channeled to the children. Life in the school is vibrant again.*

And a primary school principal says*:*

> *Teachers' progress can be observed in the classroom. Even an 'old hand' tells me with a broad grin that he is doing things differently! That, too, I have been able to observe. They are really involved in it. I also notice that relations between teachers and students are improving. Mutual understanding is genuinely growing. There is more openness between colleagues.*

The study reported here systematically explores the impact of the quality from within approach on the professional development of participating teachers from six primary schools, and on school culture as a whole (as reported by teachers). It further deals with the question whether specific aspects of the approach stimulate or hinder teacher growth. We expect that insights from this study may be useful for other schools when designing innovations for professional learning.

This study was guided by the following research questions:

1. *What do the participants in the 'quality from within' projects perceive as the outcomes of the project and how do these outcomes – according to the participants - take form in daily practice?* This first research question is studied from two perspectives: (1) from the perspective of the primary process in the classroom, i.e. we looked at outcomes both for the teachers themselves and

for their students, and (2) from the perspective of the school as whole, including the school culture.

2. *Do the participants perceive themselves as better facilitators of student and colleague learning as a result of the 'quality from within' projects?*
3. *What aspects of the project or of school or of themselves do the participants perceive as:*
    a. *stimulating the learning process and the outcomes?*
    b. *hindering or limiting the learning process and the outcomes?*

By the combination of research questions that take their departure both from what the participants perceive as relevant (question 1, and 3) and from the criteria the researchers had predetermined (question 2), two research methods are being combined: an *evidence-based-approach* that tries to find evidence for the effectiveness of a certain approach and a *value-based-approach* that starts from the values and meaning relevant for the participants themselves.

2. Theoretical Framework

2.1. Educational innovation is problematic

In the *International Handbook of Educational Change*, published in 1998, a review of a large number of studies on educational innovation showed that most innovations fail (Holmes, 1998, p. 254). Elliot (1991, p. 47) notes that teachers often do not feel taken seriously in their own professionalism and inspiration for the profession. Another very important reason is that often fixed goals are pre-established without consulting the teachers (Korthagen, 2007). Although innovators might know what needs to be changed in the classroom, it is not certain that teachers agree with these ideas or choose to act in the way the innovators would like them to act (Day, 1999). A top-down approach to innovation often creates a feeling of external pressure in the teachers, especially when the innovation is not in line with their needs and views. As a result, teachers often respond by showing fight, flight, or freeze patterns. They actively resist (fight), try to escape from the pressure to change (flight) or become tensed (freeze). These response patterns are noticeable in various schools, and particularly in the responses of teachers under pressure. For example, a common flight or fight response of teachers is to put innovations away as being useless or impractical, and to speak negatively of educational innovators (Elliot, 1991).

However, this top-down thinking and its ineffectual results is still very much part of the educational culture (Korthagen & Vasalos, 2008). It mirrors what Schön (1987) called the "technical-rationality model", which is based on the idea that if research indicates what is needed for good teaching, teachers will just have to learn this, so they can apply the research outcomes in their teaching. Though this sounds logical, it appears not to work in practice. Many studies show that teachers hardly apply the theories presented to them (see e.g. Cochran-Smith & Zeichner, 2005). This is a crucial problem in educational innovation. It seems that a deadlock ensues where teachers reject potential innovations, regardless of their potential benefits for practice. Education seems to be in need of a fundamental solution to this wide-spread phenomenon.

Often educational innovators try to minimize the external pressure put on teachers as much as possible. One way to do this is by promoting 'ownership' and making the teachers 'owners' of the innovation. But, that still means that they *must do* something prescribed to them, which implies a top-down approach. In turn teachers resist, and this leads according to Hargreaves, Lieberman, Fullan, and Hopkins (1998), to educational innovators expressing a lack of respect for teachers. In sum, the overall picture is rather hopeless: educational experts and teachers do not really interact, they do not really take each other seriously, and the top-down approach to educational innovation is often not very successful. Characteristic for the quality from within approach is that it is essentially bottom-up instead of top-down. More detailed information about the approach is given in section 3.

2.2. Positive psychology

Another reason for the failure of innovations is the emphasis often put on what is not good or imperfect in the existing quality of the school and its teaching practices, and thus on what has to be improved (the 'deficit' model). This generates little enthusiasm in teachers and is rather ineffective. A recent approach within psychology, called *positive psychology*, helps us understand the psychological processes involved. The founders of this approach, Seligman and Csikszentmihalyi (2000) state that for long psychology has focused on traumas, and on what is wrong with people (and what consequently has to be 'repaired' or improved). This traditional line of thinking is limited and appears to be ineffective. According to Seligman and Csikszentmihalyi, this traditional approach to psychology does not succeed in contributing to the well-being of people. They argue that we should emphasize more the inner potential of people, or what they call *character strengths*, such as enthusiasm, care, courage, determination and creativity. Ofman (2000), calls such strengths *core qualities.* According to Ofman, such qualities are always potentially present in people and are already part of them, whereas competencies, such as 'giving a clear and unambiguous explanation' can to a high degree be learned, also at a later age. As a teacher, however hard you work at your competencies, it is your personal qualities that color the way you behave in your profession and most influence professional growth. Hamachek (1999, p. 209) puts it this way: "Consciously, we teach what we know; unconsciously, we teach who we are." Almaas (1986, p.148) refers to core qualities as 'essential aspects', and states that they are absolute in the sense that they cannot be further reduced to something else, or divided into more basic constituents, which is different for competencies, which can be divided into subcompetencies. Another important aspect of core qualities is that they can be broadly applied, in virtually all areas. In other words: they have a high 'transfer value' (Korthagen, 2004). Tickle (1999) states that in education people's core qualities are too much neglected, as a result of a technical and analytical way of looking at people. In the 'quality from within approach' the focus is on the teacher (or student) as a whole person, with special attention to their core qualities as critical factors in teaching and learning experiences. Acknowledging and focusing on core qualities instead of emphasizing things that are deficient, can not only validate the individual's irreplaceable contribution to their own and colleagues' professional growth but also progressively mould their more holistic approach to students while creating room for alternative ways of approaching problems in work and life.

2.3. Self-Determination Theory

In the literature, insights from positive psychology have been connected to the Self-Determination Theory (SDT, see Deci & Ryan, 2000; Ryan & Deci, 2002; Evelein, 2005), in which three basic human psychological needs are distinguished: the need for autonomy, for competence and for relatedness. Evelein (2005, p.45-46) showed that if teachers are stimulated to identify and act upon their personal strengths, the fulfillment of their basic needs is enhanced.

Autonomy refers to the need to express the authentic self, and to experience the self as the source of one's own behavior (Ryan, 1995; Ryan & Deci, 2002). Central in experiencing autonomy are the personal will, clear decision making based on consciousness of personal values, and a feeling of responsibility for one's own decisions (Hodgins, Koestner, & Duncan, 1996). *Competence* refers to feeling effective in one's ongoing interactions with the social environment. It implies that organisms are born with the urge to influence their surroundings through their capabilities. The need for competence is not the desire to attain specific skills, but rather the desire to feel confident in the effectiveness of one's actions (Ryan & Deci, 2002). The need for *relatedness* refers to the longing for experiencing positive relations and engagement with others, to care and be cared for by those others. Relatedness is further the feeling of belonging to a group or community (Baumeister & Leary, 1995; Ryan, 1995; Ryan & Deci, 2002). According to Deci and Ryan (2000, 2002), fulfillment of these basic psychological needs is essential to psychological health and growth, to intrinsic motivation, to the experiencing of well-being, optimal functioning, and self-actualization. Evelein (2005) showed that an increase in the fulfillment of the basic psychological needs of teachers correlates with more effective teaching behavior. In sum, stimulating the use of personal strengths might have a positive influence on teaching and learning.

2.4. Quality from within and Multi-level Learning

Based on the above analysis of the causes of failure of educational innovations, the principles of positive psychology, and Self-Determination Theory, a new approach to professional development has been developed by Korthagen and Vasalos (2008), called ‘quality from within’. This approach starts from the qualities, commitment and inspiration that teachers (and students) already possess, and promotes further development from there. Fredrickson (2002) calls this the *broaden-and-build model*, which means the broadening and extension of the basis that is already there.
In the quality from within approach the principles of Multi-level learning (MLL) are being used for professional development (as described by Korthagen & Vasalos, 2005, and Meijer, Korthagen, & Vasalos, 2009). The theory on MLL acknowledges already existing knowledge, qualities and inspirations of teachers. The starting point of this approach is the assumption that professional behavior becomes more effective and fulfilling (in the sense of fulfillment of the three basic psychological needs) when behavior is connected with the deeper layers in a person, and even more important, when the different layers are in harmony with each other.

In the so-called onion model (Korthagen, 2004, see Figure 1) six of such layers are distinguished: (1) environment, (2) behavior, (3) competencies, (4) beliefs, (5) identity, and (6) personal mission (sometimes referred to as the layer of spirituality). This sixth level is the level of personal ideals. In addition, in Figure 1 questions are formulated to clarify the essence of the layers. The center of the model is called ‘the core’ and this is where the person’s core qualities are assumed to be located, influencing the inner layers.

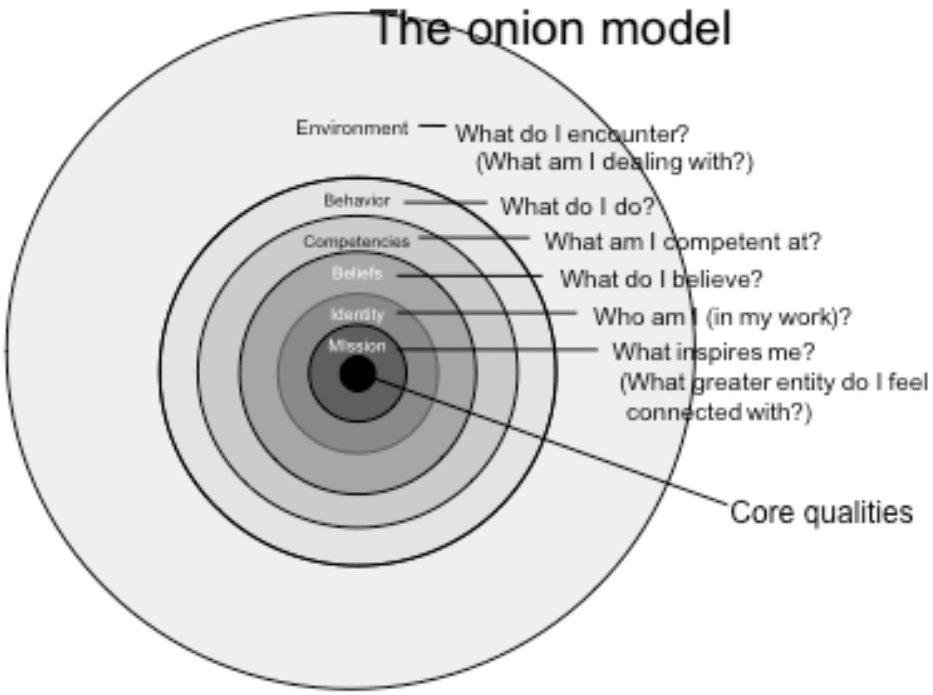

Figure 1: The onion model

To illustrate how the layers of the onion model play a role in teaching, we give an example.

Teacher Jennifer teaches in the fourth grade (*environment*). She sees herself (*identity*) as a 'guiding' teacher who supports children to develop themselves and teaches them how to learn. In that way she feels she contributes to the world by assisting the children in becoming self-reliant and self-developing adults (*mission*). In order to do so, she believes it is important to help children find and assess their own answers to questions they have (*belief*). Therefore, she develops the skills to guide them through their learning process with questions and hints (*competencies*) and she uses her qualities of patience and trust *(core qualities)*. In this example we see that the various layers are in harmony with each other. This is called *alignment* of the layers.

In MLL, alignment between the different layers of the onion is promoted. In other words, what is promoted is a harmonious connection between the outer and the inner layers of the onion model, i.e. between the layers within the person and the environment. This implies what Ryan and Deci (2000, 2002) call a *positive organic-dialogical process* in the interaction between the person and the environment, in which there is a high degree of fulfillment of the three psychological needs. This means that the individual functions in a way that is both an effective response to the demands of the situation (environment) and is at the same time personally fulfilling (person).
One way to make people more aware of the inner layers of identity and mission is to promote awareness of their ideals and core qualities. If the more outer layers of the model are not in line with these inner layers, we speak of disharmony (or no alignment) between the onion layers. In our example, this would be the case when Jennifer is for example quickly telling a student the right answer to a question (*behavior*), which would not be in line with her mission of assisting the students in becoming self-reliant and self-developing adults. In MLL awareness is promoted of the obstacles causing such disharmony.

Recent empirical studies showed that awareness of the existence of the different layers and especially alignment between those layers is of great importance within education. In a study by Meijer, Korthagen, and Vasalos (2009), one beginning teacher was followed, who was supervised during 7 sessions, based on the principles of MLL. The authors describe both the teacher's growth and the supervisor's interventions in detail, using quotations from supervisory sessions, logbooks, and interviews. It was shown that the teacher became more fully present while teaching, more effectively using her personal qualities, and that she felt more effective as a teacher. The authors summarize the teacher's learning process as an integration of the personal and the professional.

In addition, Hoekstra and Korthagen (in press) describe a study addressing the question of if and how MLL-based supervision makes a difference to teacher learning. In a longitudinal mixed method study, the learning of one teacher has been documented in a year in which she had no systematic support, but had to adjust herself to an educational innovation. This teacher was also studied in a consecutive year in which she received individual supervision based on MLL. During this supervision, the teacher became aware of beliefs and patterns that had previously inhibited her ability to change. This awareness precipitated significant changes in her beliefs and classroom behavior, as well as her way of learning. The findings suggest that professional learning will be strongly promoted if a teacher is supported by means of MLL in dealing more effectively with the personal factors involved in the learning process.

In line with the above mentioned theoretical assumptions about the importance of a focus on core qualities and alignment between the layers of the onion model, the principles and methods of a specific kind of reflection, named *core reflection*, are being used in the 'quality from within' approach. Core reflection is a form of reflection based on the following key principles (Meijer, et al., 2009):

1. Promoting awareness of ideals and core qualities in the person that are related to the situation reflected on, as a means of strengthening awareness of the layers of identity and mission.
2. Identifying internal obstacles to acting out these ideals and core qualities.
3. Promoting awareness of the cognitive, emotional and motivational aspects embedded in ideals, core qualities, and obstacles.

4. Promoting a state of awareness in which the person is fully aware (cognitively and emotionally) of the discrepancy or friction between 1 and 2, and the self-created nature of the internal obstacles.
5. Trust in the process that takes place from within the person.
6. Support of acting out one's inner potential within the situation under reflection.
7. Promoting autonomy in using core reflection.

In sum, the essence of core reflection is to make people aware of their core qualities and to support them in putting these qualities into action and dealing with the obstacles hindering them from doing so.

Finally, the 'quality from within' program is an innovative approach for professional development. It is innovative in the way in which it starts from the qualities, potential and inspiration of the teachers, and in the way it supports teachers in doing the same with their students. Different from most innovations, the 'quality from within' approach does not aim at a specific outcome in terms of how teaching should be. If teachers connect with their inner strengths and inspiration as well as those of their students, they start to find their own approaches to effective education.

3. Context of the study

The 'quality from within' approach has been implemented in a variety of Dutch schools, departments of teacher education, and other educational organizations. In this study we examine the implementation of the approach in six primary schools between June 2008 and June 2009. The aim of this project was to improve the quality that was already present in the schools, through the inner qualities of teachers, students and school principals. Hence, teachers were stimulated to become aware of their own qualities, potential and inspiration and to develop from there. They learned to use a (self) reflection and coaching method that starts from the core qualities and inspiration of themselves and their students. Furthermore, they were stimulated to reflect also on their pedagogical view, based on their experiences with this new method. It was assumed that by using this method, the teachers would become better facilitators of the learning of their students and their colleagues.

In order to reach these aims, an intervention was implemented at each school. Characteristics of the intervention at each school were:

1. *Building on the needs and concerns of the participants*
   In the three group meetings during the project (of one day each), the pedagogical approach is based on the concept of 'realistic teacher education' (Korthagen et al., 2001). This means, for example, that problems or concerns that participants encounter in their work are taken as the starting point of the discussion and the learning process. These issues are approached according to the principles of MLL.

2. *Practicing in authentic situations*
   Besides the authentic situations teachers experience in their daily practices, new experiences are constantly created during the meetings. Both types of experiences are used as a starting point for core reflection. Moreover, teachers practice the methods of MLL in their real work situations with students. In order to increase their learning this practicing with students is partly coached by the trainers. Therefore, sometimes students are brought into the group meetings or the teachers are supported through coaching-on-the job in the classroom.

3. *Promoting individual reflection*
   To enable the participants of the project to realize deep learning, they are constantly stimulated to practice personal reflection. This reflection is about different topics, e.g. recent situations in their

work with students or each other, their ideals and beliefs, their core qualities, the obstacles they encounter, and so forth (see the key principles of core reflection in section 2.4).

4. *Enhancing transfer*
   Since the literature on effective professional development emphasizes the importance of opportunities for transfer of learning experiences into authentic practices, in between meetings, the participants are encouraged to continuously apply what they have learned to practice, both in their work with their students, as well as with each other. In order to further enhance this transfer, the participants practice inter-collegial coaching in pairs, keep logbooks for reflecting on their experiences that they e-mail to the trainers and the rest of the group, and they read a few Dutch articles on the MLL methods practiced in the group meetings. As noted above, coaching on the job also promotes the transfer into daily practice. In addition, a developmental group is being installed, which consists of two up to five teachers. Its aim is to monitor, guide and support the development within the school. A member of the school management might be part of the developmental group, but the group fulfills a role additional to the management.

5. *Promoting reflection on the team and school level*
   Learning takes place in the school at more than just the individual level. The school principals, remedial teachers and student-teachers join the teachers in the learning process and participate in the meetings. Hence, all school members are participating and a learning process of the school as a whole is stimulated.

   All participants in the school are stimulated to reflect on its educational identity and mission. Through discovering the similarities and connections between the individual qualities and missions in the group as a whole, the teachers discover important elements of the deeper onion-layers at the school level: elements of the identity of the school and of its mission. Essential in this process is the development of a common language, not only supporting the team's discussions on the relationship between theory, vision, and practice, but also deepening the reflection of the individual teacher on his or her own practice.
   Moreover, the participants are stimulated to make the innovation that is taking place public, for example by organizing an informative afternoon for parents, other schools or educational institutions, the educational inspectorate, the local press, etc. This stimulates an even sharper definition of the educational identity of the school, the demonstration of effects, and critical reflection on what has been achieved and what still has to be achieved.

In sum, the project consists of more than just three course meetings. It are certainly not only the course meetings that make the difference, but the whole ongoing process at school during the time span of the project, with the meetings of the developmental group, the inter-collegial coaching, etc.

Finally: in order to fully realize these characteristics of the intervention, it is important that the trainers are experienced teacher trainers who are specifically trained in guiding the learning process on core reflection and multi-level learning for several years. For more details on the implementation of the MLL approach in this project, see Korthagen and Vasalos (2008).

4. Method

4.1. Design

In this study, six primary schools where the 'quality from within' approach was being implemented were followed over a period of 17 months. We used a mixed-method design for reasons of triangulation and complementarity (Johnson & Onwuegbuzie, 2004).The timing of the meetings and the data collection are illustrated in the time line in Figure 2. In this study our focus is on the results of the questionnaires at the moments Q1 and Q2 (N=61), and on the interviews at the first interview round (I1:N=24) and the second interview round (I2: N=20). In addition, to get a grasp of the more

longitudinal effects of the intervention, in section 4.2.3 we report on the data of a third interview round (I3: N=14). Unfortunately, since the third interview moment was quite long after the ending of the training and after the summer holiday, not all of the original participants could be interviewed this time. Some left the school, some were pregnant or ill, and one did not want to participate anymore because she said nothing had changed for her since the last interview. All together, 14 teachers were interviewed during the third interview round.

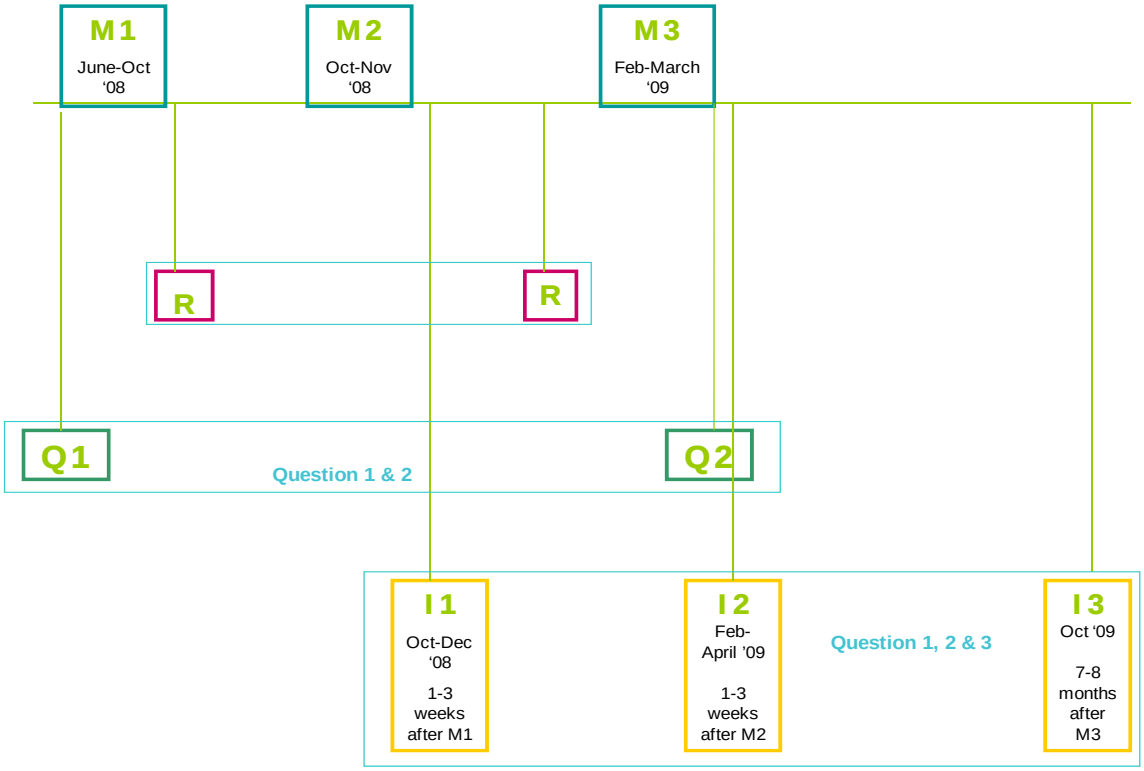

Figure 2: Time line of the intervention and data collection period (M=meeting, R=Reflective report, Q=Questionnaire and I=Interview)

4.2. Participants

Quantitative data were gathered on 61 primary school teachers from six schools located in six different, small to middle sized cities (three in the East and three in central Netherlands). The schools ranged from small schools (for example a starting school with 5 teachers) up to big schools, with for example 30 teachers and two locations. The grades that teachers taught ranged from Kindergarten to Grade 6. The years of teaching experience also varied. The participants ranged from novice teachers to teachers with 25 or more years of teaching experience. A subset of these teachers was also interviewed, namely 24 teachers in round 1, 20 in round 2, and 14 in round 3. They came from four of the schools (two in the East and two in central Netherlands). At the first interview round five male and 19 female teachers were interviewed.

During the second round of interviews with the teachers (within three weeks after the workshop period had ended), we also interviewed the school principals. We asked for their opinion on (1) the development of the school during the project and (2) essential characteristics of the intervention that made this development possible.

4.3. Data collection

Four instruments were used, to be described below.

4.3.1. Questionnaire on perception of work

To measure what the participants of the 'quality from within' projects perceived as the outcomes of the project and whether they perceived themselves as better facilitators of student and colleague learning as a result of the project, a questionnaire was filled out by all the participants. This questionnaire indicated how they perceived (themselves within) their work, (1) right before the project started, and (2) right after it ended. With this questionnaire we measured the fulfillment of basic psychological needs. This questionnaire was based on a pilot-study carried out in 2007. It consists of four sub scales: (1) fulfillment of the basic psychological need for *competence*, (2) fulfillment of the basic psychological need for *relatedness*, (3) fulfillment of the basic psychological need for *autonomy*, and (4) self-efficacy regarding the principles of coaching that are central to the 'quality from within' approach.

The first three scales are based on a study by Evelein (2005), who presented evidence of the validity and reliability of these scales. The fourth scale measures the teachers' self-perception of their own coaching competencies that are illustrative for the 'quality from within' approach. Representative examples of items are:

Variable	**Example item**
Need for autonomy	- I feel free at work to come up with my ideas and opinions - I feel I can decide for myself how I do my work - In my work I have to do what I am told (negative item)
Need for competence	- The people at work tell me I am good at what I do - I feel I am able to cope with my work - I feel little competent in my work (negative item)
Need for relatedness	- My colleagues are friendly towards me - I feel I have a bond with my colleagues - There are few colleagues who are close to me (negative item)
Self-efficacy in coaching students and colleagues by means of core reflection and MLL	- I feel competent in in-depth coaching - I can help people to express their personal qualities - When I coach other people I can deal with personal aspects

Table 1: Scales and representative items of the questionnaire on perception of work

Participants scored the items on a seven-point Likert-scale ranging from (1) *not true at all* to (7) *very true*. Cronbach's alphas of the scales for the first measurement moment (Q1) are shown in Table 1.

Scale	**Number of items**	**Chronbach's alpha**
Autonomy	8	.75
Competence	6	.67
Relatedness	8	.70
Self-efficacy in coaching	10	.88

Table 2: Cronbach's alphas of the five scales of the questionnaire on perception of work

The questionnaire was filled out by all participating teachers of the six schools, i.e. 93 teachers. Some of these teachers could not fill out both questionnaires because, for example, they were ill during a certain period of time, or left the school. The questionnaires of these teachers were excluded from the data, which led to a final sample size of 61 teachers, nested within 6 schools.

4.3.2. Reflective reports

To achieve insight into what the participants of the project perceived as the outcomes and to find out what stimulated or hindered their learning, we used reflective reports the participants wrote. Twice during the project period the teachers wrote these reflective reports, namely between the first two workshop days, and between the second and last workshop day. These focused on what inspired them in the approach and the workshop day, what they were planning to do with this, and how this worked out in daily practice. Moreover, in these reports they reflected on what had supported and hindered their learning. The teachers sent their reports to the trainers, and to their colleagues if this was okay for the person who wrote such a report.

4.3.3. Semi-structured interviews

We conducted semi-structured interviews to study the teachers' experiences in depth. These interviews focused on the (learning) outcomes of the project for the participants and what stimulated or hindered these outcomes. The interviews were based on a detailed guideline in which the research questions were operationalized by way of a number of sub questions, framed in the type of language that teachers and school principals use. Some examples of the interview questions are:

- What is the first thing that comes to your mind when you think of the project?
- What are personal outcomes for you as a result of your participation in this project?
- Do you notice something has changed in the students?
- What do you think were aspects that stimulated the outcomes of the project?
- What do you think were aspects that hindered the outcomes of the project?

At four schools we interviewed a sub sample of six teachers per school. We held the interviews (1) halfway through the workshop period, (2) within three weeks after it had ended, and (3) approximately seven to eight months after it had ended. The six teachers per school were chosen on the basis of the reflective reports they had written after the first workshop day. All teachers were divided into categories, based on these reports:

A) teachers who were very enthusiastic about the project and seemed to learn a lot;
B) teachers who were slightly positive about the project and seemed to learn a few things;
C) teachers who were not enthusiastic about the project and seemed to learn little;
D) teachers who did not write a reflective report (hence we did not know to which of the first three groups they would belong).

For the interviews, two teachers from category A, C and D were selected randomly. In one school there were no teachers in category D, so here we chose them from A and C. The remaining group of teachers, i.e. those who were not interviewed, mostly belonged to the categories A and B.

4.3.4. Intervention report

We asked the trainers of each school for (1) the characteristics of the specific intervention at this school, (2) their opinion about the development of the school, and (3) their opinion about what was essential in the intervention to make this development possible. These data were mainly used as background information to help us interpret the results found with the other instruments.

4.4. Data analysis

4.4.1. Analysis of the questionnaire

With respect to the quantitative analysis a pre-posttest design was selected. Respondents were 61 teachers who worked at six schools (i.e. observations (N=122), nested within teachers (N=61), nested within 6 schools (N=6)). Included in the study were teachers of whom we had both a pre-test and a post-test score. To assess whether the participants of the 'quality from within' projects showed an increase in the fulfillment of the three basic psychological needs, and/or an increase in their perceived capacity to facilitate colleague and student learning, a multi-factor analysis of variance was computed (Bickel, 2007). We were interested in a fixed effect (of time) but had to take other effects into account too (e.g. it was possible that some teachers or schools performed better than others right from the beginning or that teachers within one school were more alike than teachers in other schools). Therefore, multiple models were tested and the best fit proved to be the model in which the random

intercept was chosen at the teacher level. Only for the autonomy scale a school-effect was found, but this effect was not significant. This means that the results can be interpreted as effects of the group of teachers.

4.4.2. Analysis of the interviews

The analysis of the interviews followed a grounded theory approach (Strauss & Corbin, 1998). First, four interviews were transcribed literally (two from category A and two from category C). On the basis of these transcripts, categories were developed that could be used for scoring the answers in all interviews. This was done in discussions between the three authors of this article. The part of the interviews that focused on the outcomes of the 'quality from within' approach (research questions 1 and 2) was based on the quality from within onion model. In order to reduce the data into meaningful categories and with sufficiently high numbers per category, the six layers of the model were combined into three layers, by combining adjacent levels into one scoring category (Figure 3).

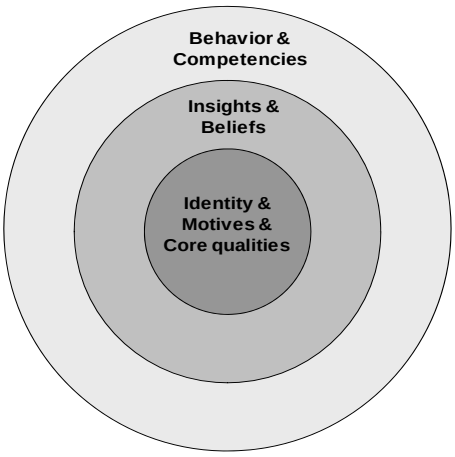

Figure 3: The simplified onion model

Using this scoring-model, the main researcher trained two research-assistants, which led to some small adjustments of the description of the outcome categories. With the aid of the final scoring model the main researcher and the two research assistants independently analyzed two interviews. Upon comparison, they agreed in most of the cases. The cases in which the assistants had other interpretations than the primary researcher were discussed leading to an agreement that the findings of the primary researcher were valid.

5. Findings

In the following sections we will first report on the results as measured before and right after the intervention. In section 5.4, we will describe the longitudinal effects of the 'quality from within' approach.

5.1.Quantitative data: outcomes of the 'quality from within' project on the fulfillment of the basic psychological needs and on self-efficacy in coaching

At the level of the whole group of teachers, the scores on the scales Autonomy and Self-efficacy in coaching increased between the pre-test and post-test ($p<0.01$) which is a small but statistically significant effect (R2 is .06 and .04 respectively). On the other scales the increase was not significant (see Table 3 and Figure 4).

	Pre-test		Post-test		time		
Sub scale	**Mean**	**SD**	**Mean**	**SD**	**b**	**se**	**P**
Autonomy	5.11	.87	5.39	.71	.275	.08	.001**
Competence	5.64	.74	5.75	.71	.116	.08	.159
Relatedness	5.51	.71	5.63	.58	.117	.07	.114
Self-efficacy in coaching	4.74	.89	4.96	.78	.231	.08	.006**

*Table 3: Means on the pre-test and post-test for the five scales of the questionnaire (** p < 0.01)*

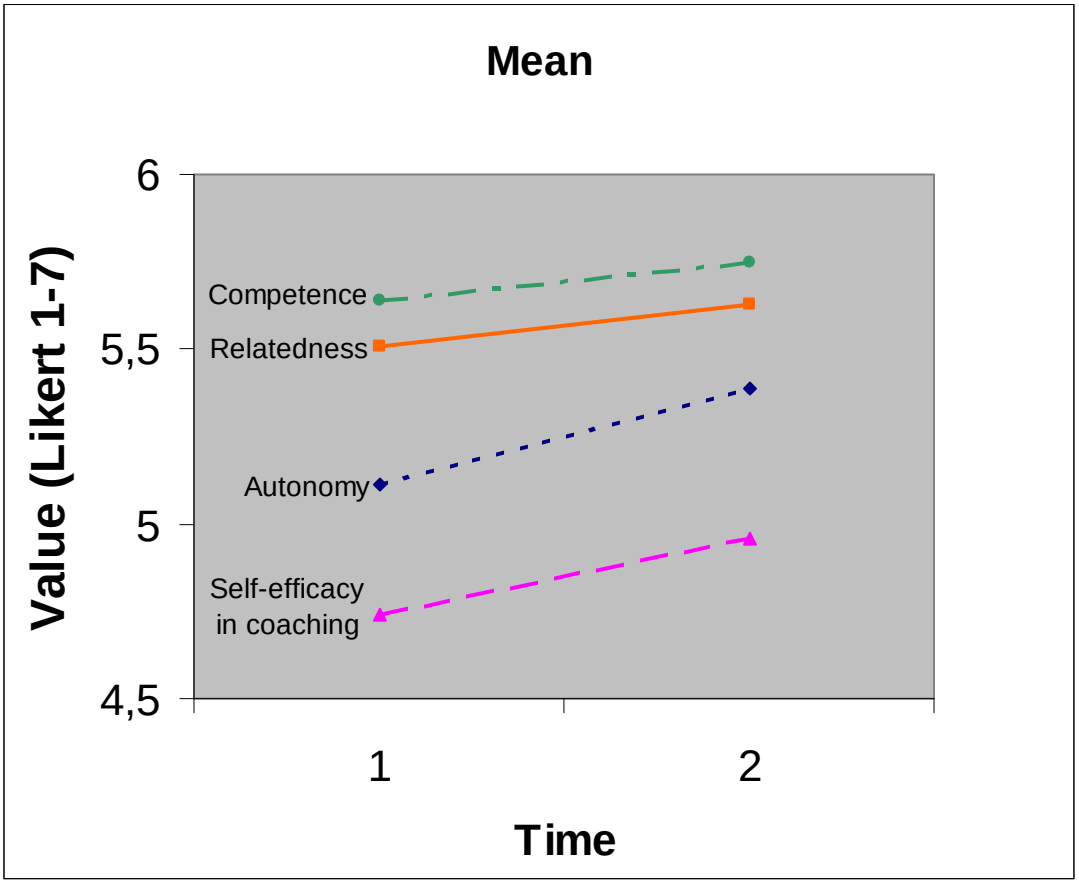

Figure 4: Means on the pre-test and post-test for the five scales of the questionnaire

5.2. Qualitative data: Outcomes of the quality from within project, as reported in the interviews

In the following sections, we will report on the results from the qualitative part of the study. First, we will describe the outcomes that the teachers perceive as important outcomes for themselves as a teacher and/or as a person. Second, we will report on the onion layers related to the learning outcomes and discuss individual differences. Finally, we will present outcomes the teachers perceived as important for others.

5.2.1. Outcomes at the individual level

In Table 4 teachers' perceptions of personal outcomes of the project are summarized. Percentages were used to show the total of teachers who mentioned these outcomes. The Table displays only outcomes mentioned by more than 50% of the participants in at least one interview round. This was done to reduce the data to results that seemed most representative for all participants.

Perceived outcomes	**Illustrative example**	**I1 (N=24)**	**I2 (N=20)**
Behavior and competencies			

Increased coaching skills (regarding coaching of students and colleagues); stronger focus on the emotional and motivational side of learning; let the other person find the solution, more structured coaching.	"I ask the children more about how they feel, and what they think. I have noticed that the children are then able to come up with their own solutions." "In coaching colleagues I pay more attention to the limiting beliefs teachers have about the students."	75%	85%
Feedback on core qualities (to students, colleagues, parents).	"I give more and more conscious feedback on core qualities."	63%	55%
Increased awareness of certain coaching skills	"I became aware of the difference between giving a compliment and giving feedback on core qualities."	58%	45%
Insights and beliefs			
New and/or renewed insights and ideas about learning	"One learns from positive feedback" "It is more useful to help someone find his own solution than presenting him with the solution."	75%	80%
Identity, motives and core qualities			
Increased awareness of one's own motives	"I want to contribute to the well-being of the children" "I want the children to learn how to solve their own problems, so that they become self-reliant and autonomous"	71%	30%
Increased awareness of one's own professional identity	"I feel there is more appreciation for me, that my experience really matters."	54%	55%
Increased awareness of one's own core qualities, like commitment, care, calmness, enthusiasm, honesty.	"I now have tools for looking completely differently at myself and a situation… more positively. That can give a complete shift. Instead of thinking 'ah, I am so busy' and feeling irritated, I now decide consciously to get in touch with my quality of care, and I decide to look at the positive side of the situation… In this way I see much more, and I feel a much lighter kind of energy."	63%	70%

Table 4: Teachers' perceptions of personal outcomes of the project

What Table 4 shows is that the reported outcomes of the 'quality from within' approach are rather similar for the first and second measurement moment. An exception is the category 'increased awareness of one's own motives'. In addition, Table 4 demonstrates that a perceived increase in coaching skills is mentioned most in the interviews as an important outcome of the project.

5.2.2. Multi-level learning

As described in the method section, we condensed the six layers of the onion model into three levels by combining adjacent layers (see Fig. 3). The three remaining levels are: (1) behavior and competencies, (2) insights and beliefs, and (3) identity, motives and core qualities.
Table 5 shows the percentage of participants that mentioned outcomes at one, two or three of these levels for each interview round.

Levels of the reported outcomes	**I1 (N=24)**	**I2 (N=20)**
Three levels	75%	70%
Two levels	12,5%	25%
One level	12,5%	5%

Table 5: Number of levels on which outcomes were reported

Table 5 demonstrates that the teachers reported more two and three-level learning at the second measurement moment. As we looked at the 14 participants that we interviewed three times, we noticed that all but one (93%) mentioned individual outcomes at three levels in at least one interview round. This seems to indicate that participating in the project resulted in multi-level learning in the teachers.

5.2.3. Individual differences in the outcomes

When we analyzed the data at the several levels reported on above, we found striking differences between the enthusiastic teachers and those who were less enthusiastic. These differences seem to be related to their attitude towards learning in general. If they had an open, learning-oriented attitude, they were more enthusiastic about the project and seemed to learn more from it. Those who had a less open attitude, seemed to 'close up' already at the beginning, although the positive experiences of colleagues and their enthusiasm, almost always started to influence these less enthusiastic teachers after a while. Sometimes, however, this made them more positive on the one hand, but on the other hand still not very open towards the possibility that they could learn something themselves. An example was a teacher who had the conviction that, through her many years of experience in communication with people (also in a previous job), the content of the project had little to offer to her.

5.2.4. Outcomes regarding others: the students, the team and the school principals

Table 6 shows the most important perceived outcomes of the project regarding the students, the team and the school principals, mentioned by more than half of the teachers in at least one interview round.

Perceived outcomes	**Illustrative example**	**I1 (N=24)**	**I2 (N=20)**
Increased working and communicating skills and attitude of the students: better attitude towards working and learning, better group work, more independent in solving problems, more understanding of each other's feelings, giving more positive feedback to each other.	"At days that I use it [core reflection], I notice that the children are working quite well and that their attitude is much better, and their concentration as well." "They [the students] are learning more with and from each other." "The children are more motivated when it comes out of themselves, if it was their own idea or discovery… Then things are bubbling, and there is enthusiasm. (…) Autonomy is very important for students, if they see: this is my learning process." "If you mention such a core quality, then you see the children grow, they look proud, and their eyes start to shine, so they find it really cool. (…) Then you see that they feel good for the rest of the morning or afternoon." "I believe that this positive approach will lead to better learning outcomes, because if they get this trust they will also use it"	67%	60%
Teachers experience more openness, safety and a deeper connectedness in school	"The barrier to be open to each other really diminished. We are also taking more time for each other. I find that very positive. (….) Suppose you have a problem with something, then it will not be seen as your fault, you keep your own value." "We listen more to each other, and more often people say what they think of something."	75%	65%
Better management and coaching skills of the school principals	"The principal asks and shares a lot about core reflection and about her ideals. That helps. (….) And when I had a problem and talked to her about it during a break, she immediately worked it out with me through	50%	45%

	core-reflection. (…) After five minutes I was ready and knew how to solve it. That was nice!” “The principal is much more decisive”		

Table 6: Outcomes of the project regarding the students, the team and the school principals,

Table 6 demonstrates that similar to the personal outcomes, the reported outcomes with respect to ‘others’ do not vary much between the first and second measurement moment.

5.3. Qualitative data: Stimulating and hindering aspects

5.3.1. Aspects that stimulated the outcomes
In Table 7 we summarize those aspects of the project, with regard to content, context, and the individual teachers, mentioned by more than half of the teachers in at least one interview round as stimulating the learning process and the outcomes.

Stimulating aspects	**Illustrative example**	**I1 (N=24)**	**I2 (N=20)**
Fitting in with the school (its development, culture, methods)	“We are together as a team for two years now, and are ready for reformulating our educational identity and mission. This project can help with this.”	96%	25%
Paying attention to the project during the school weeks: during staff meetings, active developmental group, peer coaching, sharing of successes, inspiring conversations with the school principal	“The installation of a developmental group, that is active and feels responsible, helps (…) *[a developmental group]* that brings it in at staff meetings, and does exercises that you can also do in your classroom. That is the way to keep it alive!”	71%	55%
Inspiring experiences during and after the workshop	“When we practiced *[with the core reflection model]*, I solved my biggest problem” “Two teachers that always have problems communicating with each other, started to understand each other.”	71%	60%
Open and active attitude towards the project and your own learning	“I think about the project and what I want with it. And I plan conversations *[with the students]* in order to practice and become competent at it.” “At the end of each day I try to evaluate how I used core reflection and what the effects were.”	63%	25%
Quality of the trainer	”The trainer is good at clarifying things.” “The trainer is very positive.”	33%	50%

Table 7: Aspects that stimulated the process and outcomes.

Table 7 demonstrates some aspects that stimulate the process and outcomes of the project. One of them is that the project should be in line with the school development and culture. The developmental group can play an important role in this alignment and also helps to pay attention to the project during school weeks. Within the teachers themselves an open attitude is an important stimulating aspect, especially at the start of the project.

5.3.2. Aspects that hindered the process and outcomes
In Table 8, we summarize those aspects of the project, with regard to content, context, and the individual teachers, that hindered an optimal process and positive outcomes. As we had selected a relatively high percentage of less enthusiastic teachers for the interviews, it helped us to get good

insight into the reasons why a small number of teachers were not so positive. Table 8 shows the hindering aspects most often mentioned.

Hindering aspects	**Illustrative example**	**I1 (N=24)**	**I2 (N=20)**
Lack of time and busyness during work	"We are so busy with many things that I have no time to practice this."	58%	45%
Workshop was not practical enough	"The workshop was different from how it is in the class room."	42%	30%
Resistance (to the focus on personal aspects of learning and to the focus on emotions)	"I felt a lot of resistance at the start (….) I found it very fuzzy, and I am a direct person. (…) this question of 'what do you feel about that?', it just does not fit me. I felt very irritated."	21%	30%

Table 8: Aspects that hindered the process and outcomes.

Table 8 demonstrates some aspects that hindered the process and outcomes of the project. Most often mentioned is lack of time and being busy.

5.4. Results of the long-term outcomes of the project.

Often, in research on teacher professional development, the analysis of the outcomes ends when the project ends. Not many researchers take the more long-term effects of a professional development intervention into account (Desimone, 2009; Borko, 2004). In this study we also collected data on the more longitudinal outcomes of the project, since we also interviewed the teachers seven to eight months after the 'quality from within' project had ended (I3). Unfortunately, not all teachers could still participate in the study by that time (see section 4.1). Hence, with respect to the longitudinal outcomes of the project, we report on the data of 14 teachers. The perceived longitudinal outcomes are provided in Table 9.

Perceived outcomes	**I1 (N=24)**	**I2 (N=20)**	**I3 (N=14)**
Behavior and competencies			
Increased coaching skills (regarding coaching of students and colleagues): Stronger focus on the emotional and motivational side of learning; let the other person find the solution; more structured coaching.	75%	85%	79%
Feedback on core qualities (to students, colleagues, parents).	63%	55%	71%
Increased awareness of certain coaching skills.	58%	45%	29%
Insights and beliefs			
New and/or renewed insights and ideas about learning.	75%	80%	64%
Identity, motives and core qualities			
Increased awareness of one's own motives.	71%	30%	64%
Increased awareness of one's own professional identity	54%	55%	57%
Increased awareness of one's own core qualities, like commitment, care, calmness, enthusiasm, honesty.	63%	70%	50%

Table 9: Teachers' perceptions of longitudinal personal outcomes of the project

Table 9 demonstrates that the important individual outcomes of the program, as perceived by the teachers, still ring true seven to eight months after the end of the project. This might also be caused by active developmental groups. One outcome that is remarkably less mentioned at I3 though, is 'increased awareness of certain coaching skills'. One explanation could be that when teachers are participating in the project longer, they are not only aware of these coaching skills, but are also feeling more competent regarding these skills and mention just this latter fact. For example, at I1 they reported things like, 'I know now that I can give feedback on core qualities, but I find it hard to practice it in the classroom'. At I2 and I3 they reported that they were actually doing this more in the classroom and therefore it might be that there was no need to report that they were aware of it.

The longitudinal results do not show much difference with respect to the number of levels at which outcomes were reported. Our previous findings that the outcomes were mostly situated at the three (reduced) onion levels that were used for the data analysis, appears to be stable in the long run. At the third measurement moment (I3), the percentages are 57% (three levels), 36% (two levels) and 7% (one level). Based on these results we cannot say anything about an increase in outcomes reported at three levels in general. However, what the results do show is that seven to eight months after the project ended, most outcomes that the teachers reported are still connected to all three levels of the onion model. As this concurs with the idea of multi-level learning, this seems a promising result with respect to the long-term effects of the 'quality from within' approach.

In table 10 the longitudinal outcomes of the project regarding the students, the team and the school principals, mentioned by more than half of the teachers in at least one interview round are presented.

Perceived outcomes	**I1 (N=24)**	**I2 (N=20)**	**I3 (N=14)**
Increased working and communicating skills and attitude of the students: better attitude towards working and learning, better group work, more independent in solving problems, more understanding of each other's feelings, giving more positive feedback to each other.	67%	60%	71%
Teachers experience more openness, safety and a deeper contact in school	75%	65%	64%
Better management and coaching skills of the school principals	50%	45%	57%

Table 10: Longitudinal outcomes of the project regarding the students, the team and the school principals,

Table 10 demonstrates that the important outcomes of the program for the students, the team and the school principals, still ring true seven to eight months after the end of the project.

Concerning the stimulating and hindering aspects, however, the data show a different picture. The aspects 'paying attention to the project during the school weeks' and 'Inspiring experiences during and after the workshop' were mentioned to the same degree in the three rounds. However, Table 11 shows that other aspects were mentioned considerably less at I3. This indicates that these aspects are especially important at the start of the project.

Stimulating aspects	**I1 (N=24)**	**I2 (N=20)**	**I3 (N=14)**
Open and active attitude	63%	25%	14%
Quality of the trainer	33%	50%	14%
Fitting in with the school (its development, culture, methods)	96%	25%	36%

Table 11: Examples of longitudinal aspects that stimulated the process and outcomes, that changed over time

Concerning the hindering aspects, there were two aspects that were mentioned to the same degree in all three rounds. These were “Lack of time and busy-ness during work” and ‘Resistance”. However, the aspect “Workshop was not practical enough” was mentioned considerably less at I3 (42% at I1, 30% at I2, and 7% at I3) This seems to indicate that the usefulness of the workshop for practice increased during the project.

6. Conclusion & discussion

This chapter presents the outcomes of the ‘quality from within’ approach at six primary schools in the Netherlands. It also describes what aspects of the approach, the school and the individual teachers were stimulating or hindering these outcomes. In this final section we will formulate our main conclusions. Before doing so, we want to mention an important limitation of this study. The findings reported on are based on participants’ reports. Although we believe that this contributes to the ecological validity of the study, a certain degree of subjectivity will probably influence the outcomes as reported by the teachers. We tried to overcome this by using the questionnaire data in which, for example, the actual scores on the fulfillment of the basic psychological needs were self-reported, but the *changes* in these scores over time were not. In any case, interviewing the students about their perceptions of the teachers might have been a fruitful way of gathering more objective data.

6.1. Main outcomes

Our findings show that in the interviews, a large number of the teachers report a number of important outcomes at various levels, which are mainly consistent over a longer time period. Given the relatively brief intervention period, this seems noteworthy, especially in light of the well known problems of educational innovation (see Theoretical Framework section). This is even more remarkable, as the sub sample from which these interview data are collected contained a higher percentage of teachers who were relatively negative about the approach at the start, in comparison with the whole sample.
We found statistically significant increases in feelings of autonomy and in self-efficacy regarding coaching of students and colleagues. Our study indicates that this ‘quality from within’ approach is a successful model of professional development.

Interestingly, the competence scale and the relatedness scale did not show significant effects. This might be because of the effect that when people start to become aware of what there is to know about a subject, they start to see what they don’t know (as in the proverb “The more you know, the more you know that you don’t know”). This might be the same for the feeling of competence and the feeling of relatedness. Because the project made the participants more aware of themselves and of their relations and of what might be possible, they also started to see what was missing. Furthermore, considering competence, the questionnaire measures a general feeling of competence and not a specific coaching competence or other competence directly related to the project. This more specific coaching competence is measured by the self-efficacy in coaching scale, which did show an increase. A similar explanation could be applied to the fulfilment of the need for relatedness.

We found a number of interesting stimulating and hindering aspects with regard to content, context, and the participating teachers. Most remarkable is that in the first interview round, 96% of the participants reported as stimulating that the approach fit in with the school (its development, culture, methods). This concurs with the central goal of the ‘quality from within’ approach, namely to build on what is already there and to stimulate the development of what is called ‘quality from within’. Apparently, the project has succeeded in reaching this aim. The projects at the six schools did start from the qualities and commitment that teachers and students already have and *their* ideals and concerns, as the basis for learning new insights, skills, and attitudes, and for developing more awareness of their own qualities. As at later interview moments this stimulating aspect of the approach (fitting in with the school) was only mentioned by 25% and 36% of the participants, this aspect seems especially relevant at the start of the project.

6.2. Multi-level learning

As discussed in the Theoretical Framework an important principle in MLL is to promote a learning process at all, or most of the levels of the onion model (see Figure 1). Our findings show that this is indeed what happened in most participants. As described in the method section, in the analysis we condensed the six levels into three by combining adjacent levels. If we look at the 14 participants that we interviewed three times, all but one (93%) mentioned individual outcomes at three levels in at least one interview round.

We conclude that the principle of multi-level learning seems to have been realized in the schools. Based on the theoretical framework described in section 2.4, we consider this an important explanation for the outcomes of the project.

6.3. Enhanced feelings of autonomy in teachers and students

The teachers reported that both they themselves and their students experienced enhanced feelings of autonomy. This result is interesting, as on the basis of the extensive theoretical framework of the Self-Determination Theory (Deci & Ryan, 2000), we may conclude that an increase in feelings of autonomy contributes to feelings of well-being, in both the teachers and their students. Feelings of autonomy have also been found highly related to the ability to cope with stress (see for an overview of studies, Schaufeli, Maslach, & Marek, 1993). The opposite of autonomy, i.e. a lack of personal control, is a factor that contributes to burnout. When people feel that they have very little autonomy to decide what needs to be done in their job, they more easily show signs of burnout. In the Netherlands, for example, 14% of the people working in education have burnout complaints (CBS, 2004). This is the highest percentage from all organizational branches. Our results may thus show an important direction for supporting teachers in their stressful profession, and for diminishing the alarming percentages of burnout amongst teachers.

6.4. How to make innovations successful?

In the Theoretical Framework section we noticed that most educational innovations fail (Holmes, 1998). The analysis of the data of this study yields some interesting ideas on how to make innovations more effective.

A first factor in the success or failure of an innovation seems to lie in the teachers themselves. Crucial is an open and active learning attitude in these teachers. By comparing the stories of enthusiastic and less enthusiastic teachers in our study, it became evident that the learning attitude of participants had a direct influence on how they perceived the project and on what they learned. This concurs with Van Eekelen (2005), who studied what she calls "teachers' willingness to learn", which appeared to correlate strongly with their capacity for self-directed learning. This mirrors what we saw in our study: those teachers who had an open and active attitude, were able to direct their own professional growth during the project and were even able to support others in their learning. This raises the question of how to deal with teachers who are not so open towards learning, also because we feel they have a negative influence on their colleagues' learning.

Van Eekelen (2005) suggests that the first stage of the development of the willingness to learn is to develop 'problem sensitivity'. We recognize that the basic tenet of the 'quality from within' approach, namely to build on existing strengths and concerns of the teachers, requires that these teachers have a certain awareness, not only of their core qualities, but also of situations in their practices that could be improved. Perhaps for the "less sensitive" teachers a more gradual approach is needed, in which they get more time to reflect on their daily practices, and to identify issues they might want to work on. We suspect that some of the teachers who did not show much willingness to learn, may in fact have a lack of self-confidence, and are perhaps afraid to look at themselves from a more critical stance. If this is true, it could suggest that an even more safe learning environment is needed for those teachers than

the approach already tries to promote through its focus on strengths. It is important that they can safely talk about their work problems and feel secure enough to open up for reflection on the deeper onion layers. This is an aspect that is both a strong feature of the project, as well as a possible pitfall for those teachers that do not feel secure. Hence, the intervention could start with giving them the opportunity to show their colleagues what they are good at, for example in small groups. An activity that is already being experimented with in the project is a small group assignment to share a successful experience from last weeks' teaching, where colleagues are asked to name the core qualities of the teacher who brings in the experience. Almost always, the teacher not only feels supported by this activity, but also starts to talk about a concern. Apparently, the safety that is created through the emphasis on strengths supports problem sensitivity.

Another explanation for the absence of the willingness to learn in some teachers, could be their lack of familiarity with the approach, specifically with the focus on inter-human aspects, and the language used (core qualities, flow, ideals, MLL...). In order to overcome this obstacle, we believe the trainers should pay more attention to the language used and could, together with the teachers, develop a common language that everybody feels familiar with.

On the other hand, as discussed above, we also found evidence that even those teachers who were skeptical at the beginning of the project became much more positive and open towards the 'quality from within' approach after three months. It seems as if they change under the influence of the general development taking place in their team. They see that other teachers apply what they have learned successfully and with interesting results, and that the whole culture in the school changes. This seems to show that it is hard for an individual to remain resistant when the whole environment changes in a positive way.

It also seems important to keep the intervention continuously alive in the school. One effective way of doing this is by creating an active 'developmental group' that monitors and supports the development within the school. In the 'quality from within' approach, a developmental group consists of two to five teachers and ideally contains one of the informal leaders of the school, a teacher who is very enthusiastic about the approach, and one who is not so enthusiastic. This group can help to keep the things learned in the project alive during the practical work in the school, for example by paying attention to it in every staff meeting, in the daily conversations between staff, and by constantly putting it on the agenda. Specific instances reported by members of the developmental groups are: sharing successes, discussing a 'difficult' student from the 'quality from within' view, doing small exercises with the teachers that they can do with the students as well. Other ways in which the developmental group can stimulate the innovation is by talking about it during the lunch breaks, and by organizing a meeting to inform the parents about the project. Keeping the project alive is also supported by peer coaching in between the workshop days, modeling and highlighting of the approach by a school principal and by connecting ideas from the project with other developments in school, e.g. student assessments.

Again, this seems to support the fundament of the 'quality from within approach', namely to start not from the insights of educational experts but from what is already there in the teachers and schools, to help the participants make their views more explicit, and to use it as the basis for further development.

These aspects of the 'quality from within' approach concur with Fredrickson's (2002) broaden-and-build model. On the basis of the research outcomes, we believe that in educational innovations, much more attention should be given to the qualities that teachers, school principals (and students!) already have, and the existing developments and culture within the schools. As some impressive examples of professional development and school development have also shown, learning processes at the individual and the organizational level start to 'flow' much more smoothly as soon as people feel that their strengths are valued and taken seriously (cf. Day, 1999; Elliot, 1991).

Regarding this issue, we wish to be very precise. Although the approach does not start from an *a priori* view of the change that is needed in a specific school, it does build on expert knowledge about change,

especially on notions from positive psychology and the theory on multi-level learning. These notions are also made explicit by the trainers during the workshop. It is our experience that much training of the trainers of the ‘quality from within’ approach is needed, in order to make the approach effective. This may partly be caused by the fact that the approach is a fairly radical move away from traditional models of professional development. The essence of this move away from traditional models is that in the 'quality from within' approach innovation is not conceived as working towards a pre-determined type of learning considered 'better' by experts. On the contrary, it is fundamental to the approach that innovation is equated with *professional development from within*, i.e. professional development grounded in already existing core qualities, missions, ideals, and so forth, or to put it briefly, in each participant’s inner potential. In this view of innovation one cannot say that teachers are *being* developed along a certain direction, but rather that they *develop themselves* along self-chosen directions. Our study showed that during this process they start to become more aware of their own strengths and those of their colleagues and students, and become more autonomous in their work, whereas traditional top-down approaches to innovation often fail and lead to much criticism from teachers. In turn, school quality stands to improve as it continuously nurtures and is nurtured by the benefits from teachers’ increased awareness of their inner qualities and ideals and a stronger enactment of these qualities and ideals in their work. In conclusion, it seems that the 'quality from within' view of innovation is a promising alternative.

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