

# **Training mentor teachers for effective supervision: the impact of the SMART programme**

Abstract

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## **Abstract**

The quality of mentoring in teacher education is an essential component of a powerful learning environment for teachers. There is no single approach to mentoring that will work in the same way for every teacher in each context. Nevertheless, most mentor teachers hardly vary their supervisory behaviour in response to varying mentoring situations. Developing versatility in mentor teachers' use of supervisory skills, then, is an important challenge. In this chapter, we discuss the need for mentor teacher preparation and explain the focus, content, and pedagogy underlying a particular training programme for mentor teachers, entitled *Supervision Skills for Mentor teachers to Activate Reflection in Teachers (SMART)*. Also, findings from several studies assessing mentor teachers' supervisory roles and use of supervisory skills in mentoring dialogues, before and after the SMART programme, are presented. In addition, implications and perspectives for mentor teacher development and preparation are discussed.

## **Keywords**

Mentor Teacher, Mentoring Dialogue, Supervisory Skills, Mentor Training

## 1. Introduction

A vital and widespread part of teacher education programmes are field experiences, in which experienced teachers who mentor pre-service teachers in their classrooms play a pivotal role. Hence, in schools all over the world, experienced teachers are involved in the mentoring of pre-service and beginning teachers. Most mentor teachers do their work alongside their main task as a teacher of pupils.

The availability of effective guidance by a mentor teacher is an essential condition for pre-service teachers' learning in the workplace (e.g. McIntyre, Hagger & Wilkin, 2005). Mentor teachers are influential because of their close interaction with their mentees. They are usually the first to be consulted since they are physically near to the mentees, who see them as a valuable source of information because of their experience as a teacher (Zanting, 2001). Since teachers' knowledge and skills are event-structured, context based, and practice-oriented in nature (e.g. Elbaz 1983; Kessels & Korthagen, 1996), mentoring dialogues about teaching experiences are an important educational context for helping pre-service teachers to develop professional knowledge and to transform existing teaching practice (Hiebert, Gallimore, & Stigler, 2002). This means that through mentoring dialogues, mentor teachers may have a considerable influence on how and what pre-service teachers learn (e.g. Helman, 2006; Edwards & Protheroe, 2004).

In this chapter, we first discuss the need for mentor teacher preparation. Next, we describe the focus, content, and pedagogy underlying a mentor teacher training entitled *Supervision Skills for Mentor teachers to Activate Reflection in Teachers (SMART)*, which is in steady use of the Schools of Education of Fontys University en Zuyd University located in the south of the Netherlands. Subsequently, we encapsulate relevant findings from several studies we conducted to assess the impact of the SMART programme. Based on these findings, we also discuss perspectives for mentor teacher development and preparation.

### ***1.1 Demand for versatility in mentor teachers' supervisory behaviour***

Mentoring in teacher education is of an idiosyncratic nature (e.g. Hobson et al., 2008; McIntyre, Hagger & Wilkin, 2005; Harrison, Lawson, & Wortley, 2005). This means that in different contexts, mentoring may have a variety of purposes and goals, may involve a variety of practices and strategies, and may take place at different stages of pre-service teachers' professional development and over different durations. Diversity in mentoring situations is the result of several workplace features which interact, differently with specific characteristics of individual pre-service teachers. As pre-service teachers differ, and as even

one singular pre- service teacher may at different points in time need a different approach, this requires from mentor teachers to be able to attune their supervisory interventions to the individual pre- service teacher and the situation at hand. Below, we give two examples of mentoring dialogues to illustrate actual supervisory behaviour connected with different supervisory goals and mentor teachers roles.

Sample 1: Giving advice

**MT Rachel:** *"The fact that you give class instruction before the group work assignment is fine. But the children are much too noisy at that point. When you explain how to work in groups, the children should be listening to you and shouldn't have their backs turned to you and chat with their neighbours. It is better to wait for them all to be quiet and, after a warning, punish directly."*

**PT Bob:** *"Well, this is not a class that can sit still, just like that. I have already given a number of lessons to these pupils and I noticed that class instruction doesn't work very well with them. I want them to start working in groups straightaway. I know they are talking to each other, but I let that go, because they need personal instruction that at that point I can't give them yet. I'd rather talk with you about John, who is harassing other pupils in class all the time."*

Sample 2: Promoting reflection

**MT Nancy:** *"How did it go?"*

**PT Tim:** *"Well, those pupils really annoy me; nobody had done any homework; they didn't have their books with them, and last time it was exactly the same. And that makes the lesson so chaotic. I am not getting anywhere this way; what can I do, have you got an idea?"*

**MT Nancy:** *"Let's first have a look at what happened exactly; what precisely did you do?"*

**PT Tim:** *"Yes, but I know what happened, and straight after the break I have another class where this is the same. What exactly can I do about it? It happens every time!"*

**MT Nancy:** *"Well, I can give you a tip, but I would first like to get a clear picture of what happened."*

**PT Tim:** *"Yes, ok, but I haven't got a lot of time and I am afraid that the same thing will happen in the next class. Could you tell me how to tackle that class and maybe you've also got other suggestions that I can use?"*

In both samples, the mentor teacher observes a problem that the pre-service teacher is facing, and uses an approach that starts from this observation. In the first dialogue mentor teacher Rachel is mainly focused on creating handholds for her mentee by giving direct advice based on her long experience as a teacher and her knowledge of the way these pupils react. She wants to discuss the noise in class during instruction. She analyses what went wrong and points out how it could be handled a next time. Pre-service teacher Bob first

states his own approach which he thinks works better in this class, and then states that he would rather talk about John, who harasses other pupils in class. In the second dialogue mentor teacher Nancy is very aware of the necessity to help her mentee reflect on the situation himself to promote his professional autonomy. She wants to encourage reflection on the subject suggested by the pre-service teacher himself: pupils who did not do their homework. She attempts to encourage reflection by helping to look back on the situation first, to be able to formulate the essence and, from that, work out alternatives and ways to implement them.

The samples illustrate that there may be a dilemma in the work of mentor teachers. On the one hand, they are experts in their own schools, which triggers an advisory role aimed at offering tips and tricks, a role that often creates security for pre service teachers who are still struggling in the classroom. On the other hand, to promote professional autonomy it is important that pre-service teachers also develop ownership regarding their work and learn from their experiences during practice teaching. Therefore, mentor teachers should also encourage pre-service teachers to reflect on their teaching experiences (Feiman-Nemser, 2001). Systematic reflection does not come about by itself, it requires support from a mentor (Korthagen, Kessels, Koster, Lagerwerf, & Wubbels, 2001). To realise this it is essential to regularly take the pre-service teacher's experiences, the questions he or she asks him- or herself, and the problems he or she encounters as a the starting point of the supervisory process.

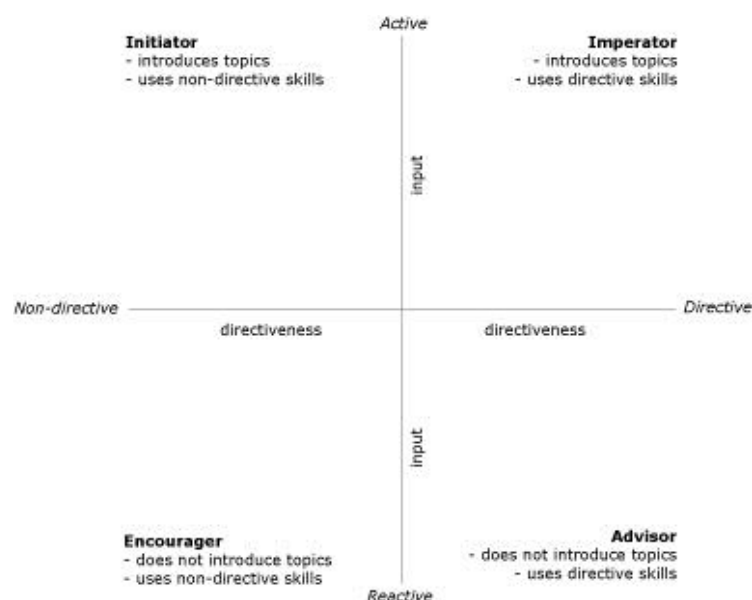
However, most mentor teachers seem to stick to a certain supervisory approach (Dunne & Bennett, 1997; Wang, Odell, & Strong, 2006) and often seem to transfer a limited, 'local' view of teaching to their mentees (Hall, Draper, Smith, & Bullough, 2008). Moreover, as several studies show, mentor teachers often focus on giving advice, and less on promoting reflection (Barrera, Braley & Slate, 2010; Evertson & Smithey, 2001; Harrison et al., 2005).

The ability of mentor teachers to regularly vary their approaches and to choose appropriate supervisory roles and skills continually and actively during mentoring dialogues is crucial for the learning of their mentees (e.g. Daloz, 1986; Hobson, Ashby, Malderez & Tomlinson, 2009). The extent to which mentor teachers are able to address different mentoring situations is an important factor in the success of mentoring. For most mentor teachers it is not easy to flexibly put different supervisory roles connected with the use of specific supervisory skills into practice.

## 1.2 Mentor teacher roles in mentoring dialogues: the MERID model

To describe and analyse mentor teachers' supervisory roles connected to the use of distinct supervisory skills during mentoring dialogues, Hennissen et al. (2008) proposed a two dimensional model entitled *MENTor (teacher) Roles In Dialogues* (MERID). The model is based on an extensive literature review.

Figure 1: MERID model



The vertical axis of the MERID model represents the dimension input, indicated by the degree to which the mentor teacher introduces topics into the mentoring dialogue. This dimension has two poles: active and reactive. The horizontal axis represents the dimension directiveness, which indicates the degree to which the mentor teacher steers the course of the dialogue. This dimension also has two poles: directive and non-directive. The combination of both dimensions results in the conception of four different mentor teacher roles in mentoring dialogues: imperator, initiator, advisor and encourager.

To put the MERID model to a first empirical test Crasborn et al. (2011) conducted a study with 20 mentor teachers. The findings indicate that there is a beginning of empirical support for the model and its distinction of four different mentor teacher roles. The results of a chi-

square test and a log-linear analysis allow for the possibility that the dimensions input and directiveness are independent of each other. Accordingly, each dimension seems to describe a specific part of mentor teachers' supervisory behaviour. Also, through a cluster analysis, empirical support was generated for the existence of four mentor teacher roles in mentoring dialogues as distinguished in the MERID model. Most mentor teachers in the sample were positioned in the emperor group. This finding is consistent with the outcomes of other studies, evidencing that mentor teachers' in mentoring dialogues for the most part give direct advice and use directive supervisory skills (e.g. Copeland, 1982; Elliot & Calderhead, 1994; Dunne & Bennett, 1997; Franke & Dahlgren, 1996; Martin, 1996; Timperley, 2001; Wang et al., 2006; Williams et al., 1998).

The development of effective mentor teachers thus primarily involves learning supervisory roles and skills to activate reflection in pre-service teachers. Mastery of these skills is seldom self-evident. Mentor teachers mostly seem to act quite intuitively due to a lack of clarity about their roles and of specific training. Developing versatility in mentor teachers' roles and their use of supervisory skills in mentoring dialogues, then, constitutes an important challenge. Consequently, an important question is what concepts, design principles and pedagogical approaches may constitute a training programme that impacts the use of mentor teachers' supervisory skills to activate reflection in pre-service teachers. In the next section we describe the basics underlying a Dutch training programme aiming at developing mentor teachers' supervisory skill repertoires for promoting reflection in pre-service teachers. The programme is entitled *Supervision Skills for Mentor teachers to Activate Reflection in Teachers (SMART)*.

## **2. The SMART training programme**

Taken into account the background outlined in the previous section, in countries all over the world, many schools often in cooperation with teacher education institutions implement training programmes to broaden mentor teachers' supervisory skills repertoires. This is also the case in the Netherlands, where since 2000 teacher education institutions and schools have intensified their cooperation concerning the preparation of teachers and are engaged in creating and improving work-based curricula. As a consequence, in the Netherlands, annually ten thousands of mentor teachers are involved in the mentoring of pre-service teachers who participate in a teacher education programme.

As teacher educators and researchers we have, in co-operation with schools, been closely involved in the development and implementation of a training programme in supervisory

skills for mentor teachers, entitled *Supervision Skills for Mentor teachers to Activate Reflection in Teachers (SMART)*. The programme is in steady use in the Schools of Teacher Education of Fontys University and Zuyd University, located in the province of Limburg in the south of the Netherlands. In the next section, we will describe the focus, content, pedagogy and structure of this programme.

## **2.1 Focus and content**

In addition to the already (in most mentor teachers) existing supervisory skills relevant to the advisor and imperator role, as distinguished in the MERID model on the right hand side of the vertical axis. The focus of the SMART programme is to develop mentor teachers' supervisory skill repertoires that are helpful in promoting reflection in pre-service teachers. These skills are related to the encourager and initiator role, as visualised in the previous section on the left side of the vertical axis of the MERID model. Accordingly, the SMART training programme for mentor teachers is situated within the reflective-developmental paradigm (Pajak, 1993). The content of the SMART programme is based on the concept of the ALACT model (Korthagen et al., 2001). This model matches a number of mentor teachers' supervisory skills with the phases of a complete process of reflection. As such, the model can be seen as a specific operationalization of the 'cognitive mentor teachers' approach (Costa & Garmston, 1994). In the ALACT model, a cyclical sequence of steps is described, which together constitute a complete reflection process. These steps are: Action; Looking back on the action; Becoming Aware of essential aspects; Creating alternative methods of action; and Engaging in a new Trial. The middle column of Table 1 contains the consecutive steps in systematic reflection. These steps constitute a cyclical process; the last step of one level being the first step of the following higher level. The assumption behind the ALACT model is that (pre-service) teachers who are able to complete reflective cycles by themselves are empowered to learn from their own practice, to cope with change and to give direction to their learning. This type of reflection does not come about by itself. It requires support from mentor teachers. When supervising a pre-service teacher, it is important to help him or her go through the phases of the ALACT-model. Pre-service teachers need the help of a supervisor to learn to reflect independently.



Table 1: Supervisory skills related to the ALACT model

| <b>Initiator &amp; encourager role</b>  | <b>Reflection Phases in the ALACT model</b>  | <b>Advisor &amp; imperator role</b>  |
|---|--|--|
| Pre-service teachers perspective as starting point for choice of use of specific supervisory skills   | <b>1</b><br><b>Action</b>  | Mentor teachers perspective as starting point for choice of use of specific supervisory skills |
| 1. Showing attentive behaviour<br>2. Asking open starting question<br>3. Asking for concreteness<br>4. Summarizing feeling (empathy)<br>5. Summarizing content<br>6. Show genuineness<br>7. Complete sentence | <b>2</b><br><b>Looking back on the action through:</b><br>Acceptance<br>Empathy<br>Genuineness<br>Concreteness   | 12. Asking for something new<br><br><br>13. Giving information                                 |
| 8. Confronting (summarizing an inconsistency, giving feedback, utilizing the here and now)<br>9. Generalizing (asking for similar situations)<br>10. Helping in making things explicit                        | <b>3</b><br><b>Becoming Aware of essential aspects through:</b><br>All the previous skills +<br>Confronting<br>Generalizing<br>Helping in making things explicit | 14. Giving opinion/assessing   |
| 11. Helping in finding and choosing alternatives  | <b>4</b><br><b>Creating alternative methods of action through:</b><br>All the previous skills +<br>Help in finding and choosing solutions                        | 15. Giving advice/instruction  |
|   | <b>5</b><br><b>Engaging in a new Trial through:</b><br>Help in continuing the learning process   |  |

In order to encourage reflection in pre-service teachers, mentor teachers need to put into practice a number of skills, which correspond to the steps in the ALACT model. These qualities and skills have to do mainly with the mentor teacher role of encourager and initiator and are mentioned in the left-hand column of Table 1. These distinct supervisory skills are based on the literature about (training in) supervision and therapy sessions (Brammer, 1973; Egan, 1975; Rogers, 1969). Those supervisory skills associated with the mentor teacher role of advisor and imperator which aim at introducing mentor teacher perspectives in the dialogues with mentees were derived from Vrolijk (1991) and are reproduced in the right-hand column of Table 1. All in all, we distinguish a mentor teacher repertoire of 15 supervisory skills. All of these can be observed in relation to the phases in the ALACT model.

## 2.2 Planning and structure

The SMART programme consists of three main components within nine sessions: training, peer group consultation and individual peer feedback. In total, the SMART programme consists of nine sessions of half a day each, spread over a period of almost five months, as shown in Table 2.

Table 2: Content and time structure of the SMART programme

|         | <b>Introduction</b><br>(1 session)   | <b>Training</b><br>(5 sessions)   | <b>Peer group consultation</b><br>(2 sessions)  | <b>Individual peer feedback</b><br>(1 session)   | <b>Conclusion</b><br>(1 session)   |
|---------|--|---|---|--|--|
| Content | <ul style="list-style-type: none"> <li>- Overview</li> <li>- Organization</li> <li>- Getting Informed</li> </ul> | Practicing supervisory skills related to the phases of the ALACT-model, and homework assignments to practice in the workplace | Using participants' video fragments of their own mentoring dialogues recorded in the workplace for feedback in groups of participants | Observation and feedback by a peer who's also participating in the SMART-programme during trainees' mentoring dialogues in the workplace | <ul style="list-style-type: none"> <li>- Reporting data</li> <li>- Feedback on portfolio</li> <li>- Certification</li> </ul> |
| Week    | 1  | 5- 6 -7 -8 - 9 - 10   | 11 - 12   | 13 - 14 - 15 - 16  | 20   |

### 2.2.1 Training sessions

After the introductory meeting, a series of five training sessions follows, in which the supervisory skills within the phases are practised. In the first two training sessions the focus is on specific supervisory skills, which can be used for helping pre-service teachers to Look Back (phase 2). Phase 2 holds the key to the fundamental change in attitude by the mentor teacher: All the skills are aimed at letting the pre-service teacher themselves do all the work. The purpose of phase 2 is that pre-service teachers tell and realise what happened in an experienced situation. During the trainings sessions, much attention is devoted to mentor teachers' supervisory skills *empathy* (summarising feeling and circumstance) and *asking for concreteness* that can be used to create safety and to encourage the pre-service teacher to tell about his or her experience. In the third and fourth training session those supervisory skills are added to the mentor teachers' repertoire, which help pre-service teachers to become aware of the essential aspects (phase 3). This can be done by confront pre-service teachers with their different perspectives which they brought in by themselves. Much attention is devoted to the skills summarising an inconsistency, helping in making things explicit and generalising. During the fifth session the focus is on those supervisory skills, which mentor teachers can use to help

pre-service teachers to create their own alternatives (phase 4). At the end of each session, homework assignments will be explained, meant to link the training to the daily supervisory practice in schools: writing a reflection of the session, practicing one of the skills learned during the session, and reading some theory about the learned skills. Although, in the first five sessions the SMART programme follows the phases of the ALACT model, the framework is not used as a straitjacket.

After each training session the participants are asked to reflect on and explicate their personal learning outcomes in a written reflection by using three core questions, related to the phases of the ALACT-model: "What has happened?", "What is important for me in that?", "To what intentions as a mentor teacher does it lead for me?"

### *2.2.2 Peer (group) consultation*

The two subsequent meetings are devoted to peer group consultation. Here, colleagues follow a structured procedure in advising each other on situations arising from practice in conducting mentoring dialogues. In these meetings, participants present a video of one of their own mentoring dialogues to their fellow participants and include an individual aspect of their supervisory behaviour that they wish to further develop. After these two peer group sessions, participants also have to guide one other participant individually with regard to the use of supervisory skills in a mentoring dialogue. In this individual peer coaching session, the peer coach is asked to apply the supervisory skills they learned during the training sessions. To prepare both the peer group sessions and the individual peer coach session, participants receive the following instruction: "Record a video of one of your mentoring dialogues with a pre-service or beginning teacher. Then, select a video fragment which you are still concerned with now, and produce a short video-excerpt of this selection, with a maximum of three minutes. Next, write down why you chose this specific part of the recording and what personal learning question is related to the fragment." Also, after each (group and individual) peer consultation session participants are asked to reflect on and explicate their personal learning outcomes by using three core questions, related to the phases of the ALACT-model: "What has happened?", "What is important for me in that?", "To what intentions as a mentor teacher does it lead for me?"

The SMART-programme ends after about 20 weeks from the start. A final session with the whole group of participants is organised, in which individual feedback on the assignments is presented and discussed as a basis for certification.

## **2.3 Pedagogy**

In order for participants to learn from the training, there are several conditions that need to be met. According to Holton and Baldwin (2000), the content should fit with the aims and wishes of the participants, in order for the learned skills to be put into practice. In addition, the components of the course must be well organized and logically thought through. A third condition is that known principles of learning should be taken into account. A clear pedagogy of training should be modeled using clear forms of presentation. The pedagogy used in the SMART programme for training mentor teachers was derived from two sources.

### *2.3.1. Principles of 'realistic teacher education'*

Firstly, it builds on a pedagogical approach based on the concept of 'realistic teacher education' (Korthagen et al., 2001). Experiences and resulting concerns that the participating mentor teachers encountered in their supervisory work are taken as the starting point of the learning process. This means that most of all, many here-and-now experiences are created. These are both authentic supervisory situations, in which real concerns and problems of the participants from their work as mentor teachers are the focus of the supervision, and role plays in which the trainers or other participants played the role of a pre-service and beginning teachers. Theory is introduced in connection with the experiences in the here-and-now. More specifically, in the approach of 'realistic teacher education' several pedagogical and didactical principles are put forward. A connection should be established between the training programme and participants' individual learning needs and questions. Using experiences from the participants' own practice, trainers can make sure that the programme's contents and exercises deal with real problems. When these problems are linked with theory, analysing them can encourage participants to develop effective interventions. In this way, the contents of the exercises become relevant for all participants. Having the participants practise the skills in between training sessions helps to produce an alternation between contributing practical experiences, reflecting on them, connecting them to relevant theory and applying them to fresh situations. The same applies to systematically having participants record their own progress. Creating a safe learning environment will help participants not to be afraid of experimenting with different behaviours, both in and outside the training sessions. In this respect, mentor teacher trainers fulfil a modelling function, for example, by seeing to it that in the beginning, positive feedback is given both by themselves and by the participants among each other.

Hence, to link training-exercises and theory with mentor teachers' use of supervisory skills in the workplace, implementing several principles of 'realistic teacher education' (Korthagen et

al., 2011) are valuable: using experiences from the learner, practicing skills between sessions, linking theory and practice, recording their own progress, creating safety and connect training with individual needs.

Table 3: Examples of 'realistic teacher education'-principles in the SMART-programme

| Principles of 'Realistic Teacher Education'  | Examples of related exercises in the SMART programme   |
|--|--|
| 1. Using experiences from participants' own practice                                   | Exercise in the first session: <i>'Remember a dialogue last year with a pre-service teacher where you are still thinking about. Write down some information about the moment, what happened and what you've done and said.'</i>  |
| 2. Practicing skills in between training sessions. (homework assignments)              | In between two training sessions each participant should practice a skill.   |
| 3. Linking practice and theory   | During the first session participants' experience which skills can be used to create safety and give emotional support. At the end of the session, they were asked: <i>'Read some theory about the learned skills in the text: notice the focus of the text, the interesting points and a specific question you were thinking off'</i> . |
| 4. Systematically recording their own progress.  | After each session the participant writes a reflection " <i>about a concern or something they are still thinking about</i> ", using the phases of the ALACT-model: What happened, what is important in that, to what intentions does it lead? The next session this reflection will be discussed within pairs.                           |
| 5. Connection between training program and participants individual needs and questions | First half an our of each session: people can bring in their personal needs and questions  |
| 6. Creating safety   | During the first session it is only allowed to give positive feedback. The trainers are modelling this behaviour.  |

In addition, to meet the above mentioned principles during the first half hour of each session four kind of discussions and interactions take place. Exchanging and discussing participants' written reflection of the previous meeting, the skills that they were asked to practise on the job, their raised personal needs and questions, and the connection to relevant theory they were asked to read.

The application of the above explained principles of 'realistic teacher education' helps in promoting constant and self-directed professional development. Paying attention to a safe atmosphere and starting with the concrete experiences of the mentor teachers implies that trainers must be rather flexible, adapting the course content to the needs and experiences that arise during the course.

### 2.3.2 Principles of micro counselling

Secondly, to systematically train distinct supervisory skills, in the SMART programme also micro counselling principles (Ivey, 1971) were implemented. According to this approach, separate supervisory skills can be learned when the following sequence of activities is applied: a verbal or visual model giving instruction and information about a skill, practice with the aim of achieving the greatest possible similarity with the target behaviour associated with the particular skill (as described in the instruction phase), and feedback providing information and suggestions from trainer(s) on the basis of observations.. In Table 4 we give an example of this sequence in the SMART programme.

Table 4: Example of micro-counselling sequence in the SMART programme

| Principles of micro counselling                           | Examples of related activities in SMART training (fourth session)  |
|---|--|
| Trainers model a skill (and participants observe)         | Trainers are modelling two next skills like <i>helping in making things explicit</i> and <i>generalising</i> within a real mentoring dialogue. |
| Trainer verbalises observed skill                         | One trainer collects on flip-over which new and old (from previous sessions) skills the trainer used during the dialogue.                      |
| Participants verbalise and conceptualise skill            | Participants read a short text passage about the new skills .  |
| Participants exercise the modelled skill                  | In small groups of three participants 'imitate' the trainers model.  |
| Peers and trainer give feedback                           | Participants practice, observe and give each other feedback.   |
| Verbalising the difficulty and giving feedback by trainer | Trainer collects on flip-over what is difficult for the participants when they used these new skills (10 min)                                  |

## 3. Assessing the impact of the SMART programme

If one wishes to facilitate the development of the supervisory repertoires of mentor teachers, it is important to understand their use of distinct supervisory skills constituting these repertoires as well as how these skills develop as a result of education and training. In the next sections, we therefore summarise and discuss the outcomes of several empirical studies we conducted to assess mentor teachers' use of supervisory skills, before and after the SMART training,

### 3.1 Participants' appreciation of the SMART training

In evaluations, the groups of mentor teachers we worked with reported their appreciation of the SMART programme. For example, mentor teachers in primary education evaluated different aspects of the SMART programme on average with 4.5 on a five-point scale (Table

5). The results regarding the distinct subscales ‘general satisfaction’, ‘pedagogy’ and ‘trainers’ indicate that participants perceive and recognize the pedagogical principles underlying the SMART programme. More specifically, participants identify and appreciate the principles of ‘realistic teacher education’ (see Table 3, section 2.3) that constituted the pedagogy of the SMART programme: ‘using experiences from participants’ own practice’ (statement 7 and 9), ‘practicing skills between training sessions’ (statement 7 and 9), ‘linking practice and theory’ (statement 6, 8 and 10), ‘connection between training programme and participants’ individual needs and questions’ (statement 2, 3, 4 and 9) and ‘creating safety’ (statements 13 and 14).

Table 5 Mentor teachers’ satisfaction with the SMART programme (N=165)

|                             |   | Alpha | Mean | SD  |
|-----------------------------|---|-------|------|-----|
| <b>General Satisfaction</b> |   |       |      |     |
| 01                          | I am satisfied about the programme.   |       | 4.4  | 0.6 |
| 02                          | The training suited my personal learning needs.                               |       | 4.3  | 0.7 |
| 03                          | I have learned from the programme.  |       | 4.6  | 0.5 |
| 04                          | I can use the learned skills in my own work.                                  |       | 4.5  | 0.7 |
| 05                          | I was motivated to take part in the programme.                                |       | 4.6  | 0.5 |
|                             |   | 0.73  |      |     |
| <b>Pedagogy</b>             |   |       |      |     |
| 06                          | There is a relation between theory and practice in the programme.             |       | 4.5  | 0.6 |
| 07                          | The experience of participants was discussed and used in the programme.       |       | 4.4  | 0.8 |
| 08                          | There was a mix between theory and practice in the programme.                 |       | 4.4  | 0.7 |
| 09                          | Bringing along video fragments to discuss personal learning needs was useful. |       | 4.5  | 0.7 |
| 10                          | The literature fitted in well with the programme.                             |       | 4.3  | 0.7 |
|                             |   | 0.70  |      |     |
| <b>Trainers</b>             |   |       |      |     |
| 11                          | The trainers are experts in this field.                                       |       | 4.7  | 0.5 |
| 12                          | The trainers worked together well.  |       | 4.8  | 0.4 |
| 13                          | The trainers are flexible.  |       | 4.4  | 0.6 |
| 14                          | The trainers created an open and safe climate during meetings.                |       | 4.6  | 0.5 |
| 15                          | The trainers gave me food for thought.  |       | 4.5  | 0.5 |
|                             |   | 0.77  |      |     |
| <b>Total scale</b>          |   | 0.86  | 4.5  |     |

For every statement the following 5-point scales was used:  
5 (strongly agree); 4 (agree); 3 (neither agree or disagree); 2 (disagree); 1 (strongly disagree)

In addition, in written learner reports, various groups of mentor teachers pointed out a heightened awareness with regard to the application of particular supervisory skills, the phasing of mentoring dialogues, their preconceptions about mentoring, their predominant supervisory roles and the importance of paying attention to pre-service teachers’ concerns and active participation in mentoring dialogues.

However, after the SMART programme, many mentor teachers also reported that they often found it difficult to systematically use the trained skills during the mentoring dialogues. Mentor teachers frequently say: “I have learned a lot, but cannot always apply it”. Applying what had been learned seemed to be far from easy.

This discrepancy in participants' reactions after the SMART programme, and the fact that a limited number of studies is available portraying the full range of mentor teachers' use of distinct supervisory skills in authentic mentoring dialogues before and after training, inspired us to conduct more empirical research in this field.

### ***3.2 Behaviour and cognitions before and after the SMART training***

According to Clarke and Hollingsworth (2002), the relationship between a person's own action and cognition is reciprocal, interactive and cyclic. Consequently, the level of competence in a particular skill domain can be reflected in behaviour and cognition (Berliner, 2001; Chi, Glaser, & Farr, 1988). Hence, to deepen our understanding of mentor teachers' supervisory behaviour before and after the SMART training, both behavioural and cognitive components need to be investigated.

#### ***3.2.1 Behavioural aspects***

Crasborn et al. (2008) investigated the behavioural component of mentor teachers' use of supervisory skills, i.e. their degree of directiveness during mentoring dialogues, visualised as the horizontal axis of the MERID model (see section 1.2). The findings portray mentor teachers' use of distinct supervisory skills in mentoring dialogues from the independent observers' perspective, before and after the SMART-training. In the study, 60 audio/video recordings of mentoring dialogues were analysed. After the SMART training significant shifts were found in the frequencies with which mentor teachers used specific supervisory skills during mentoring dialogues. The frequency of asking for concreteness ( $ES=2.00$ ) and summarising content ( $ES=0.96$ ) increased and the frequency of giving information ( $ES=1.09$ ), giving opinion ( $ES=0.56$ ) and giving advice ( $ES=0.89$ ) decreased. Also, the findings indicate that after the SMART training, mentor teachers on average used less of the dialogue time. Definite individual differences were found regarding all investigated aspects. In another empirical study by Hennissen et al., (2011), mentor teachers' use of supervisory skills in mentoring dialogues was considered from the pre-service teachers' perspective. The aim of the study was to clarify how pre-service teachers perceived mentor teachers' use of supervisory skills during mentoring dialogues, 30 before and 30 after mentor teachers participated in the SMART programme. Based on precise quantitative ratings of pre-service teachers' perceptions of specific supervisory skills put into practice by mentor teachers, the study identified two sets of observable supervisory skills. Pre-service teachers predominantly perceived six distinct supervisory skills as offering emotional support:



summarising content, showing attentive behaviour, giving positive opinion, showing genuineness, summarising feeling and giving information. Five specific supervisory skills were perceived as offering task assistance: asking for concreteness, helping in finding and choosing alternatives, asking for something new, giving advice and giving information. The findings indicate that after participating in the SMART programme, shifts in the frequencies of mentor teachers' use of distinct supervisory skills can occur, which are perceived by pre-service teachers as triggers for emotional support or task assistance. Such correspondences were found to a considerable extent, in the sense that the frequencies of use as observed by independent raters and as perceived by pre-service teachers developed according to quite similar patterns. For two supervisory skills, i.e. 'asking for concreteness' and 'summarising content', the increase of the frequency of use was statistically significant for both the independent raters (resp.  $ES=2.00$  and  $ES=0.96$ ), and the pre-service teachers resp.  $ES=0.87$  and  $ES=0.70$ ). For one supervisory skill, i.e. 'giving advice/instruction', the decrease of the frequency of use was statistically significant for both the independent raters ( $ES=0.89$ ) and the pre-service teachers ( $ES=0.90$ ).

### *3.2.2 Cognitive aspects*

Also some studies into the cognitive component of mentor teachers' use and acquisition of supervisory skills were conducted. Crasborn et al. (2010) reported a study aiming at capturing frequencies of mentor teacher reflective moments before and after the SMART-training, as indicators of different levels of consciousness in mentor teachers' use and acquisition of supervisory skills. Reflective moments were defined as specific episodes during mentoring dialogues in which mentor teachers' cognitions related to their use of supervisory skills occur consciously. In this study 60 stimulated-recall interviews with mentor teachers were analysed, 30 before and 30 after the SMART training. The data show that, on average, the frequency of reflective moments measured with stimulated-recall interviews increased significantly after the SMART programme ( $ES=0.58$ ). Furthermore, shifts in frequencies of use of some regularly used supervisory skills corresponded with shifts in the frequencies of reflective moments occurring during the use of these skills. To uncover the contents of mentor teachers' interactive cognitions which may occur during mentor teachers' reflective moments in mentoring dialogues, Hennissen et al. (2011) conducted two consecutive studies. Interactive cognitions are in operation during a person's actions and are manifest during reflective moments. In the first study, an instrument was developed to categorise contents of mentor teachers' interactive cognitions. Four main content categories of mentor teachers' interactive cognitions were distinguished, i.e.

'discussed topic', 'use of supervisory skills', 'mentor teacher's role', and 'strategy during the dialogue'. In the second study, this instrument was applied to uncover frequencies of specific contents of mentor teachers' interactive cognitions, before and after the SMART programme. After the programme, a statistically significant decrease of contents of interactive cognitions in the category 'discussed topic' (ES=0.83) and a statistically significant increase of contents in the categories 'use of supervisory skills' (ES=1.61) and 'strategy during the dialogue' (ES=0.63) were found.

### ***3.3 Implications and perspectives***

The aforementioned studies contribute to our understanding of mentor teachers' acquisition of supervisory skills, set off by a training programme. After participating in the SMART programme, mentor teachers were aware of their newly acquired supervisory skills and were trying to put them consciously into practice. In the beginning of this section we quoted a typical reaction of mentor teachers who after the SMART training said: *"I have learned a lot, but [I] can't always apply it"*. The findings of the reported studies shed a fresh light on this frequently heard remark. The first part of the statement refers to mentor teachers' increased awareness and capability to perceive their own actions in mentoring dialogues after participation in the SMART programme. During the programme, they acquire a frame of reference and a professional language with which they can give more direction to their own supervisory behaviour. The second part of the statement (*"but [I] can't always apply it"*) refers to supervisory skills which have been learned and are consciously being used or tried out, but whose application in daily practice is not yet fluent or without fault.

#### ***3.3.1 Initial stage of acquiring expertise***

In the wake of what was learned during the SMART programme, mentor teachers experience a heightened awareness of their partial competence in applying supervisory skills. This situation concurs with initial stages of acquiring expertise in a specific domain, where a person is concerned with his or her own performance and, as a result, may become more conscious of his or her own behaviour (Dreyfus & Dreyfus, 1986). In this stage, during dialogues, mentor teachers may more often examine consciously their (new) knowledge base regarding the use of supervisory skills. This can be considered as a first step towards a development of a competence in revising (supervisory) behaviour. In line with theories about expertise development (e.g. Dreyfus & Dreyfus, 1986) it can be

expected that, after some time, when the mentor teacher has mastered the supervisory skills, the focus on their own supervisory behaviour will decrease. From that moment on the mentor teacher may focus more and more on the learning process of the pre-service teacher by using newly learned supervisory skills to activate concerns and reflection in pre-service teachers. All together, the findings seem to underline Orland-Barak's (2001) opinion that becoming a mentor teacher does not emerge naturally of being a good teacher, but is a highly conscious and gradual process of developing communicative competencies.

### *3.3.2 Improving training and expertise in supervisory skills*

The SMART training brings most mentor teachers into an initial stage of competence in the use of supervisory skills, during which mentor teachers are primarily concerned with their personal performance in applying supervisory skills. Transfer to their behaviour in actual supervisory practices is still not easy. Hence, the identification of pivotal supervisory skills and pre-service teachers' identification of overt supervisory skills offering either emotional support or task assistance, as has been done in the aforementioned studies, can be helpful for choosing, designing and implementing effective training programmes aiming at broadening mentor teachers' supervisory skills repertoires. Then, distinct supervisory skills can be targeted and trained explicitly and efficiently, to gradually develop a broad repertoire of supervisory skills. Also insights gained from research into mentor teachers' interactive cognitions, are particularly relevant to mentor teacher training, because they can help mentor teachers to learn to understand their own supervisory behaviour better. Accordingly, exercises for training supervisory skills should not only focus on behavioural aspects. We believe that during training programmes, mentor teachers should also be encouraged to reflect on their interactive cognitions, because these may point to specific perspectives or frames of reference guiding their actions. This type of reflection may provide clues for improving and speeding up the development of mentor teachers' repertoires of supervisory skills.

### *3.3.3 Nourishing mentor teachers' competencies*

Findings from research discussed in this section underline the necessity and practical usefulness of training mentor teachers in the use of supervisory skills. They also show, however, that training may bring most mentor teachers only into an initial stage of competence in this skill domain. This means that in order to achieve higher levels of competence, it is important to sustain practice in the newly learned skills with follow-up

learning activities, for example by having mentor teachers take part in further training and coaching on the job (Joyce & Showers, 1995).

Follow-up learning activities may also take place through conversations about mentoring practices in mentor teachers' communities of practice, as these are generally assumed to be helpful in facilitating and enhancing mentor teachers' skill development (Carroll, 2005; Orland, 2001). In the company of colleagues, mentor teacher can be encouraged to practice specific supervisory skills further and to reflect on their supervisory behaviour.

To help mentor teachers and their mentees understand how their stances and interactions may contribute to the mentoring process, mentee-mentor pairs might, on a regular basis, talk explicitly about their perceptions and expectations regarding their roles and contributions in mentoring dialogues. Drawing out (combinations of) individual mentor teachers' roles in a profile based on the MERID model (Crasborn et al., 2011) may be helpful to set the stage for a reflective conversation and, subsequently, for changes in and enhancement of mentor teachers' roles. This type of learning conversation could also take place during seminars with fellow mentor teachers about the practice of mentoring. A mentor teacher might be encouraged to reflect on the degree to which his or her prevalent supervisory roles match a specific student teacher's learning needs.

### *3.3.4 Contextual factors*

Crucial to pre-service teacher learning is mentor teachers' ability to vary their approaches regularly and to choose suitable supervisory behaviour continually and actively. Developing versatility in conducting mentoring dialogues is therefore an important challenge. Apart from the need and importance of training mentor teachers for effective supervision, research has highlighted several other factors which may have an impact on the success of mentoring across a variety of contexts. Firstly, the success of mentoring improves when mentoring is an ingredient of a coherent teacher education programme, which is not fragmented between different contributors such as schools and universities (Hascher, Cocard & Moser, 2004). Success is also more probable when mentor teachers are involved in the design and evaluation of and are committed to the broader teacher education programme of which their mentoring is an ingredient (Evans & Abbott, 1997). Secondly, mentoring is more powerful when it takes place in a collegial and learning-oriented school culture (Lee & Feng, 2007), which is relatively free from an excessive emphasis on externally determined goals and agendas (Edwards, 1998). Thirdly, adequate timetabling is crucial to allow mentor teachers and prospective teachers to meet together during the school day (Bullough, 2005). Also, mentor teachers should receive some kind of incentive, for example

financially, for their work (Simpson, Hastings, & Hill, 2007). Additional release time for mentor teachers is vital for their undertaking mentoring activities (Lee & Feng, 2007). Finally, the quality of mentoring is improved when decisions about mentor–mentee pairings take account of mentees’ strengths and limitations (Abell, Dillon, Hopkins, McInerney & O’Brien, 1995), when the mentor teacher’s motivation to do the job is taken into account (Lindgren, 2005), when mentor and mentee get along well both personally and professionally (Abell et al., 1995), and when both mentor teachers and mentees have access to support outside the mentoring relationship (Whisnant, Elliot & Pyncheon, 2005).

All these factors illustrate that mentoring is a complex and multifaceted process. The quality of mentoring in teacher education is an important component of a powerful learning environment for pre-service teachers. As such, it is a perennial issue. Understanding the process of mentoring and the factors influencing it, will optimise the effectiveness of mentoring pre-service teachers. After all, guidance by a mentor teacher is an indispensable constituent for fostering any student teacher in becoming a professional teacher.

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