

Levels in reflection: core reflection as a means to enhance professional growth

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Reflection is currently a key concept in teacher education. The reflection process is often described in terms of a cyclical model. In the present article, we explain how such a model can be used for supporting student teachers' reflection on practical situations they are confronted with, and on their behaviour, skills and beliefs in such situations. In some cases, however, more fundamental issues appear to influence teachers' practical functioning. For example, their self-concept can have a decisive influence on the way they function, or they may do what is expected of them, and yet not feel truly involved. In such cases, a more fundamental form of reflection is needed, which in this article we refer to as 'core reflection'. The focus on core reflection concurs with the recent emphasis in psychology on attending to people's strengths rather than their deficiencies.

Treasures are people who look into my eyes and see my heart. (Rick Betz)

Introduction

An example: a teacher educator complains to a colleague, 'I must have had nearly a dozen supervisory meetings with Steven about his lack of contact with the class. We've looked at all sorts of approaches, each time using the reflection circle, but we're still getting nowhere. I have a feeling the problem sits more deeply, and that it has something to do with the way Steven relates to people in general. But I don't know whether I'm the right person to talk to him about this problem'.

In the professional development courses on the promotion of reflection that we organize for teacher educators and mentor teachers, situations regularly arise that resemble the one sketched here. Teacher educators have to deal with many cases in which the reflection process aimed at appears to be ineffective, and something 'deeper' seems to be involved. However, most teacher educators are rightly careful not to act as therapists.

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In the present article we examine this problem and demonstrate that often a form of reflection is needed which does go deeper, and which we call *core reflection*. This form of reflection, however, does not entail delving into a person's private life, but it can lead to profound changes. Moreover, it is possible to train educators to reach these more deeply rooted aspects.

The article is structured as follows. First, we briefly examine the competence for reflection, which is of essential importance to teachers, if they are to learn from their experiences (Schön, 1987; Calderhead, 1989). Next, we look at the question of which aspects are the most relevant for the teacher to reflect upon, i.e., we focus on possible contents of reflection. We describe a model of content *levels* that has proved beneficial in tailoring the supervision to a particular individual. The concluding sections examine the consequences for the supervision of professional development processes in teacher education.

Theoretical framework: the reflection process

The approach to the supervision of teachers that we describe in this article, originates from a model of reflection that has been discussed in many previous publications, and that is called the ALACT model (see Korthagen & Kessels, 1999; Korthagen *et al.*, 2001). This model builds on the assumption that by nature people reflect on their experiences, but that systematic reflection often differs from what teachers are accustomed to doing. If we look closely at how teachers generally reflect, often influenced by the specific school culture, we see that the pressure of work often encourages a focus on obtaining a 'quick fix'—a rapid solution for a practical problem—rather than shedding light on the underlying issues. While this may be an effective short-term measure in a hectic situation, there is a danger that one's professional development may eventually stagnate. In some cases, teachers unconsciously develop standard solutions to what they experience as problems, so that the accompanying strategies become frozen (Schön, 1987). The teacher is no longer in the habit of examining these strategies, let alone the analyses he or she once made of the problems they are intended to address. Thus, structured reflection is important in promoting sound professional behaviour. It also supports the development of a *growth competence* (Korthagen *et al.*, 2001, p. 47): the ability to continue to develop professionally on the basis of internally directed learning.

Figure 1 shows the ALACT model, which aims at structuring reflection. It is named after the first letters of the five phases, and is now used in many countries as a basis for systematic reflection in teacher education.

When teachers have developed a growth competence, they will be able to go independently through the various phases of the model. In practice, however, initial help of a supervisor or colleague is often necessary. The latter will need to employ certain interventions. Figure 2 shows the most important types of interventions, and the phase in which they are to be used. They find their roots in humanistic psychology (Carkhuff, 1969; Rogers, 1969), and in more recent sources such as Constantine and

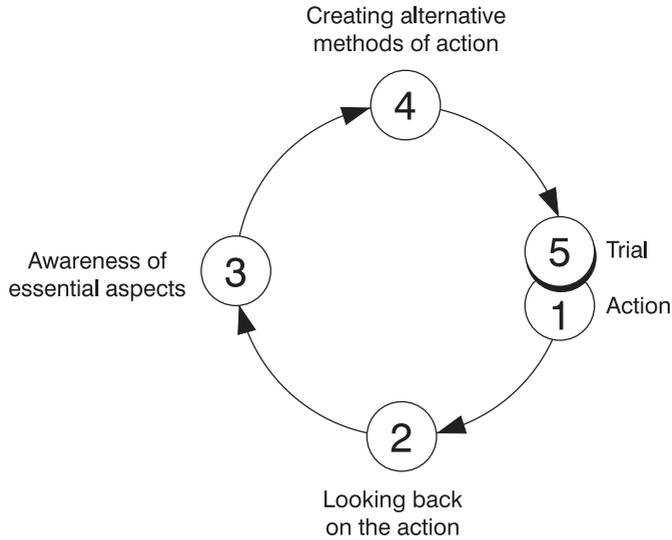


Figure 1. The ALACT model describing a structured process of reflection

Gainor (2001), Egan (2000), Havens (1986), Rice and Greenberg (1990) and Vanaerschot (1990).

For the purpose of professional development courses in teacher education,¹ all interventions have been concretized for use in supervisory conferences with student teachers. In the case of *concreteness*, for example, the supervisor will ask the teacher

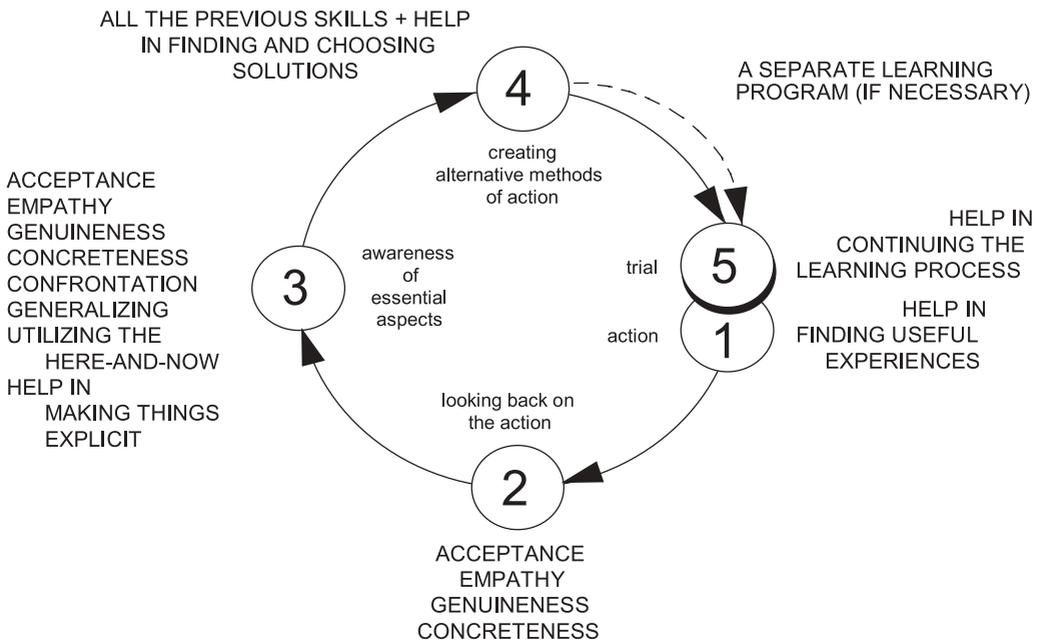


Figure 2. Supervisor interventions related to the ALACT model

0. What was the context?	
1. What did you want?	5. What did the pupils want?
2. What did you do?	6. What did the pupils do?
3. What were you thinking?	7. What were the pupils thinking?
4. How did you feel?	8. How did the pupils feel?

Figure 3. Nine areas relevant when concretizing in Phase 2

about various aspects of the situation, and will at least touch upon the dimensions of wanting, feeling, thinking and doing. Because these dimensions influence both teacher and pupils, it is important for teachers to include all the areas shown in Figure 3. By asking further questions related to these specific areas, the supervisor can help the teacher discover how to address them more systematically. Only then can we say that someone is truly *learning how to reflect*.

One example of a concretizing question is: ‘How do you think the pupils felt when you asked that question?’ Another important intervention in supervisory conferences is *empathy*, which has to do with an explicit understanding of how another person feels, and being able to put a name to what triggered those feelings (Carkhuff, 1969; Egan, 2000). An example of an empathic reaction could be: ‘I understand that you began feeling a bit uncertain when the pupils said that this exercise wasn’t part of the homework assignment’. This response also links two of the fields in Figure 3 (namely 4 and 6), clarifying an essential aspect of how the person experiences the situation (leading to Phase 3).

The above are just a few examples of the theory behind the cyclical model of reflection (Figure 1) and the accompanying interventions (Figure 2). Readers interested in a more detailed discussion of the reflection model, and the other interventions from Figure 2, are referred to Korthagen *et al.* (2001, p. 106–128).

Important in this approach to reflection is the balanced focus on thinking, feeling, wanting and acting, whereas in many other views on reflection there is a strong focus on rational analysis. For example, many teacher educators use Kolb’s model (Kolb & Fry, 1975), which describes experiential learning as a cyclical process of concrete experience, reflective observation, abstract conceptualization and active experimentation. Although the model looks rather similar to the ALACT model, it stresses conceptualization much more than the development of an awareness of less rational sources of teacher behaviour. Although for many decades, the teacher has been considered as a theory-guided decision maker (Clark, 1986), since the middle of the 1980s there is more awareness among researchers of these less rational sources of teacher behaviour.

For example, to date more attention is given to findings of Britzman (1986), Crow (1987), Ross (1987) and Place (1997), who all emphasize the strong but often implicit influences of former *role models* on teachers. Weber and Mitchell (1995) showed the influence of stereotyped examples of teaching in movies and on television.

In line with their work, Clandinin (1985) describes this phenomenon in terms of *images*. Connelly and Clandinin (1984) stress that images play an important part in shaping teacher behaviour. Cuban (1990, pp. 8–9) and Valli (1990) emphasize the role of *values*, which are often strongly rooted in the teacher's personal history (Carter & Doyle, 1996). Hargreaves (1998a, b) has drawn our attention to the fact that teaching is strongly influenced by *feelings* and *emotions* (see Sutton & Wheatley, 2003, for an overview of research on this issue). The attention to feelings and emotions in teachers concurs with recent insights into human consciousness, for example with a conclusion drawn by Damasio (1994) that emotion is linked with the primary decision-making process. Finally, self-determination theory (see Deci & Ryan, 2000) emphasizes the pivotal role of human *needs* in people's functioning.

It is not easy to capture all these less rational sources of behaviour under Kolb's umbrella term of abstract conceptualization. Kolb's model seems to be too rational for that. Phase 3 of the ALACT model, on the contrary, is explicitly aimed at developing awareness of these less rational factors. In other words, the model aims at a holistic approach to teachers and teaching. This also explains why interventions from a supervisor on the level of feelings (concretizing feelings, empathy) are so important.

At the same time, greater attention to other areas of reflection than just the rational sources guiding teachers' actions, creates the need for a careful analysis of the possible contents of reflection. For, if a teacher educator decides to help teachers delve more deeply into their feelings and needs, this may touch upon very personal issues related to their self-concepts, their upbringing and their deepest motives for being a teacher. Where lies the boundary between professional supervision and therapy? Is it possible to work with teachers on a deeper layer without discussing issues from their private lives?

These are questions we will discuss below. In order to structure this discussion, we will first introduce a model describing possible contents of reflection.

The contents of reflection

The ALACT model describes a structured reflective process, but it does not tell us very much about the content of reflection: what does or should the teacher reflect upon? This section will examine the possible contents of reflection processes.

We will start with a case in which a student teacher, named Judith, passes through the various phases of the cyclical model with the help of a teacher educator.

Judith is annoyed about a pupil called Peter. She has the feeling that Peter is trying to get away with as little work as possible. Today was a good example. In the previous lesson, she had given the class an assignment for the next three lessons, in which they were to work in pairs. In the third lesson, the assignment would be finalized with a report. Today was day two. Judith expected all the pupils to be hard at work, and during this lesson she planned to answer questions from pupils about any problems they were experiencing. She then noticed that Peter was working on a completely different subject. When Judith saw this, her response was 'Oh, so you're working on something else ... looks like you're going to fail this assignment, too!' (*Phase 1: Action*)

During the supervisory meeting, Judith becomes more aware of her irritation, and how this irritation influenced her actions. When being asked what effect she thinks her reaction had on Peter, she realizes that Peter may also have been irritated and that this may have led him to be even less motivated to do well in her class, which is precisely what Judith is trying to prevent. (*Phase 2: Looking back, making use of the dimensions of wanting, feeling, thinking, doing*)

Through this analysis, she becomes aware of the escalation taking place between her and Peter, and the fact that this process is leading nowhere. (*Phase 3: Awareness of essential aspects*)

However, Judith sees no way out of the situation. Her supervisor shows empathy with Judith's problems with Peter. He also introduces small theoretical elements concerned with escalating processes in relationships between teachers and pupils, such as the pattern of 'more of the same' (Watzlawick *et al.*, 1974), and the guideline saying that in such a situation the best thing to do is to break the pattern, for example by means of an empathic reaction, or by consciously making a positive remark about Peter. This is the beginning of *Phase 4: Developing alternatives*.

Judith compares this theoretical guideline with her tendency of becoming even stricter, and putting Peter in his place. In the end, she decides to *try out* (*Phase 5*) a more positive and empathic approach, which begins with asking Peter about his plans. She first practices during the supervisory meeting: the supervisor asks Judith to think of examples of sentences she could use when talking to Peter. He then does a short exercise with her in the use of words that express feelings, thus making her better able to respond empathically.

When Judith reflects on the results of the new approach to Peter, after trying it out in the next lesson, Phase 5 becomes the first phase of the next cycle of reflection, creating a 'spiral' of professional development.

The case shows the five phases in the reflection process and also illustrates that reflection by teachers commonly focuses on the following aspects:

1. *The environment*: this refers to everything that Judith encounters outside of herself. In the present example, it means Peter and the way he behaves.
2. *Behaviour*: both less effective behaviour, such as an irritated response, and other—possibly more effective—behaviours.
3. *Competencies*: for example, the competency to respond in a constructive manner.
4. *Beliefs*: perhaps Judith believes that Peter is not motivated or even that he is trying to cause trouble. (Novice teachers often assume that pupils are testing them.)

However, things may be more complicated. Beliefs are often deep-rooted and persistent (Calderhead & Robson, 1991), in which case the supervisor cannot bring about a change as easily as in the above instance. For example, following the supervisory meeting, Judith tries to be more constructive in her contacts with Peter, but both the supervisor and the teacher herself suspect that this approach does not really suit her. Perhaps, there is more here than meets the eye. A significant underlying issue may be how Judith views her own *professional identity* (Beijaard, 1995), i.e., what kind of teacher she wants to be. Or, the problem may be even more complex: perhaps she is enthusiastic about her subject, mathematics, and finds her inspiration there rather than in building and maintaining a relationship with her pupils. And yet, this does not

necessarily mean that Judith would do better to consider a different profession. The problem may be a limiting self-concept interfering with the development of a number of personal qualities. If she were more receptive to the possibility that these qualities can be developed, then the result might be a renewed sense of inspiration and enthusiasm for the teaching profession. To get that process moving, it is not enough to reflect on environment, behaviour and competencies. And even reflection on beliefs does not go to the heart of the problem.

Levels in reflection

The ‘onion model’ in Figure 4 (a variant of the so-called Bateson model, see Dilts, 1990, and Korthagen, 2004) provides a framework for the problem sketched above. It shows various *levels* which can influence the way a teacher functions. The idea behind the model is that the inner levels determine the way an individual functions on the outer levels, but that there is also a reverse influence (from outside to inside).

In this model, two new levels are added to the levels of environment, behaviour, competencies and beliefs: the level of (*professional*) *identity* (Beijaard, 1995) and the level of *mission* (for the latter Dilts, 1990, uses the term ‘level of spirituality’). Reflection on the level of mission triggers such issues as ‘why’ the person decided to become a teacher, or even what he sees as his calling in the world. In essence, this level is concerned with what inspires us, and what gives meaning and significance to our work or our lives (for an elaboration of the issue of the teacher’s calling see Hansen, 1995; Palmer, 1998; Korthagen, 2004). This is a *transpersonal* level, since it involves becoming aware of the meaning of our own existence in the world, and the role we see for ourselves in relation to our fellow man. Whereas the level of identity has to do with how we experience ourselves and our self-concept, the level of mission is about ‘the experience of being part of meaningful wholes and in harmony with superindividual units such as family, social group, culture and cosmic order’ (Boucouvalas, 1988, pp. 57–58).

Getting in touch with the levels of identity and mission has a very practical significance. For example, a beginning teacher may be so focused on surviving in the classroom that he takes on the role of ‘policeman’ (identity level). This kind of teacher has quite a different influence on the class from the one who is conscious of the interests and needs of the pupils, and whose actions are sincerely rooted in a pedagogical ideal (on the level of mission). Where the first teacher may ‘invite’ a power struggle, the second often succeeds in creating an atmosphere of togetherness, so that the pupils also consider it important to work together in a pleasant and productive atmosphere.

Core reflection

When reflection extends to the two deepest levels in Figure 4 (the core of one’s personality), we speak of *core reflection*. The ALACT model (Figure 1), and the accompanying interventions (Figure 2), are no longer sufficient to describe the entire process of core reflection, and the role of the supervisor in supporting this process.

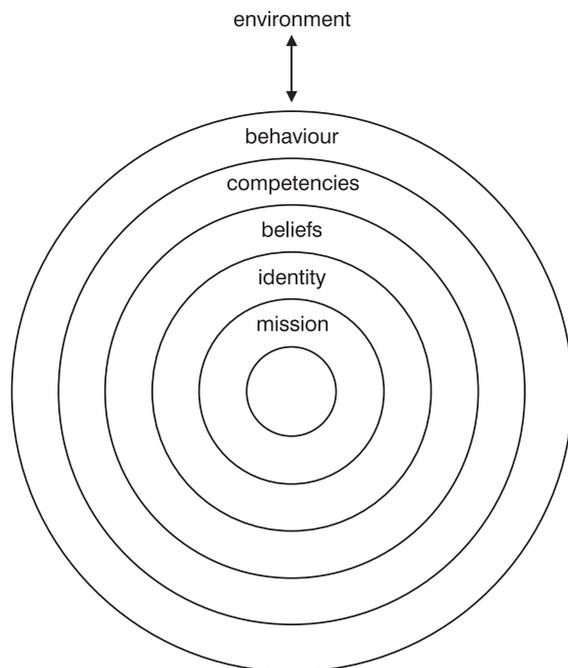


Figure 4. The onion model describing different levels on which reflection can take place

However, the initial stages of the process are the same as those described in Figure 1: there is an experience within a concrete situation giving rise to reflection. As a rule, reflection is triggered by something which is still on the teacher's mind. This could be a feeling of dissatisfaction with what was accomplished during the lesson, or some incident that affected the relationship with the pupils. It leads to Phase 2: looking back. Here, the nine areas in Figure 3 can play an important role. In core reflection, however, there is less emphasis on an extensive analysis of the problematic situation, because recent psychological research shows that this leads to a narrowing of available action tendencies: the person is inclined to think within the boundaries of the problematic framework (Levenson, 1992; Fredrickson, 1998), and in this way often loses contact with the deeper levels inside. In core reflection, the focus is much more on (re)establishing this contact, and on creating room for new possibilities. Therefore, the following questions are helpful:

1. What is the *ideal situation*—the situation which the teacher wants to bring about?
2. What are the *limiting factors* preventing the achievement of that ideal?

The first question refers to an ideal situation the teacher is anxious to create. This means that it is closely connected with the level of identity or mission. During the process of becoming aware of the ideal situation, it often emerges that the teacher's difficulties in achieving it are not restricted to the present, but rather that often they crop up in other situations as well. In that case, it is important to address this extension of the problem, since it is an extra stimulus to tackle the problem, and also to look more closely

at possible limiting factors. Initially such a factor may be experienced as related to the environment (a troublesome class or a school management that has failed to take the necessary measures). However, what is important here, is to look at the ways in which the teacher in question may be restraining *herself*. This could have to do with:

- Limiting behaviour (for example, avoiding confrontations).
- Limiting feelings (for example, ‘I feel powerless’).
- Limiting images (for example, ‘the class is a mess’).
- Limiting beliefs (for example, ‘this is something I have no influence over’).

By formulating the ideal situation, together with the factors experienced as inhibiting the realization of that condition, the person has become aware of an inner *tension or discrepancy*. As an example, we can take a student teacher longing to feel secure as a teacher (ideal situation: inner self-confidence in the classroom) and the limiting belief that she—as a beginning teacher—does not have what it takes to exercise leadership. Another example is the problem faced by someone striving with all his might for appreciation and respect, but who constantly displays unsuitable—and thus limiting—behaviour.

The essential thing here is for the teacher to take a step backward and to become aware of the fact that she has a choice whether or not to allow these limiting factors to determine her behaviour. Sheldon *et al.* (2003) claim that this awareness of having a choice is one of the most fundamental factors in a person’s development, as it contributes to personal autonomy.

There is an important difference between this process and a process of reflection involving only the outer levels of Figure 4: often the formulation of the discrepancy between the ideal situation and the limitations one is experiencing is enough to clarify the problem, which is at the root of many other problems on the levels of behaviour, competencies or beliefs. One could say that this brings to light a *core discrepancy*, i.e., a tension that touches the very core of the individual. To follow up on the example we gave above: the student teacher in this case was made aware of the tension between her ideal situation—feeling self-confident and relaxed in the classroom—and her limiting belief that this is something which is only achieved by very experienced teachers. By means of this process of awareness-raising, she gradually realized that her nervousness in the classroom, the minor conflict she had had the other day, as well as the uninspiring assignments she had devised for her pupils, all had to do with that underlying tension. Because on the one hand she wanted to feel confident and relaxed, while on the other she was held back by the conviction that this is something reserved for ‘later’, her stronger side—her *core qualities* (Ofman, 2000)—could not be fully realized.

Core qualities

Characteristic of core reflection is the attention to such core qualities in people. This brings us to an area which up until the present day has received very little attention from educators and researchers. Tickle (1999, p. 123) maintains:

In policy and practice the identification and development of personal qualities, at the interface between aspects of one's personal virtues and one's professional life, between personhood and teacherhood, if you will, has had scant attention.

Tickle mentions such qualities as empathy, compassion, love and flexibility. Other examples are courage, creativity, sensitivity, decisiveness, and spontaneity. These are indeed essential qualities for teachers, qualities seldom appearing on the official lists of important basic competencies.

Our focus on core qualities is linked to a recent development in psychology, advocated by people such as the past president of the American Psychological Association, Seligman, and called *positive psychology*. Seligman and Csikszentmihalyi (2000, p. 7) state that this movement is a reaction to the fact that for too long psychology has focused on pathology, weakness and damage done to people, and hence on 'treatments'. They emphasize that 'treatment is not just fixing what is broken; it is nurturing what is best'. Hence, they point towards the importance of positive traits in individuals, which they call *character strengths*. They mention as examples: creativity, courage, perseverance, kindness and fairness (Seligman, 2002; Peterson & Seligman, 2003). A central issue in positive psychology is how these strengths mediate between external events and the quality of experience, something that is directly relevant to teacher education.

Peterson and Seligman (2003) emphasize that character strengths can and do produce desirable outcomes, but also that they can be morally valued in their own right, because 'they fulfil an individual'. This illustrates that we can locate these strengths on the levels of identity and mission. Peterson and Seligman add that when people are referring to their strengths, this correlates with a feeling of 'this is the real me', that they show 'a feeling of excitement when displaying a strength', and—very important for our present discussion—'a rapid learning curve'.

The way Seligman and other psychologists within this new field write about strengths, clarifies that they are synonymous with what we call core qualities. Ofman (2000) states that such a core quality is always potentially present. He maintains that the distinction between qualities and competencies lies primarily in the fact that qualities come from the inside, while competencies are acquired from the outside. This is in accordance with the onion model: abilities such as the ability to take into account different learning styles or to reflect systematically, are located at the level of competencies, whereas core qualities are found on the deeper levels. Almaas (1986, p. 148) talks about 'essential aspects', which he considers absolute in the sense that they cannot be further reduced to something else, or analyzed into simpler constituents.²

The actualization of core qualities in teachers

Through core reflection according to the model in Figure 5, core qualities can be activated in teachers. The process of core reflection begins with Phase 2 (awareness of the area of tension, and the choice of whether or not to identify oneself with the limiting factor), which leads to Phase 3 (awareness of core qualities).

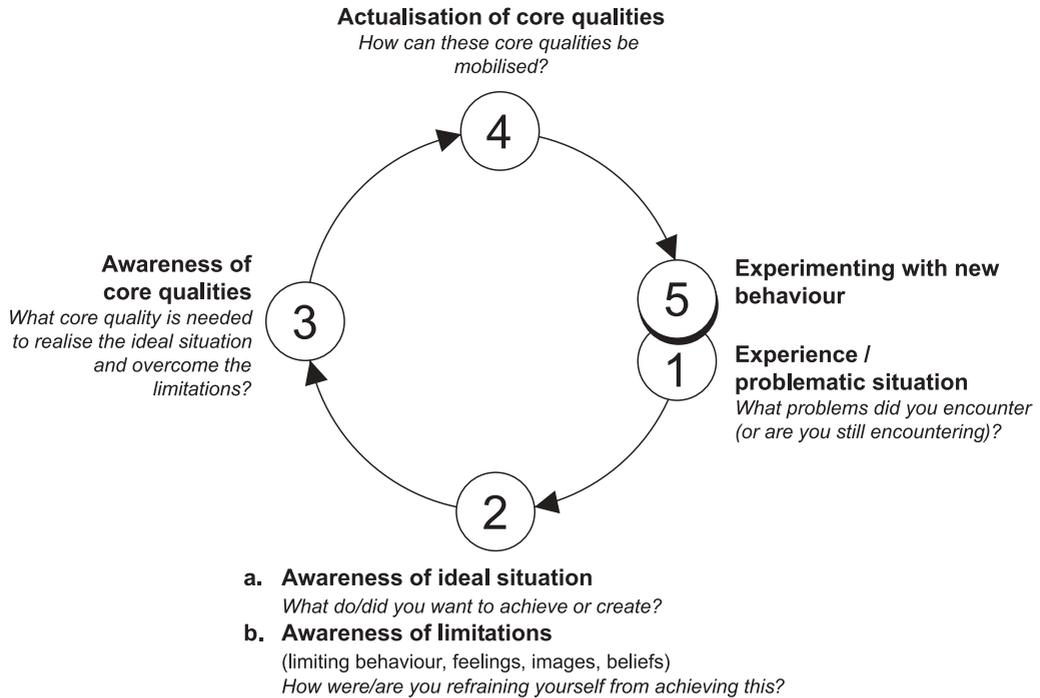


Figure 5. Phase model of core reflection

Often the student teacher involved in the process of core reflection is suddenly aware of such core qualities after Phase 2. If that is not the case, there are several possible strategies for a supervisor. The first is to trace relevant past experiences in which the student teacher did succeed in achieving the desired situation. Thus, the student in our example, who lacked self-confidence, can try to recall situations in which she was indeed self-confident and relaxed. That might be a situation in a totally different context, for instance, an occasion when she presided over a meeting at a student house. By immersing herself in this past experience, she will realize that on that occasion it required no effort to be spontaneous, to feel at ease and autonomous. She may start to realize—at first cognitively—that she does actually possess those core qualities, but what is even more important is that, by recalling the memory of the positive experience, she is able to re-experience, to feel these personal qualities and to access the will to mobilize them. This will enable her to address the question of how she could build on those core qualities in her behaviour during a specific lesson on the following day. That is Phase 4.

Another strategy is to challenge the student who is allowing her belief (that she has no authority over the class) to inhibit her, by asking her to take the lead in a concrete, less problematic situation. In this way, the student teacher can come into contact with an inner potential—for example, the core quality of self-confidence. Often limiting beliefs or images have repressed important core qualities for so long that a stimulus from outside may be necessary to activate them again.

Phases 3 and 4 of the model for core reflection may ultimately result in a more fundamental solution than would be possible if reflection were confined to the levels of behaviour, competencies, and beliefs. For one thing, the process can lead to a redefinition at the level of professional identity or mission. For example, the student in the example did not initially see herself as a self-confident teacher, but she did do so after the core reflection, or in any case much more than before.

It should be stressed that when someone comes into touch with a core quality, it is important to help him or her take the step towards the actualization of that quality (the step from Phase 3 to Phase 4). In other words, promoting core reflection is about facilitating the process whereby the inner levels influence the outer levels. In line with our previous discussion of the pivotal role of non-rational factors in a teacher's functioning, we wish to stress that this actualization of core qualities is not just a cognitive process. When, through *thinking*, a teacher arrives at the rational conclusion that a certain pattern of thinking and acting is counterproductive, and also gains an insight into more constructive possibilities, this may have some influence on the teacher's future behaviour. But, this influence of rational analysis on future actions is much stronger when free will is also involved in the reflection process, i.e., when the teacher uses conscious *wanting* to support his or her own development. When the teacher is also really *feeling* the frustration of his or her limiting patterns, and really *feels* the empowering effects that naturally evolve from an awareness of new possibilities (feelings of pleasure, excitement, fulfilment and expansion), this deepens the process even further, making reflection much more effective. (Damasio, 1999, pp. 279–295, emphasizes the importance of really *feeling one's feelings*.) In sum, thinking, feeling and wanting are all important in arriving at new actions on the basis of a core quality.

We will illustrate this with an example of a supervisory meeting focusing on core reflection, Phases 3 and 4.

- Supervisor: How does it feel to get into touch with this quality of spontaneity?
 Student teacher: Wonderful! It gives me a sense of freedom.
 Supervisor: Yes, I can tell by looking at you! It's great that you're in touch with it ... What would it be like to build on that feeling when going into your next class?
 Student: Yeah, if I could ...
 Supervisor: Just hang on to that great feeling.
 Student: Yeah, then I feel much more free. I feel as if I have more potential than I've called on up to now.
 Supervisor: Is there something concrete that you would now do in the class where you were having problems?
 Student: I'd be quicker to let the pupils know what I'll accept and what not.
 Supervisor: Exactly! Can you give me an example?
 Student: Well, for one thing, I'd rein in Sandra sooner.
 Supervisor: Let's make that more concrete. Suppose Sandra started calling across the classroom again. Get in touch with the core quality spontaneity in yourself, and that feeling of freedom ... What do you want to say or do, on the basis of that feeling?
 Student: That I want her to stop doing that.

- Supervisor: Yes, good! That sounds firm! Now suppose that Sandra was here in front of you, right this minute. Tell her that.
- Student: Sandra, I don't want you calling across the classroom like that.
- Supervisor: Great! I can see your ability to show your quality of spontaneity! How does it feel?
- Student: It's a kind of relief.
- Supervisor: It was great to see how you responded. Next time, shall we talk about how things worked out during the lesson?
- Student: Okay.

A supervisor accustomed to the process of core reflection will often be able to support the actualization of core qualities. It will be clear from the example that the necessary encouragement can be provided by a committed supervisor who is convinced that the teacher has the potential to change, and who helps the teacher to realize that potential.

Promoting core reflection

Among the most important skills of a supervisor wanting to promote core reflection are the *ability to recognize and promote the development of core qualities*. The supervisory interventions appearing in the outer circle in Figure 2 remain important, but acquire a somewhat different significance in core reflection. In supervising the process of 'looking back' (Phase 2), it is important for the supervisor *to focus on the ideal situation as well as the limiting factors* as experienced by the teacher being supervised and to show *empathy* for both. *Concretization* is another intervention that has a slightly different emphasis here: the supervisor may focus on the level of identity or mission, by asking questions like 'What is the ideal situation that you are longing for?', 'What would you like to achieve?', or the supervisor may focus on inner limitations, for example by asking 'What is keeping you back here?' Hence, in core reflection, the dimensions of thinking, feeling, wanting, and doing as summarized in Figure 3, are still important, but now for the elaboration of the ideal situation and inner limitations.

Another important point is the fact that the supervisor can make use of *self-disclosure* (Egan, 2000), namely by sharing parts of her or his own struggle with personal ideals and inner limitations, while modeling the process of core reflection. It may help the student teacher to understand the natural and liberating effects of this approach.

Confrontation also deserves special attention when used to promote core reflection. A supervisor can use this intervention type to help the teacher become aware of the tension between the ideal situation and limiting factor or factors. Any form of confrontation always needs some empathy, but this is even more important during the process of core reflection, in order to ensure that the supervisory setting remains being experienced as safe and supportive.

Professional development of teacher educators

The above discussion may lead some readers to wonder if all this is not too difficult for the average teacher educator or supervisor. In our experience, this is not the case.

However, we do think that specific training is needed. For a couple of years, we have been organizing professional development courses for teacher educators in which they learn to supervise reflection at the various levels of the onion model. During these courses, it has become clear to us that when teacher educators are introduced to core reflection, they have to make certain ‘adjustments’ to their mindset. This is because, over the years, they have often become accustomed to focusing on problems rather than possibilities; they have sometimes been more concerned about providing suitable behavioural alternatives than about capitalizing on the core qualities present in the student teacher. However, we have also seen that the gradual, stepwise clarification of this new approach often helps the participants to break away from the old patterns, and that they are soon enthusiastic about the results they see in their student teachers, and in themselves. (Core reflection is also an effective instrument for self-reflection.) Below, we give an example of this phenomenon, a reflection recorded by a teacher educator after a day and a half of a course on promoting core reflection.

Resolution: in the time to come I will try to recognize core qualities in other people, and will have them identify those qualities themselves, because they are so important when it comes to overcoming limitations.

Experience: when talking to a student, he told me he was no longer enjoying the teacher ed programme. He explained that there were too many situations he experienced as negative. As a result, he was incapable of self-guidance, had a low sense of well-being, was lonely, and lacked purpose and decisiveness. During this conversation, I asked him what it was he wanted to achieve, and what he needed to make it happen. Eventually, he confided to me that he hardly ever shared his feelings with fellow students or his teachers, but that now he thought it might be good for him if he did. The core qualities of openness and vulnerability were mentioned. The student confessed that our conversation had had a ‘liberating’ effect on him: he had found someone willing to listen to him, and to try to understand what was eating at him. And when I said that openness and vulnerability were clearly present in our conversation, he discovered he felt comfortable with that.

In the end, we agreed he would regularly email me about his positive experiences at school. He said that perhaps he would now take other people into his confidence, and share his emotions with them. He was convinced that this was how a form of collaboration would ultimately take shape.

The teacher educator writing this was very enthusiastic about her experience. Although the learning paces of educators may differ, it is our experience that, after the first few days of a course, almost all of them will have picked up the most important principles of promoting core reflection.

Concretization: details about the course

How do we do this? What kind of strategies and structures do we use in the course?

One important strategy is that the participants not only see the approach demonstrated (which obviously is more effective than reading about it), but they also experience its effects, since core reflection is also being practiced on them, first by the

trainers, and then by other participants. This form of experiential learning has proved effective as a means of reinforcing the transfer to the teacher educators' own practices.

We generally start with an exercise called 'discrepancy analysis'. The participants take a recent positive and negative experience from their work. In a guided reflection, they are helped to re-experience both situations at the levels of their thinking, feeling, wanting and doing. Finally, they reflect on the question of what the essential difference is between the two situations, and they formulate this in one or a few words, writing them down on paper. These words often have a personally significant meaning. Next, the participants form pairs, and help each other to finish one of the following sentences (which aim at an awareness of the deeper levels of 'the onion'):

I am someone who needs ...

I am someone who considers ... important.

I am someone who strives for ...

The trainers emphasize the importance of empathy and concretization of feelings in this conversation in pairs and coach the participants in using these interventions on the feeling dimension.

In fact, by their choice of sentence, the participants more or less indicate an ideal situation in their profession. Next, the trainers present the onion model, and the concept of core qualities. This is used in the same pairs to investigate with which level of the onion model the sentence is connected, and what the other levels related to the sentence would be. (What kind of environment fits the sentence, what kind of behaviour, etc). In this way, the participants develop a feeling for the various levels.

Next, within a group discussion, the participants learn how to recognize core qualities in each other. Generally, this needs some modeling and guidance by the trainers: we found that it is not common among teacher educators to stress people's core qualities. When talking about professional ideals and core qualities, all kinds of limiting beliefs and images come to the surface and the trainers demonstrate how one can deal with them using the model for core reflection, which is then made explicit. Next, the participants split up into new pairs and, under the trainers' supervision, they practice the promotion of core reflection.

The rest of the course is mainly focused on helping the participants use a more holistic style of supervision, in which feelings and needs are seriously dealt with, and on tackling all kinds of inner limitations in the participants, which again offers opportunities for modeling core reflection.

Participants discover that what we are aiming at is actually a quite natural process: finding the right manner of adjusting one's own qualities to the environmental requirements is one of the most fundamental human processes. Unfortunately, in the educational world we have become somewhat alienated from this process, because of the emphasis on external behaviour norms (such as lists of teacher competencies ...). Resurrecting this natural process is almost like rediscovering your own natural way of walking, after a period during which you or others have tried to subject the process to all sorts of norms.

The difficulty of writing an article such as this is the fact that charting a natural process quickly starts to sound complicated, just as the process of natural walking would, if we tried to describe it in detail. For this reason, it may be more helpful to quote a number of evaluative statements made by those participating in a short course in ‘core reflection’ (lasting just one and a half days):

- My skills have been honed, and I now have a clear framework for delving more deeply.
- Excellent addition to the reflection model.
- I’ve gone to a deeper level in the awareness of my own approach, and the things I want to develop further.
- A good working method for getting the core qualities out into the open.
- More awareness of my own supervisory skills, awareness of new ways of providing good supervision, the confidence to make use of those qualities.
- I am now able to supervise with less effort, and more effect.

Two conditions have to be met for taking part in the course: participants are expected to have had a reasonable amount of experience as supervisors, and to possess some basic supervisory skills. We feel that otherwise the step leading to core reflection could prove to be a very big one. We regard core reflection as the next stage in the professional development of those supervisors who are already experienced in promoting reflection. An additional—implicit—condition for participation is that supervisors are willing to look for people’s strengths and for ways to help students use their inner potential to overcome inhibitions. In fact, we found that this is considered important by all those taking part in our courses. We believe that it is often for this reason that they find their work as supervisors enjoyable and satisfying. Core reflection reminds them of this fact, and encourages them to bring their inspiration into line with their work and behaviour in concrete supervisory situations.

This illustrates that the participants in such courses often learn a great deal about their own deeper levels (those of identity and mission). We believe that an awareness of the role these levels play in how they themselves function, is a precondition for the ability to empathize with the quest many teachers undertake in the course of core reflection. Such awareness is also important for enabling supervisors to support student teachers’ learning by sharing their own experiences with learning processes on the deeper levels (*self-disclosure*).³ This means that institutions or teacher educators wishing to use a model for supervision like the one discussed in this article, should realize that it does require an investment in the professional development of the educators, as well as ethical considerations for practice.

Indications for the necessity of core reflection

During the supervision of reflection processes, supervisors regularly encounter problems that cannot be easily tackled by means of ‘ordinary reflection’, i.e., reflection limited to the outer levels of the onion. In such cases, core reflection, which focuses

on the inner levels, appears to be needed. This will be clear from several cases drawn from our teacher education programme:

1. Phase 5 in the circle of reflection (trying out a new alternative) has been reached, but the student teacher isn't happy with what has been achieved. It is as if the alternative behaviour is not experienced as being personally appropriate.
2. A specific problem has been the object of repeated reflection. Each time, a number of possible solutions were put forward, but the student teacher still hasn't succeeded in applying them.
3. One problem after the other presents itself, but it is as if the essence of the difficulties still hasn't been identified. One could go on forever, and still not find the solution. There seems to be something more fundamental behind all the problems.
4. The same type of problem presents itself in various contexts, i.e., independent of the other people who are part of the situation. (For example, someone is always uncertain of himself or is always dominant.)
5. A teacher feels the need to delve more deeply into himself or herself. This may happen when the teacher is trying to attribute meaning to work, considering the choice of profession, etc (for example when addressing the question, 'Do I really want to be/remain a teacher?').

Cases like these are indications that processes of reflection that confine themselves to behaviour, competencies, or beliefs, remain too superficial. Core reflection can help to go deeper.

From core reflection to behaviour

This article in effect makes a case for a tailor-made approach to the promotion of reflection: we believe that a professional supervisor should be capable of assessing the level at which supervision is necessary or desirable. It can be confined to the level of the environment (for example, one particular pupil). Often, however, the reflection will proceed 'from outer to inner': something that is experienced in one's own contact with the 'environment' (such as a conflict situation) provides an opportunity to direct the process of reflection towards the more inner levels, even as far as those of identity and mission. In such situations, the supervisor must ensure that the way 'to the outside' also gets sufficient attention: if teachers have experienced a deeper contact with what inspires them in teaching (their 'calling'), it is still important for that calling to be translated into concrete behaviours, so that 'inside' and 'outside' come together. It may thus be necessary to carefully look at the levels of beliefs and competencies as well.

In short, in our view a good supervisor is capable of switching back and forth between the levels, in accordance with the needs of the individual being supervised. It is good to keep in mind that an apparently insoluble or persistent problem on a particular level is often an indication that it is time to examine a deeper level. This only works when the person being supervised is also prepared to look at those levels.

One cannot force people to delve more deeply: they have to feel the need to do so themselves. However, one can certainly help a person to become aware of the (often unconscious) need within to delve more deeply for hidden inner strengths. (Deci & Ryan, 2000, claim that the need to feel competent is one of the basic human needs.)

The boundary between supervision and therapy

People reading or hearing about our approach, are often worried that it may be too therapeutic. It is interesting that the teacher educators who have attended our courses do not express this worry. We will try to explain this phenomenon.

The source of the worry may be that most people associate 'going deeper' with delving into problems and pain. We believe that this has to do with a traditional image of therapy. Originally, the Greek word 'therapy' refers to 'healing', and thus has the connotation of an illness that has to be overcome. This is exactly what Seligman and Csikszentmihalyi (2000) point to as the traditional, ineffective view of psychology on human growth. Psychologists are beginning to discover the causes of this lack of effectiveness. Fredrickson (2000, 2002) has shown that a strong focus on one's negative feelings narrows a person's momentary thought-action repertoire, by calling to mind and body an ancestrally adaptive action repertoire, which narrows the person's options.⁴ Because positive feelings are not linked to threats requiring quick action, they broaden the person's thought-action repertoire, and lead to an increase in the use of personal resources. Hence, Fredrickson (1998, 2000, 2002) emphasizes the importance of building on this alternative view of human growth, which she calls the *broaden-and-build model*. One way to use this model, she says, is to promote people's awareness of positive meaning. In our approach, we do so by helping people to focus on ideals.

In sum, the approach that we described in this article concurs with Fredrickson's broaden-and-build model. Core reflection aims at building on people's strengths, and on the positive feelings often triggered when people feel in touch with positive meanings, and with their strengths. Through this, they can get into a state of optimal functioning that Csikszentmihalyi (1990) calls *flow*, a state which promotes rapid learning.

Hence, we propose a view of professional learning which does aim at 'going deeper', but not in the sense of an emphasis on negative feelings, for example the negative feelings connected to traumatic childhood experiences. On the contrary, in core reflection 'going deeper' refers to the joyful adventure of digging into the richness of one's inner potential by focusing on the positive feelings connected with this inner potential, and one's inner sources of inspiration. Such strong positive feelings are often not triggered when the learning process only focuses on the outer levels of the onion model.

It may be clear that core reflection will sometimes inevitably touch upon issues beyond the professional domain. Core qualities such as self-confidence, courage, goal-directedness, etc. will generally not only play a role in teaching, but also in the private lives of teachers. People's limiting thoughts such as 'I am not important enough' or 'They will not like me', will of course not only limit their potential in

teaching. In other words, no neat and watertight boundary can be drawn between professional core issues and personal biographical material. On the other hand, it is not difficult for supervisors to make a deliberate choice to stick to the professional domain, and leave other areas out of the reflective conversation, something that we advocate in our courses for teacher educators.

The other side of the picture is that we have found many teacher educators to be so afraid of touching issues beyond the professional domain, that they miss the opportunity to discover the power of the levels of identity and mission for the professional growth of student teachers. Perhaps, we can illustrate this with the following two possible ‘scenarios’ of the same supervision situation.

During a supervisory session, a student teacher looks downcast. The lesson she gave the previous day had been a disaster. The teacher educator asks: ‘What exactly happened? And how did that make you feel?’ The student teacher explains that she gradually felt increasingly uncertain of herself, so that she was no longer able to deal adequately with discipline problems, and that this made her even more uncertain. There were moments when she just wanted the ground to part and swallow her.

Scenario 1. The teacher educator continues to question her about her feelings of inadequacy, for example, when such feelings were most likely to surface (focus on negative feelings, negative situations). Then he asks: ‘Why are you so uncertain of yourself?’ (focus on delving into the problem, together with an undesirable, non-explicit intervention on the level of identity, namely reinforcing the inhibiting belief that it is her nature to be uncertain. This also reinforces the negative feelings). The student teacher says, ‘I guess I’ve always been that way ... It probably has to do with my upbringing ...’ (note that many students are contaminated with the widespread belief that problems can be traced back to childhood experiences, via a disease model). At this point, the teacher educator says, ‘We seem to have moved into an area where I don’t feel competent to provide guidance. It might be better for you to seek specialist help.’ (Now the student has an extra limiting belief: ‘There is something very wrong with me’. According to Fredrickson, the negative feelings to which this gives rise also narrow the student teacher’s repertoire of new behavioural alternatives.)

Scenario 2. The teacher educator says, ‘I understand that this was not a very pleasant experience for you ... And yet, listening to you talk about what happened yesterday, I see evidence of your strengths of openness and sensitivity.’ (Reinforcement of core qualities and promotion of positive feelings.) ‘May I ask you a question: ideally, how would you like the lesson to be?’ The student teacher then sketches an ideal situation in which everything goes well, and she feels competent and certain of herself. ‘Yes, that sounds good! This highlights a completely different side of you: I see your core qualities of self-confidence and joy! Can you feel these too?’

The student: ‘Yes, but I don’t seem to be able to hang on to those feelings.’ The teacher educator: ‘How does this kind of negative thinking affect you? And how does it influence the pupils?’ The student begins to realize that because of her limiting belief, she is activating a spiral that has a negative effect on herself and her pupils.

The teacher educator: ‘Do you realize that you activate that spiral yourself by thinking ‘I’m just not able to connect with my strengths?’’ The student seems to be touched by this insight. The teacher educator: ‘Isn’t this frustrating, that you create this yourself through how you think ...?’ (Pause) ‘But let’s say we accept that these thoughts are bound to surface, also during teaching. Which quality in yourself do you need to call on in order to

keep that destructive thought from governing your actions?’ The student teacher realizes *that she has a choice*: whether to continue with these negative thoughts, or to deliberately activate her core qualities of self-confidence and joy.

Of course, these are two extreme descriptions. In practice, both scenarios will generally take more time and more interventions (although we have the experience that as soon as teachers get used to core reflection, they go through the process much more quickly). However, we have discovered that the first scenario is exactly what many teacher educators are afraid of. As they do not know an alternative approach, they often try to avoid going more deeply, with the result that no fundamental transformation can take place.

In sum, the basic issue is: do we see a crisis as something problematic that needs to be dealt with by therapists, or do we see a crisis as an opportunity for growth, and do we possess the competencies to use the crisis as an incentive to help people connect with their inner potential?

The following logbook excerpt from a participant in one of our courses on core reflection may further illustrate the above.

I decided to do this course in core reflection, because I wanted to improve my way of supervising. The ideal situation I envisaged involves a method with which both parties—student teacher and supervisor—feel comfortable. In the past, I experienced on several occasions that when the supervisor gains access to the beliefs and the identity of the student, the conversation takes on a new content. To make this possible, the student must enter into a relationship of trust with the teacher educator. Such a relationship does not automatically develop with every student. I did not want to fall into the same trap as some supervisors I have observed, who take on the role of a therapist and delve into the individual’s past with dubious results. I have always rejected this manner of working on the part of supervisors, because of the danger that the person being supervised will ultimately become resistant. My view of the task of a supervisor involves a strict separation between the student’s private domain and his professional development. In my opinion, the ideal supervisor role is to probe into the inner potential of a student teacher for the benefit of his professional development, without in any way encroaching on the dignity of the individual. After following this course, I believe that I am much better equipped to attain that goal.

In my supervisory conferences with student teachers, I have already started to apply what I learned during this course. Based on discussions I have had with student teachers over the past few weeks, generally in connection with classroom observations or their logbooks, I will now take one as an example. The teacher in question is a young woman in her mid-twenties, who finds it difficult to organize things, and runs into problems, because she cannot get her work done in time. She appears to be uncertain of herself, and this is visible in her manner and in all sorts of uncoordinated movements (e.g., her hands tremble and she seems to be unable to keep her feet still). And yet, at times, she makes a quite spontaneous and enthusiastic impression. During the supervisory conference, where I first used the ALACT model, I soon discovered that this woman suffered from a problem I used to have, and occasionally still have: she is a perfectionist, which means that she is fearful of making mistakes. This sometimes takes the form of a negative fear of failure, and a tendency to set her sights too high. Obviously, if you deliberately set such high objectives that almost no one can achieve them, then your own failure to attain those norms is easier to accept. Because I knew exactly how she felt, I was able to adopt an empathetic attitude, and we

had a very open and frank discussion. I helped her to make her feelings more explicit and to get rid of the limitations she had placed on herself, by means of questions such as ‘What would it be like if you would now refrain from putting such high demands on yourself?’ and ‘What would happen if you tried to accomplish two things this week, instead of five?’ She was eager to cooperate, talking freely about the things that were bothering her. She said she had a good feeling about our meeting and later e-mailed me to say how glad she was we had had our talk. It was clear that she was quite relieved, and it made me feel good too.

In a later e-mail, she wrote that I had helped her to improve her self-image, which had become somewhat tarnished. A few days later, I was present during a session on ‘discussion techniques’, in which she—in the role of a teacher—had to deal with a group of troublesome pupils (played by her fellow student teachers) and she did an excellent job. It was very different from the presentation she had given several weeks before, in a wavering voice and with hands trembling. Of course, the main credit goes to the teacher herself, but as her supervisor, I was also tremendously pleased after her impressive performance. The best thing about the whole affair is that, in a later e-mail, she shared with me all sorts of other positive experiences she had had. At such moments, you feel as if you have really been able to help someone.

I have noticed that holding core reflection sessions is not only pleasurable for the student teachers, but also for their supervisor. The student is more conscious of his or her core qualities, while for the supervisor it is gratifying to hear that the student had such positive feelings afterwards. And, of course, it is much more enjoyable to point out people’s good qualities than their shortcomings.

Conclusion and discussion

In closing, we can say the following. The ALACT model for reflection (Figure 1) describes a structured reflection *process*. For this reason, the onion model (Figure 4) is an important addition, dealing as it does with the *contents* of the reflection process. The model helps to determine at which level or levels the teacher’s problems are located, and by which level or levels the process can be deepened or broadened. The core reflection model (Figure 5) is an essential supplement to the ALACT model, because it is directed towards promoting a greater awareness on the levels of identity and mission. Core reflection supports the integration of all the levels in a fundamental and authentic way, and helps to build professional growth on the teacher’s sources of inspiration and personal strengths.

Recent studies in positive psychology support the beneficial effects of the view of human growth underlying the core reflection approach. This has to do with the fact that, generally, the process of core reflection is above all enjoyable: it is a rewarding experience to get into touch with one’s inner potential, and to use this as a basis for action. In contrast to various therapeutic approaches, core reflection does not require a deeper delving into a person’s past, with all the pain that this may entail, and yet the process goes deep and leads to fundamental change. This is also a great advantage for teacher educators, who—quite rightly—draw a line between the students’ private lives and their professional development as teachers.

Just as in ‘ordinary reflection’, the important thing is that teachers are finally able to make use of core reflection autonomously, i.e., to go through the process without

the benefit of supervision. In ordinary reflection, one of the main aims is to enable experienced teachers to do so while they are actually teaching (*reflection-in-action*; see Schön, 1987). The same is true of core reflection: ultimately teachers can learn to activate the process of core reflection during their teaching, and in this way to make contact with the core qualities which are of importance at that particular moment.

Good teaching, in our view, is characterized by a proper balance between the various levels. We believe that, ideally, a teacher education programme should focus on all the levels of the onion model in Figure 4, preferably keyed to the various phases of the programme and the developmental processes the student teachers are passing through (for an elaboration see Korthagen *et al.*, 2001, pp. 263–269; Korthagen & Verkuyl, 2002).

It may be self-evident that the approach described above is connected to a holistic view of learning and learners (a view further elaborated in Korthagen, 2004). We believe that the affective aspects of human behaviour and human learning need to receive balanced attention in reflection processes. We hope to have demonstrated that core reflection has the potential to stimulate an awareness of the emotional side of people in a non-threatening manner. This can help to make it more natural to include feelings, emotions, needs, and values in people's reflection on and decisions in educational settings. We are aware of the fact that such a more holistic view of reflection is not very common. Although several publications stress the role of affective and motivational factors in teachers (see the references in the theoretical framework section), until now this has not led to many elaborated strategies to support teachers in their reflection on such matters. Moreover, limiting beliefs in many teacher educators seem to obstruct developments in this direction. For example, the belief that in this way supervision can easily become therapy; that one has to have much more extended training to supervise reflection on emotional aspects than can be offered in a few days; that emotions should not play a role in academia; etcetera. In our experience, such beliefs start to change as soon as teacher educators discover that the competencies needed to deepen teachers' professional development do in fact lie in their zone of proximal development. (This is another example of the close connection between the level of competencies and the level of beliefs: not only are competencies influenced by people's beliefs, but beliefs start to change as soon as people experience that they possess or can develop the competencies to have a much greater impact on other people's learning than they thought was possible.)

Finally, directing attention to core reflection during their professional preparation can help prospective teachers to become more aware of the core qualities of their pupils, so that they will be better able to guide these children in their learning, and help them mobilize their core qualities, in school and in their future lives. This is of particular importance in view of the shifts currently taking place in the role of the teacher as a result of constructivist views of learning. World-wide, teachers have to develop a more supervisory role, which means that they must be capable of developing the self-directing capacity of their pupils. To that end, such core qualities as curiosity, commitment (e.g., to learning), and self-confidence must be stimulated.

In sum, we feel that core reflection, like ordinary reflection, is of crucial importance for teacher educators, teachers, and pupils, and may lead to a shift in our thinking about (teacher) education, a shift concurring with the shift towards positive psychology.

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Notes

1. For more information about these training courses for teacher educators, see Korthagen *et al.* (2001, pp. 239–253).
2. The approach described in the present article has to a large extent been influenced by Almaas' s so-called 'Diamond approach' (see, for example, Almaas, 1986). He places great emphasis on the importance of getting into touch with one's own 'essence', in order to transform one's personality from the inside.
3. Walsh (1992, p. 30) says: 'State-dependent communication may be particularly limited if the receiver of the communication has never experienced the state from which the communication is coming'. See also Tart (1983).
4. In our view it is not so much the negative feelings as such that cause a kind of tunnel vision, but the fixation on these feelings. Negative feelings can also be used as an important incentive to focus on one's ideal, and this supports one's awareness of new possibilities.

References

- Almaas, A. H. (1986) *Essence: the diamond approach to inner realization* (York Beach, ME, Samuel Weiser).
- Beijaard, D. (1995) Teachers' prior experiences and actual perceptions of professional identity, *Teachers and teaching: theory and practice*, 1(2), 281–294.
- Boucouvalas, M. (1988) An analysis and critique of the concept 'self' in self-directed learning: toward a more robust construct for research and practice, in: M. Zukas (Ed.) *Proceedings of the trans-Atlantic dialogue conference* (Leeds, University of Leeds), 56–61.
- Britzman, D. (1986) Cultural myths in the making of a teacher: biography and social structure in teacher education, *Harvard Educational Review*, 56(4), 442–456.
- Calderhead, J. (1989) Reflective teaching and teacher education, *Teaching and Teacher Education*, 5, 43–51.
- Calderhead, J. & Robson, M. (1991) Images of teaching: Student teachers' early conceptions of classroom practice, *Teaching and Teacher Education*, 7(1), 1–8.
- Carkhuff, R. R. (1969) *Helping and human relations* (New York, Holt, Rinehart & Winston).
- Carter, K. & Doyle, W. (1996) Narrative and life history in learning to teach, in: J. Sikula (Ed.) *Handbook of research on teacher education* (New York, Macmillan), 120–142.
- Clandinin, D. J. (1985) Personal practical knowledge: a study of teachers' classroom images, *Curriculum Inquiry*, 15(4), 361–385.

- Clark, C. M. (1986) Ten years of conceptual development in research on teacher thinking, in: M. Ben-Peretz, R. Bromme & R. Halkes (Eds) *Advances of research on teacher thinking* (Lisse, Swets & Zeitlinger), 7–20.
- Connelly, F. M. & Clandinin, D. J. (1984) Personal practical knowledge at Bay Street School: Ritual, personal philosophy and image, in: R. Halkes & J. H. Olson (Eds) *Teachers thinking, a new perspective on persisting problems in education* (Lisse, Swets & Zeitlinger), 134–148.
- Constantine, M. G. & Gainor, K. A. (2001) Emotional intelligence and empathy: their relation to school counselors' multicultural counseling knowledge and awareness, *Professional School Counseling*, 5, 131–137.
- Crow, N. (1987) Pre-service teacher's biography: a case study, paper presented at the *Annual Meeting of the American Educational Research Association*, New Orleans.
- Csikszentmihalyi, M. (1990) *Flow: the psychology of optimal experience* (New York, Harper & Row).
- Cuban, L. (1990) Reforming again, again and again, *Educational Researcher*, 19(1), 3–13.
- Damasio, A. R. (1994) *Descartes' error: emotion, reason and the human brain* (New York, Grosset Putman).
- Damasio, A. (1999) *The feeling of what happens: body and emotion in the making of consciousness* (London, Heinemann).
- Deci, E. L. & R. M. Ryan (2000) The what and why of goal pursuits: human needs and the self-determination of behavior, *Psychological Inquiry*, 11(4), 227–268.
- Dilts, R. (1990) *Changing belief systems with NLP* (Cupertino, CA, Meta Publications).
- Egan, G. (2000) *The skilled helper: a problem management approach to helping* (Pacific Grove, CA, Brooks/Cole).
- Fredrickson, B. L. (1998) What good are positive emotions? *Review of general psychology*, 2, 300–319.
- Fredrickson, B. L. (2000) Cultivating positive emotions to optimise health and well-being, *Prevention & Treatment*, 3, 1–25.
- Fredrickson, B. L. (2002) Positive emotions, in: C. R. Snyder & S. J. Lopez (Eds) *Handbook of positive psychology* (Oxford, Oxford University Press), 120–134.
- Hansen, D. T. (1995) *The call to teach* (New York, Teachers College Press).
- Hargreaves, A. (1998a) The emotional practice of teaching, *Teaching and Teacher Education*, 14(8), 835–854.
- Hargreaves, A. (1998b) The emotions of teaching and educational change, in: A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds) *International handbook of educational change* (Dordrecht, Kluwer), 558–575.
- Havens, L. (1986) *Making contact: use of language in psychotherapy* (Cambridge, MA, Harvard University Press).
- Kolb, D. A. & Fry, R. (1975) Towards an applied theory of experiential learning, in C. L. Cooper (Ed.) *Theories of group processes* (New York, Wiley), 33–58.
- Korthagen, F. A. J. (2004) In search of the essence of a good teacher: towards a more holistic approach in teacher education, *Teaching and Teacher Education*, 20(1), 77–97.
- Korthagen, F. A. J. & Kessels, J. P. A. M. (1999) Linking theory and practice: changing the pedagogy of teacher education, *Educational Researcher*, 28(4), 4–17.
- Korthagen, F. A. J., Kessels, J., Koster, B., Lagerwerf, B. & Wubbels, T. (2001) *Linking practice and theory: the pedagogy of realistic teacher education* (Mahwah, NJ, Lawrence Erlbaum Associates).
- Korthagen, F. & Verkuyl, H. (2002) Do you meet your students or yourself? Reflection on professional identity as an essential aspect of teacher education, in: *Making a difference in teacher education through self-study: proceedings of the Fourth International Conference on Self-Study of Teacher Education Practices* (England, Herstmonceaux), 43–47.
- Levenson, R. W. (1992) Autonomic nervous system differences among emotions, *Psychological Science*, 3, 23–27.
- Ofman, D. (2000) *Core qualities: a gateway to human resources* (Schiedam, Scriptum).

- Palmer, P. J. (1998) *The courage to teach* (San Francisco, CA, Jossey-Bass).
- Peterson, C. & Seligman M. E. P. (2003) *Values in action (VIA): classification of strengths* (Philadelphia, Values In Action Institute). Available online at: <http://www.positivepsychology.org/taxonomy.htm>
- Place, A. W. (1997) Career choice of education: Holland type, diversity and self-efficacy, *Journal for a Just and Caring Education*, 3(2), 203–214.
- Rice, L. N. & Greenberg, L. S. (1990) Fundamental dimensions in experiential therapy: new directions in research, in: G. Lietaer, J. Rombouts & R. van Balen (Eds) *Client-centered and experiential psychotherapy in the nineties* (Leuven, Universitaire Pers Leuven), 397–414.
- Rogers, C. R. (1969) *Freedom to learn* (Columbus, OH, Merrill).
- Ross, D. D. (1987) Teaching teacher effectiveness research to students: first steps in developing a reflective approach to teaching, paper presented at the *Annual Meeting of the American Educational Research Association*, Washington, DC.
- Schön, D. A. (1987) *Educating the reflective practitioner* (San Francisco, CA, Jossey-Bass).
- Seligman, M. E. P. (2002) Positive psychology, positive prevention and positive therapy, in: C. R. Snyder & S. J. Lopez (Eds) *Handbook of positive psychology* (Oxford, Oxford University Press), 3–9.
- Seligman, M. E. P. & Csikszentmihalyi, M. (2000) Positive psychology: an introduction, *American Psychologist*, 55(1), 5–14.
- Sheldon, K. M., Williams, G. & Joiner, T. (2003) *Self-determination theory in the clinic: motivating physical and mental health* (New Haven, CT, Yale University Press).
- Sutton, R. E. & Wheatley, K. F. (2003) Teachers' emotions and teaching: a review of the literature and directions for future research, *Educational Psychology Review*, 15(4), 327–358.
- Tart, C. (1983) *States of consciousness* (El Cerrito, CA, Psychological Processes).
- Tickle, L. (1999) Teacher self-appraisal and appraisal of self, in: R. P. Lipka & T. M. Brinthaupt (Eds) *The role of self in teacher development* (Albany, NY, State University of New York Press), 121–141.
- Valli, L. (1990) Moral approaches to reflective practice, in: R. T. Clift, W. R. Houston & M. C. Pugach (Eds) *Encouraging reflective practice in education* (New York, Teachers College Press), 39–56.
- Vanaerschot, G. (1990) The process of empathy: holding and letting go, in: G. Lietaer, J. Rombouts & R. van Balen (Eds) *Client-centered and experiential psychotherapy in the nineties* (Leuven, Universitaire Pers Leuven), 269–293.
- Walsh, R. (1992) The search for synthesis: transpersonal psychology and the meeting of east and west; psychology and religion, personal and transpersonal, *Journal of Humanistic Psychology*, 32(1), 19–45.
- Watzlawick, P., Weakland, J. H. & Fisch, R. (1974) *Change: principles of problem formation and problem resolution* (New York, Norton).
- Weber, S. & Mitchell, C. (1995) *'That's funny, you don't look like a teacher!'* (London, Falmer Press).