Teacher–student contact: Exploring a basic but complicated concept

CrossMark

Fred A.J. Korthagen [a,*], Saskia Attema-Noordewier [b], Rosanne C. Zwart [a]

[a] Utrecht University, The Netherlands
[b] VU University, Amsterdam, The Netherlands

HIGHLIGHTS

- The study combines a theoretical and empirical approach to teacher–student contact.
- Contact is a combination of awareness of inner processes and external contact.
- In moments of good contact, the process is reciprocal and self-reinforcing.

ARTICLE INFO

ABSTRACT

Contact is fundamental to teacher–student relationships, but empirical studies or theoretical frameworks on teacher–student contact are rare. This article describes a theoretical and empirical exploration aimed at building such a framework. In two studies using classroom observations and interviews with teachers and students, we found interesting features of teacher–student contact. We conclude that contact is a very personal experience, in which teachers' ideals and core values play a central role. Using frameworks from other fields, we were able to define teacher–student contact as a two-way interactive process, in which both participants influence each other's cognitive, emotional, motivational and behavioral responses.

© 2014 Elsevier Ltd. All rights reserved.

"What I must do is to be totally and non-selectively present to the student — to each student — as he addresses me."

Noddings, 1984, p. 180.

1. Introduction

An issue both student teachers and experienced teachers often talk about, is the contact with their students. Although these conversations sometimes deal with negative experiences in the contact, for many teachers positive contact experiences in the interaction with young people are the driving force behind their choice to become a teacher (Newman, 2000; Palmer, 1998). Moreover, the nature of teacher–student contact seems relevant to the learning process and thus to educational outcomes. Studies on maintaining discipline in classrooms also point towards the central role of contact (Doyle, 2006). Contact thus seems a fundamental

issue in teaching (Noddings, 2003; Van Manen, 1994). At the same time, although much has been published about maintaining classroom discipline or promoting a positive learning climate, the underlying and fundamental notion of 'contact' has seldom been the direct object of studies on teaching. However, researchers do publish studies on related concepts such as teacher–student relationships and presence (Meijer, Korthagen, & Vasalos, 2009; Rodgers & Raider-Roth, 2006).

In other helping professions, too, contact seems a basic concept. For example, in the field of psychotherapy many researchers studied the effectiveness of specific approaches. In their overview of the research in this area, Lambert and Bergin (1994) concluded that it is hard to maintain that one therapeutic approach is more effective than others, but that most of the effectiveness of therapy appears to be influenced by factors not related to a specific approach but by the quality of the contact between the therapist and the client. Hence, it is not the specific approach that therapists use that makes the difference but more how they are creating a type of contact that is supportive of personal growth. Would this not be the same in the field of teaching?

In several studies a significant relation has been found between the quality of teacher–student relationships and outcome variables

* Corresponding author. Takstraat 14, 3572 HZ Utrecht, The Netherlands. Tel./fax: +31 30 2710692.
   E-mail addresses: fred@korthagen.nl, F.Korthagen@uu.nl (F.A.J. Korthagen).

such as engagement in learning activities (Skinner, Wellborn, & Cornell, 1990), positive feelings about school (Gest, Welsh, & Domitrovich, 2005), and higher levels of academic and behavioral competence and achievement (Gest et al., 2005; Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008; Wentzel & Wigfield, 1998). However, it is not clear what such publications on teacher–student *relationships* mean for teacher–student *contact*. What exactly is contact? What is the theoretical meaning of this concept? Does this theoretical meaning concur with how in practice teachers experience and talk about the contact with their students? These were questions guiding our research into the contact between teachers and students. They seem highly relevant for the daily practice of teaching and thus also for teacher education.

First, we wish to emphasize that we distinguish 'contact' from 'relationship'. The latter term refers to a more enduring phenomenon: relationships develop over time and may last for months or years. Contact is a *momentary experience related to an encounter in the here-and-now*, although in some cases it may last for several minutes. Hence, we can speak about 'contact moments'. Buzzelli and Johnston (2002, p. 120) referred to such a contact moment as "a point" [in time]. Fredrickson (2013) speaks about micro-moments of connection. Relationships grow on the basis of many contact moments. For example, when a teacher wishes to build a trusting relationship with a student, in general this may take quite some time and a large number of contact moments in which trust is gradually being built.

Second, it may be clear that the term 'contact' may refer to rather different experiences. Saying hello to a student in the school corridor is quite a different experience from having an intense contact with a student about a serious personal problem. Thus, there is a continuum from superficial to more intense contact. Although we soon discovered that in the literature on teaching and teachers not much is written about such a distinction, we did find related notions in the theory on Gestalt therapy. The founders of Gestalt therapy, Perls, Hefferline, and Goodman (1951) defined contact as "the sense of the unitary interfunctioning of you and your environment" (p. 73). This is exactly what we were interested in, assuming that teachers know and value such specific experiences of unitary interfunctioning. Perls (1969) related such contact moments to the *I–Thou relationship* as described by Buber (1958). Buber also distinguishes contact from relationship and states that real contact in an I–Thou relationship is in contrast to casual contact between people, which he describes as an I–It association. In such cases the other person is perceived more as an object and the quality of the contact is businesslike, habitual (Korb, Gorrell, & Van de Riet, 1989). We were especially interested in the questions of how teachers experience moments of "unitary interfunctioning" with students and what are the characteristics of such contact moments.

In more everyday terms we briefly refer to this unitary inter-functioning as *good contact*, in order to demarcate the difference from more superficial contact. We have also chosen this term as it concurs with what is common in conversations between teachers, who often talk in terms of good or bad contact with students. Our assumption was that a thorough scholarly exploration of good contact might reveal that the concept is not self-evident and deserves close analysis.

A more elaborated discussion of the available theoretical notions that we found will be presented in the next section. We will conclude that as an area of academic research, the topic of teacher–student contact seems to be in its infancy and thus our research can be seen as an exploration of an unknown territory. It seems much too early to think of large-scale studies in this area. Hence, we carried out a first small-scale study among teachers in one small primary school in the Netherlands. In order to make an in-depth

analysis possible, we decided to study the topic in a relatively small number of cases. We soon found discrepancies between our theoretical exploration and our study of contact as it emerged from practice: existing theories did not always concur with the teachers' way of thinking and talking about contact. In addition, giving justice to their perceptions of contact seemed to be in contrast with a focus on observable elements (e.g. making eye contact). This led to a second study, in which we built our analysis more on teachers' perceptions and meaning-making. How these teacher thought about contact contributed considerably to our understanding of how the concept of contact is being used — implicitly and explicitly — in practice. We believe that this may help future researchers in building a theoretical framework regarding teacher–student contact that is ecologically valid. By definition this means that the methods, materials, and setting of the research approximate the real-world that is being examined (Brewer, 2000).

2. Theoretical framework

In this section we will discuss the theoretical background to our research, in particular the concepts of teacher–student relationships, contact, presence, and engagement.

2.1. Teacher–student relationships

As noted above, there is an extensive literature on *teacher–student relationships*, in which we can perceive various theoretical orientations.

A first theoretical perspective on teacher–student relationships is the traditional *extended attachment perspective*, based on research about the relationship between mother and child (Riley, 2011; Spilt, Koomen, & Thijs, 2011; Watson, 2003). According to this theory, feelings of security in the student are promoted by a positive relationship with the teacher, which is seen as a necessary precondition for learning (e.g. Thijs & Koomen, 2008).

A second theoretical perspective is *Self-Determination Theory* (SDT), which describes three basic psychological needs: the need for autonomy, competence, and relatedness (Deci & Ryan, 2000). Fulfilment of these three needs is essential to psychological health and growth, intrinsic motivation, well-being, optimal functioning, and self-actualization (Deci & Ryan, 2000).

A third theoretical perspective is *Relational-Cultural Theory* (RCT) (Jordan, 1986; Miller, 1976; Spencer, 2000). It rests on the assumption that healthy, growth-enhancing relationships are crucial to human development (Gilligan, 2011; Miller & Stiver, 1997). Central concepts in this theory are *connection* (and connectedness), *disconnection*, and *reconnection* (Spencer, 2000).

Systems theory is another theoretical approach that has been used to understand teacher–student relationships. For example, Pianta (1999) used systems theory with the aim of helping teachers understand the many factors involved in their classroom relationships. Stieha's theory of a *relational web* (Stieha & Raider-Roth, 2012) built on Pianta's work and views the teacher's professional life as an interconnected system embedded within the relationships with others (e.g. students, colleagues, administration).

A number of other researchers have contributed additional notions and insights, in particular about *pedagogical* relationships. Drawing on interviews with children, Raider-Roth (2005) claimed that building *trust* in teacher–student relationships is pivotal to students' capacity to learn (cf. Bryk & Schneider, 2003; Watson, 2003). This concurs with Chu (2004), who emphasized that teacher–student relationships influence the thinking, feeling, and desires of students. Way and Chu (2004), who studied adolescent boys, stated that adults who are able to establish *caring relationships* with them, contribute to positive outcomes in all aspects of

the boys' lives. Brown and Gilligan (1991, 1992) showed that this is evenly true for girls.

Researchers have found significant correlations between certain measures for assessing the quality of teacher–student relationships on the one hand and cognitive performance, motivation, and wellbeing of students on the other (Gest et al., 2005; Spilt et al., 2011; Valiente et al., 2008; Wentzel & Wigfield, 1998). Roorda, Koomen, Spilt, and Oort (2011) conducted a meta-analysis showing substantial associations of both positive and negative teacher–student relationships with student engagement and achievement. Hamre and Pianta (2001) found that affective teacher–student relationships have a positive long-term impact.

All the above perspectives have much value and are helpful to our understanding of teacher–student relationships, but they do not directly deal with *contact*. Only Noddings's work (1984, 2003, 2005) on the *ethics of care* in relationships does describe optimal contact, as it focuses on what happens in the encounter in the here-and-now. Therefore, we will discuss Noddings's work in the next section.

2.2. Contact

Although there is not much research in which *contact* (defined as a *momentary* phenomenon) was studied in detail within educational settings, the literature does describe specific *aspects* of good contact, such as *eye-contact* (Andersen, 1979; Hamlet, Axelrod, & Kuerschner, 1984), *empathy* (e.g. McAllister & Irivine, 2002), and *positive feedback* (e.g. Voerman, Meijer, Korthagen, & Simons, 2012; Fredrickson, 2002).

Frymier and Houser (2000) described how the contact between students and teachers can be understood in terms of the communication skills used to develop and maintain friendships (Burleson & Samter, 1990) and showed that the use of these skills by teachers is positively related to student learning and motivation. *Immediacy* in the teacher–student contact is another aspect for which such relations have been found (Christophel, 1990; Frymier, 1994; Kearney, Plax, & Wendt-Wasco, 1985). It is the perception of closeness between persons (Richmond, Gorham, & McCroskey, 1987) and is communicated through behaviors such as calling students by name, asking them about themselves, and asking for their opinions (Gorham, 1988), as well as through nonverbal behavior (Andersen, 1979).

In conclusion, although there are some publications on specific, observable aspects of contact and studies on related concepts, we agree with Andrzejewski and Davis (2008), who stated: "Inasmuch as the importance of teacher–pupil relationship quality is minimized in the current educational climate, the role of human contact in building those relationships appears to be overlooked altogether" (p. 780).

However, if we take a closer look at the work by Noddings (1984, 2003, 2005) on the ethics of care, we see that much of what she wrote about has to do with encounters between teachers and students in the here-and-now, hence with what we call 'contact'. In line with the distinction made above, Noddings, too, stated that investment in such momentary encounters is not the same as building a relationship:

"I do not need to establish a deep, lasting, time-consuming personal relationship with every student. What I must do is to be totally and non-selectively present to the student – to each student – as he addresses me. The time interval may be brief but the encounter is total."

Noddings, 1984, p. 180

Noddings may thus be the most prominent scholar in education who does give attention to contact. She writes: "First it is a desire to come into direct, undiluted contact with the human partner of the educational enterprise" (Noddings & Shore, 1984, p. 157). According to Noddings (1984) such contact requires but is not synonymous with *presence*.

2.3. Presence and engagement

This latter concept of *presence* has drawn the attention of various scholars, for example in business and management (e.g. Senge, Scharmer, Jaworski, & Flowers, 2004). Scharmer (2007) put the notion of presence at the center of optimal human functioning. Rodgers and Raider-Roth (2006) positioned presence within the context of teaching (cf. Stieha & Raider-Roth, 2012), presenting the following definition: "Presence from the teacher's point of view is the experience of bringing one's whole self to full attention so as to perceive what is happening in the moment" (p. 267). Meijer, Korthagen, and Vasalos (2009) related the concept to what in Buddhist traditions is called "full awareness" (Greene, 1973, p. 162; Mingyur Rinpoche, 2007, p. 94).

Although there are thus connections between the concepts of presence and contact, they are not similar. Presence is a state of being of the person, and a necessary, but not sufficient condition for good contact. If a student is extremely angry with another child, the teacher can be fully present to the situation and even to the student's emotions, but this does not guarantee that there is an experience of good contact with the student. The latter requires a connection in the here-and-now between both, and thus also a willingness and openness in the student regarding a personal connection with the teacher in the moment. In other words, a basic requirement is that *both* participants in the interaction are *present to each other*.

Finally, (work) *engagement* is a concept that comes close to presence. It is defined as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). Hence, we can see that a teacher's work engagement is another important, but not sufficient state of being in order to have an experience of good contact with a student. A precondition for contact is that *both* are engaged in the situation and are open to a connection with the other in the here-and-now.

3. Study 1: a first exploration of teacher–student contact

Our first empirical investigation into the notion of contact as used in practice was an exploratory study in which our research questions were:

1. What are elements of good teacher–student contact, in the perception of teachers?
2. How does good teacher–student contact influence the student?

As we wished to delve deeply into the phenomenon of one-to-one contact, we focused on contact between individual teachers and students and not on contact between a teacher and a group of students.

3.1. Research method for study 1

This study was carried out in a small primary school in the Netherlands, in which the teachers had previously shown an interest in the topic and shared the view that teacher–student contact is fundamental to student learning. The school consisted of five student groups, with children aged from four to twelve. Table 1 presents background information about the five teachers.

We deliberately did not start from an a priori perspective, for example by observing these teachers and their interactions with

Table 1
Characteristics of the five teachers.

Pseudonym	Gender	Dutch grade level	US grade level[a]	Age	Years of experience as a teacher
Ken	Male	6 & 7	4 & 5	31	5
Judith	Female	1	K1	28	5
Lisa	Female	4 & 5[b]	2 & 3[b]	25	2
Ellis	Female	3	1	42	18
Peter	Male	8	6	36	10

[a] In this column, we use the North-American way of numbering grade levels (which differs from what is usual in the Netherlands).
[b] In the second study Lisa taught in grade level 4 and 5 (numbered in the North-American way).

students using categories based on the above theoretical framework. First of all, we wanted to understand how *teachers* experience and talk about (good) contact, in other words, we wished to understand contact from an *actor perspective*. Therefore, we interviewed one teacher from each student group ($n = 5$) on two instances of good contact during their regular lessons, based on their own choice of these instances.

We were careful concerning ethical procedures in our research. We promised and guarded anonymity and checked with the teachers whether they agreed with how we reported on the interviews. Being a Professional Development School, the school had a formal agreement with the parents that their children could be included in research studies within the school. Moreover, in a newsletter to the parents the school had announced this specific study. In addition, we carried out and described our study in such a way that the children could not be recognized from quotations or could otherwise be harmed.

3.1.1. Data collection: stimulated-recall interviews

We used *stimulated-recall interviews* (Calderhead, 1981) based on video-recordings of teachers working individually with their students. In order to make an in-depth analysis possible, we limited ourselves to a small number of cases. Five teachers were filmed in their regular classrooms during interactions with individual students for a minimum of 10 and a maximum of 20 min. The teachers were asked to behave as usual. On the same day the recordings were made, each teacher was asked to view the recordings and choose the two best moments of good contact between themselves and a child, which thus resulted in ten cases. The moments had to last between 5 s and 1 min. If the moments were shorter, it would perhaps not be clear what exactly was happening. If they were longer, lots of different things would happen in the contact and the fragment would actually consist of various contact moments. After the teachers had chosen their two video fragments, we interviewed them. The interviews were semi-structured and based on two leading questions:

a. What do you think is good contact?
b. How do you experience instances of good contact?

During the interview, this was further elaborated in subquestions, such as: What makes you identify this as an example of good contact? Is it an example of a general principle of good contact? If so, what is the general principle? What were you experiencing in this episode? What do you think the student experienced in the fragment? What do you think was the effect on the student?

Next, two questions were asked about the moments that had not been selected:

c. In what ways do the moments you did <u>not</u> choose differ from those that you did?
d. What is the reason that in those instances you didn't do what you did in the chosen fragments?

3.1.2. Data analysis

On the basis of the interview data, one researcher created a matrix giving an overview of the chosen contact moments taken from the video recordings and the teachers' answers to the questions from the stimulated-recall interviews. Next, this researcher categorized the teachers' utterances using a grounded-theory approach (Strauss, 1987; Strauss & Corbin, 1998). A few of the categories seemed to mirror elements from the above theoretical framework (e.g. connection and presence), but not all. To improve the quality of the analysis the categorization process was discussed with the other two researchers acting as 'critical friends' (Day, 1999). Lincoln and Guba (1985) call this *peer debriefing*. This means that critical questions and alternative interpretations were discussed until agreement was reached. This led to splitting one category, namely 'connection', into two: connection specifically understood as a feeling of togetherness and the more physical and observable aspect of eye-contact.

3.2. Findings

From the interviews we learned that the teachers' perceptions of what characterizes good contact moments were quite idiosyncratic and that it was hard to put their answers to the interview questions into general categories relevant to all teachers. The left-hand column of Table 2 shows the most important elements of good contact in terms coined on the basis of the data. The right-hand column presents examples of how teachers described these elements in the stimulated-recall interviews.

Table 2 shows that the categories that we found only partially matched our theoretical framework. Moreover, we discovered that the teachers' answers to our questions were rather focused on visible elements of contact and their effect on the students, probably due to the use of video as a stimulus in the interviews. In other words, we felt a bias, both in the teachers and in ourselves as researchers, towards an 'external' or 'observational' perspective. Only when being asked the question "what were you experiencing in this episode?" did the teachers also describe their feelings, which often appeared to be related to their inner motives, ideals, and core values regarding teaching. Hence, what creates an experience of good contact appeared to depend on motivational aspects in the individual teachers. For example, certain moments were mentioned as examples of good contact because the teachers thought that the student felt seen or that the child felt taken seriously, which seemed to mirror a pedagogical goal or ideal of the

Table 2
Elements of good teacher–student contact, mentioned by the teachers.

Element	Examples of the teachers' utterances
Eye contact	*Peter:* I look for eye contact. *Lisa:* I look at him and he looks back, you look each other in the eyes. *Judith:* I sit down besides him, and look at him
Making connection	*Ken:* I look at the problem together with her, and try to find out what her exact problem is. *Ken & Judith:* I go down to the same level. [physically]
Empathy	*Ken:* I take an empathetic stance. *Ellis:* That I understood her, I really understood her insecurity.
Being there	*Ken:* They know I stand there and really take the time for them [the students]. I am patient. *Judith:* I am really there for her, only for her. *Lisa:* There is more calmness in me. *Peter:* I was more calm than normally.
Positive feedback	*Lisa:* I gave him positive attention. [...] For a moment I was positive, after all that negativity. *Ken:* I tell her what she did well. *Judith:* I gave him a compliment.

teacher. We concluded that this motivational dimension should receive more attention than we had originally given it in this study.

When asked, the teachers could perceive several behavioral effects of the good contact moments on the students. Most often they saw differences in how actively and attentively the students went back to their learning task at hand. A few examples of what teachers observed:

- *Ken:* "She picks up her pen and goes back to work."
- *Judith:* "The student goes back to work and is indeed able to do so."
- *Peter:* "They are really learning. […] They are focused, there is attention."

Also effects on the students' feelings were mentioned. Some examples: "The student experiences a positive feeling" (*Lisa*), "I see a little smile, I think I am seeing satisfaction" (*Ellis*), "The self-confidence gives motivation" (*Peter*), "She finds it great to get my attention" (*Judith*), and "He felt being seen" (*Ken*). Of course these were all interpretations by the teachers, but it could be an indication that good contact may have an effect on the students' active and attentive learning behavior, as well as on their emotional states.

When asked to compare moments of good contact with other contact moments, the teachers indicated that those other moments were more volatile and often characterized by less restful attention and less eye-contact. The main reason they gave was a lack of time, caused by the fact that other children also needed attention.

Regarding our second research question (How does good teacher–student contact influence the student?), we tentatively concluded that good contact seems to influence the degree of active and attentive learning behavior of students and that there may also be an important influence on the students' emotions and motivation.

3.3. Reflection

Looking at the outcomes of our first study, we arrived at the following conclusions:

1. It appeared difficult to put the teachers' personal experiences into general categories applicable to all of them. How good contact was described by the teachers in specific instances depended strongly on the specific student with whom the contact was experienced, but also on the specific teacher and, in particular, on *inner motives* and *core values* of the teacher.
2. The more we tried to probe the details of the teachers' experiences and tempted them to find words for describing moments of good contact in terms of the theoretical frameworks outlined above, the more both we as researchers and the teachers felt that we lost the essence. Even though some elements were mentioned by more than one teacher (see Table 2), neither the teachers, nor we ourselves felt that good contact could be reduced to these elements.
3. In order to understand teacher–student contact more deeply, we needed to avoid a strong focus on specific *visible* aspects and should study the phenomenon from a more *meaning-oriented* perspective. It is not only what the teachers *do* (specific behaviors) that we were interested in but most of all how they *experience* the contact and what it means to them and why. In other words, we felt that we should further strengthen a meaning-oriented approach in our data collection, as opposed to an analysis of observable phenomena.
4. As the teachers repeatedly talked about what they observed in their students and interpreted their students' feelings, we felt we had to include the students themselves in our study. We started to question what these students experienced in the

contact moments under study and what the meaning was they attached to these moments.

These four conclusions shaped the way in which we set up a second study.

4. Study 2: a meaning-oriented exploration

Based on the above conclusions from the first study, we also included the students with whom the teachers interacted in the second study. This second study was framed from a meaning-oriented perspective. We worked bottom-up, trying to understand what the interaction in specific contact moments *meant* to the actors in a situation and how it was *experienced,* assuming that their experiences are related to the cognitive, the emotional, and the motivational dimensions within the person (i.e. how they think about the contact, what they feel, and what motivates or drives them). Hence, our research questions were:

1. What, according to the teachers, is the meaning *for teachers and students* of good contact moments between them?
2. Which personal characteristics or inner motives (ideals) or beliefs of the teacher play a role in what they experience as good contact in the classroom and how do these play a role in their actual behavior?
3. What, *according to the students*, is the meaning of the contact moments chosen by the teacher?

4.1. Research method

4.1.1. Participants and contact moments
In the second study the same teachers participated as in the first study ($n = 5$), but we started with a new round of observations of ten to 20 min classroom situations with one-to-one contact moments. Again these were video-taped and used as the basis for stimulated-recall interviews. Although in the first study the use of video may have caused an overemphasis on observable behavior, we felt that we still needed the strong stimuli that video recordings provide to the teachers in order to be able to probe into their perceptions and meaning-making of specific instances of contact. However, in the second study we deliberately focused more on these perceptions and on meaning-making.

In order to arrive at a more profound understanding of the teachers' views on the issue of contact, we asked them not only to select two moments of good contact but also one example of what they would call bad contact with a student. We thought it would be better not to ask for more examples of bad contact, firstly because there might not be that many and secondly, because if there were more, this could be rather confrontational to the teachers and we wished to keep the interview situation sufficiently safe. Hence we focused our study on 15 contact moments, three per teacher.

In this second study we in addition interviewed ten students, two from each teacher's class, also using a stimulated-recall approach. The students were aged between four and twelve. In this study too, we promised and checked for anonymity, in this case concerning both the teachers and the students.

4.1.2. Teacher interviews
The leading questions in the teacher interviews were partly similar to those in the first study, but we also included the following new questions:

- What do you consider to be good teacher–student contact?
- What is bad teacher–student contact?
- What does good contact mean to you and your students?

Table 3
Interview questions for the student interviews.

1. Can you tell me in a few sentences what you have just seen?
2. How did you experience seeing … [interviewer repeats the student's answer to the first question]
3. What made you experience that?
4. What did you feel (think, want) when … What made you feel (think, want) that?
5. I also watched this fragment with your teacher, and s/he thought you were experiencing … [the interviewer uses the teacher's words]. Is that correct?
6. Was there a difference in what you felt, thought, wanted, did after the moment as compared with before the moment when … ? If yes, what was the difference?
7. What do you think caused this difference?

We deliberately dropped the idea that we had to follow a linear structure in the interviews. Rather we used a mind-map with questions serving as 'sensitising concepts' and mainly followed the stream of thoughts from our respondents, in order to understand their process of meaning making, while avoiding the emphasis on observable phenomena that occurred in the first study. Now and then we probed a specific aspect if this seemed helpful to arrive at a deeper understanding of the teachers' thoughts, feelings, and motivations.

Each interview ended with an explicit summary of the interview by the researcher, which the teacher could correct if felt necessary. In addition, a couple of months later the analyses and final conclusions of the study were checked for accuracy and validity in a group meeting with the teachers. This showed that the teachers agreed with these. This procedure represents what Lincoln and Guba (1985) call a *member check*. In a member check the interpretation of the data and the research report (or a portion of it) is given to members of the sample with the aim to improve the accuracy, credibility, and validity of the study (Harper & Cole, 2012; Lincoln & Guba, 1985).

4.1.3. Student interviews

After each teacher interview the students appearing in the chosen fragments of good contact were asked to watch the fragment and were then interviewed about how they experienced this specific moment. The central questions for these student interviews are listed in Table 3. Of course, the interviewer adapted the language of these questions to the children's level of understanding. This was facilitated by first piloting the interview format with a

teacher not involved in our study and three children from the same age group as the children in our study.

4.1.4. Data analysis

In the data analysis we again used a grounded-theory approach (Strauss, 1987; Strauss & Corbin, 1998), in which we did not start from preconceived frameworks but worked bottom-up. One researcher analyzed the interviews with the teachers and the students and wrote down emerging themes. As we were interested in *contact as experienced by the teachers*, we focused on the teachers' utterances and used the student data to better understand the teachers' experiences and perceptions. This meant that the starting point of the analysis was always the teacher's choice of good and bad contact moments and their perceptions, explanations for, and connotations connected with the moments they had chosen. The themes surfacing from the teachers' utterances were placed into categories. Sometimes teacher utterances could be put into more than one category (for examples, see Table 4). The two other researchers served as critical friends, checking the data and the conclusions for inconsistencies or omissions (peer debriefing). This led to a discussion concerning some minor issues, a joint decision about a final list of categories, and a tentative formulation of conclusions. Next, while observing the video recordings of the teacher interviews, one researcher selected every example and counterexample of each conclusion as it was visible in the video. The exact timing and wording of these (counter)examples were recorded into an observation scheme.

In order to further validate the data collection, analysis, and conclusions, an *audit procedure* was conducted (Akkerman, Admiraal, Brekelmans, & Oost, 2008). All steps taken during the data collection and data analysis were audited by an independent researcher. There appeared to be total agreement between the two researchers.

4.2. Findings

4.2.1. Emerging themes

Similar to study 1 we heard quite a variety of views and notions, in which the following themes were mentioned by the five teachers, but not by all:

- Response, interaction, mutuality (*Lisa, Ellis, Peter*)
- Eye contact, really seeing the student, personal attention (*Ken, Lisa*)

Table 4
Examples of the teachers' utterances about what they thought was happening in the student during good contact moments, put into four categories.

Categories →	1	2	3	4
Teacher utterances ↓	Cognitive insight	Positive feeling	Increased motivation	Behavioral impulse towards the task
• *Ken:* "I think she feels being seen. […] She feels enthusiasm."		X		
• *Ken:* "I think that she now knows how to go on now; she starts writing it down immediately."	X			X
• *Judith*: "You see how happy he was when I said 'now you are now going to draw a circle.' 'Yes, I'm going to do that!', he said."		X	X	X
• *Lisa*: "I think she liked it, me giving her attention. […] I think she liked getting an explanation and clarity."	X	X		
• *Lisa*: "You see her smiling, a real smile, and in fact she is responding o my compliment."		X		
• *Lisa*: "I think I gave him some calmness; he becomes calmer and starts working in a concentrated manner."		X		X
• *Ellis*: "More motivation, commitment, and initiative. He starts working with more self-confidence."		X	X	X
• *Peter*: "As I respond and smile, she feels it's okay and she goes on [with her work]."		X		X

- Pleasure, relaxation (*Ellis, Peter*)
- Taking the student seriously (*Judith*)
- Making a connection, attuning (verbally and non-verbally, e.g. being in the same position, in particular sitting down) (*Ken*)

4.2.2. The meaning of good contact

Answering our first research question, for the teachers the meaning of good contact appears to lie in an effect on the student that they perceived and considered positive. In good contact moments they saw something happening in the student that they valued, something they found desirable. Often this was:

(1) a cognitive insight (understanding of the task at hand),
(2) a positive feeling (e.g. the student becomes glad, calmer or more re-assured),
(3) increased motivation (visible in the videos as enthusiasm or joy), and/or
(4) a behavioral impulse towards the task (almost always the student returns to the task at hand and keeps working on it).

Representative examples are presented in Table 4 and related to these four categories.

It was remarkable that in nine out of the ten selected contact moments the teacher noticed a positive feeling in the student. In the remaining case the teacher was not certain about this. In most cases it was obvious from the video recordings that the students started to actively work on the task after the contact moment, because they seemed to know how to proceed. The teachers often (but not always) said that the positive feelings or the behavior they observed in the students during the moments of good contact, in turn gave them a positive feeling too. They reported that they experienced these positive feelings not only when watching the video but also during the contact moment itself (a quote: "I enjoyed this moment").

When talking about the selected bad contact moments, the teachers noted such features as not really acknowledging the child (*Judith*), lack of eye-contact and interrupting the conversation (*Lisa*), only making brief eye-contact and then forgetting about the child (*Ellis*), interrupting the student's thinking (*Ken*), and not being focused: "It was not clear to whom I had put the question" (*Peter*). This shows that in moments of bad contact the teachers often just did not really acknowledge the student, often because at the same time they were doing other things, such as maintaining classroom discipline, and sometimes because they were just not attuned to the child's learning process at that particular moment.

4.2.3. Ideals and core values

Concerning the second research question, we recognized that experiences of good contact as perceived by the teachers were generally instances in which they felt they were enacting personal ideals or core values in their teaching. It was remarkable that, when asked, the teachers could easily make their ideals explicit, which seems to indicate a certain degree of awareness of what guided them in the chosen contact moments. In Table 5 we present examples of naming personal ideals or core values, which are put in italics. (These two concepts could not always be separated, as an ideal can always be reformulated as a core value.)

4.2.4. The student perspective

The interviews with the students did not always yield very detailed information. As the students were sometimes rather young, answering our questions was often difficult for them. Still we did get interesting information as the students' responses generally indicated that (1) the chosen contact moment gave them a better understanding (cognitive insight) and/or (2) a positive

Table 5
Examples of utterances in which the five teachers name personal ideals or core values (put in italics).

- *Ken:* "What I liked is that she felt *being heard.*"
- *Judith*: "In good contact moments *the child feels seen*, there is a *response*, the child *feels taken seriously*. And such moments fit in with *my deeper ideal that every student should be learning, should have a good day, and a success experience.*"
- *Lisa:* "Yes, I do have *the ideal of establishing good contact with all the children* and *a nice and pleasant atmosphere*, and I do have that feeling here in this moment [video] and that's why you can later build onto it."
- *Ellis:* "The student *gets connected to the task at hand, it really becomes something they own.* There is *mutual understanding, the other's thinking is being stimulated.* There is *a two-way interaction.* The effect on the student is a *nice feeling*, joy, and they start *working on the assignment more actively, more self-confidently, the assignment has become something of their own.*"
- *Peter:* "In good contact, there is something like *fun, joy, relaxation, a joke*, it's real, the student [in the video] is completely *in touch with the questions you are asking,* and you [as a teacher] can follow her and ask questions. […] It feels like a *mutual thing.* And what I find important in it is that *the children feel at ease and full of confidence and that they can learn in a joyful manner.*"

feeling, and/or (3) they started to return to their task (behavioral impulse). Table 6 shows examples of the students' utterances, put into these three categories. When we compare Tables 4 and 6, we see that, different from the teachers, the students do not talk about increased motivation. Probably they do not distinguish between a positive feeling and experiencing more motivation.

We also checked with the students whether the teachers were right about the feelings they thought the students had (in more academic terms this reflects whether the teachers showed empathy). Although there were some minor exceptions, we could conclude that generally the interpretations of the teachers about what happened to the students during the chosen contact moments, concurred with what the students told us.

5. Conclusions and discussion

The topic of teacher–student contact seems fundamental to teaching. As explained, it differs from related topics, such as (pedagogical) relationships, presence, and engagement, which have been studied in depth, also theoretically. Important in contact is the momentary, mutual experience of unitary interfunctioning. Through our two exploratory studies we have gained a better understanding of why the theme of contact is so under-researched. Although it seems a basic topic, it soon becomes complicated when one starts to study it from an academic stance. In our first study we tried to build on teachers' descriptions of good contact moments, but we found that this was a difficult, if not impossible enterprise, because of the idiosyncratic nature of teachers' experiences of their contact with a student and perhaps also as a result of our research method. In any case, traditional theoretical frameworks did not seem to be of much help. In our second study we used a more meaning-oriented approach, in which we stayed closer to the teachers' experiences and also involved the students. This led to a number of interesting findings. Before we summarize them, we wish to emphasize that our conclusions are only tentative. As the scope of our studies was rather limited in order to make in-depth analyses possible, it may be better to speak of hypotheses or first indications instead of conclusions. They are grouped into various subsections, in which we discuss (5.1) the personal aspect in good contact, in particular the role of ideals and values, (5.2) the impact of good contact on students, and (5.3) the fact that in good contact there seems to be a reciprocal influence, a kind of resonance between the teacher and the student. In Section 5.4 we distinguish between internal and external contact and briefly discuss the role of awareness. In Section 5.5 we summarize the contact process in a

Table 6
Examples of the students' utterances about what happened in them during the contact moments chosen by their teachers, put into three categories.

Categories →	1	2	3
Student utterances ↓	Cognitive insight	Positive feeling	Behavioral impulse towards the task
• "I found it funny. […] I like jokes. Then it is not so boring and you have something funny in-between."		X	
• "It was kind of relaxed […] At first I did not like to go on working, but after this I did."		X	X
• "I liked it that she [the teacher] helped me, otherwise I could not do the exercise."		X	
• "I wanted to know this, otherwise I could not finish my task for the week. At first I did not understand but afterwards I did."	X		
• "The teacher gave me a compliment and that made me feel glad, for I had done my best to finish my task, for I had been ill for two days this week. I think she was pleased because I had done so much."		X	
• "I understood less and less and then I talked with the teacher and then he explained and then it was much better than I thought. […] I understood the exercise much better than before. […] I felt a lot happier that I could do this exercise and then I immediately started to work on it."	X	X	X

figure, which also helps us understand the role of empathy (Section 5.6). In Section 5.7 we synthesize our findings and introduce a description of the concept of teacher–student contact. Finally, we discuss the implications of our findings for practice and for research (5.8).

5.1. The personal aspect, in particular the role of ideals and values

What emerged most obviously in our studies is the personal aspect in teacher–student contact. We have drawn the following conclusions:

1. *Contact is a rather personal and idiosyncratic experience, in which the whole of the teacher as a person is involved.*

2. More specifically, it seems that *teachers experience contact moments with a student as good if in this contact an ideal, inner drive, or core value of the teacher could be enacted.* The teachers could rather easily make their ideals explicit in relation to the chosen moments of good contact. Apparently such pedagogical ideals are a driving force in their work (cf. Hansen, 1995). This second conclusion concurs with the work of other researchers. While honoring teachers' academic mission, Simon (2001) shows how essential teachers' moral ideals and values are in education that impacts children's lives. Other examples can be found in publications by Carr (2005) and Newman (2000). Day (2004) states: "Arguably it is our ideals that sustain us through difficult times and challenging environments; and it is our ideals that commit us to changing and improving our practice as the needs of students and the demands of society change" (p. 20).

5.2. The impact of good contact on students

Although 'good contact' is thus a rather personal experience, colored by the teacher's personal ideals and values, we almost always found an immediate impact on the students involved. The teachers as well as we as researchers, observed that good teacher–student contact as perceived by the teacher seemed to promote active learning behavior in the student and almost always led to affective outcomes in the child, such as self-assurance, autonomy, and engagement. Here we have to be cautious, as these were interpretations of phenomena we saw in the video-recordings, but the student interviews in our second study did seem to confirm at least some of these interpretations. This finding seems important from the perspective of the effectiveness of education and deserves further investigation.

Moreover, study 2 seems to confirm that if a teacher considers a contact moment as good, this is generally also the case from the perception of the student. Again some caution is needed, as the students in our study were rather young and may have been tempted to give socially desirable answers to our questions. In future research other methods could be used to arrive at valid estimations of what young children experience as good teacher–student contact, for example role plays in which children are asked to play the role of a teacher and are subsequently questioned about what they like or dislike about what happened between the teacher and the students in the role play.

5.3. A reciprocal influence: resonance

As the teachers so often saw positive effects on their students as a result of what they considered good contact moments, we started to become interested in the relation between good contact moments and positive outcomes in the student. In line with Hamre and Pianta (2006), this may not be a one-way causal relation, but it seems that a *reciprocal relation* is involved, as teachers tend to experience a contact moment as good whenever they perceive a positive reaction in the child, which in turn has an effect on the teacher. To phrase it more precisely, our hypothesis is that in moments of good contact the process is self-reinforcing, as positive notions, feelings, and behavior in the student trigger positive notions, feelings, and behavior in the teacher, and in turn this triggers positive notions, feelings, and behavior in the student, and so forth. We name this phenomenon *resonance*, in line with psychologist Fredrickson (2013), who found similar patterns in her research on love and human connection. Our hypothesis is further supported by Jörg's (2004) theory of reciprocal learning, which builds on the so-called 'Matthew effect' (Walberg & Tsai, 1983), defined as the symmetric strengthening effect on both participants in a fruitful interaction. Jörg links the reciprocal effects on both partners in the interaction to empirical results found by Anderson et al. (2001), who speak about a potential 'snowball phenomenon' between actors in a situation. It is obvious that not all contact moments are like this. On the basis of our findings we think that resonance between the teacher and student, in other words a 'snowball effect', can only take place if the teacher is really interested in the child's perspective. In such a situation, both teacher and student are learning or even transformed through the contact. In this context Bruner (1996, p. 56) speaks about a "pedagogy of mutuality", requiring a specific attitude.

5.4. Internal and external contact: the role of awareness

We could wonder whether teachers are aware of the reciprocal influence and the phenomenon of resonance in moments of good contact. Such awareness requires what Rodgers and Raider-Roth (2006, p. 271) call *being present to oneself*, which means being aware of one's own thinking, feeling, wanting, and doing. This may help the teacher to be more explicit towards the student about this thinking, feeling, and wanting, which then might promote the resonance. The interesting point here is that contact with others (*external contact*) is enhanced through deeper awareness of oneself (*internal contact*) (Senge et al., 2004). This concurs with the way in which contact is conceptualized in Gestalt therapy, namely as being *both intrapersonal and interpersonal* (Korb et al., 1989).

5.5. A lemniscate

When combining these insights with our finding that contact seems a two-way interactive process in which all three dimensions of thinking, feeling, and wanting, as well as doing (behavior) are important, we can visualize internal and external contact as it is shown in Fig. 1.

This figure is not a mathematical graph, but a metaphorical representation of the contact process. It shows that a teacher's own thinking, feeling, and wanting (on the left hand of the figure) influences the way the teacher engages in interactions with students through doing (verbal and non-verbal behavior). Vice-versa the teacher's awareness of the students' thinking, feeling, and wanting (expressed in the child's behavior) influences his/her own thinking, feeling, and wanting. If there is a genuine internal and external contact in the here-and-now, this two-way interaction between internal and external contact deepens the sense of connection. Then a feeling of real contact can be experienced by both teacher and student. This requires from the teacher a high degree of *authenticity*, defined by Harter (2002) as "owning one's own personal experiences, be they thoughts, emotions, needs, wants, preferences, or beliefs….[so] that one *acts* in accord with the true self, expressing oneself in ways that are consistent with inner thoughts and feelings" (p. 382).

If the process encompasses several cycles in the lemniscate in Fig. 1, a reciprocal effect takes place that we called 'resonance'. Such an encounter creates a special feeling in both the teacher and the student, a sense of 'psychological energy'. Noddings (1984, p. 180) speaks about a "total encounter" and states that teachers need to have such total encounters with students in order to have an impact on them.
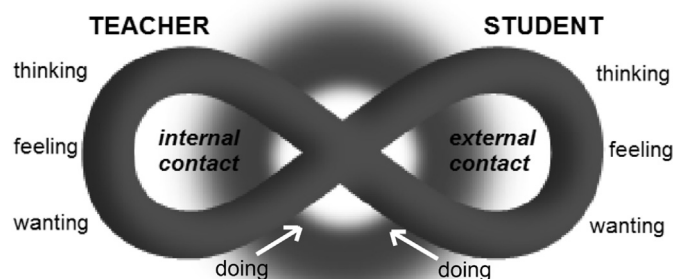

Fig. 1. Internal and external contact, as perceived from a teacher's stance.

5.6. The role of empathy

Fig. 1 points towards the importance of teacher empathy as a prerequisite for good contact (cf. Van Manen, 1994). In both our studies, it was obvious that contact moments described as 'good' by the teachers were characterized by much understanding on the part of the teacher of what was going on in the student in terms of thinking, feeling, and wanting. This seems in line with the extended attachment perspective (see Section 2.1), as this creates safety for the student.

One may wonder whether in moments of good contact there is always *mutual empathy*. Although one of our respondents did refer to a feeling of mutuality, mutual empathy has been defined as "a two way process which occurs when two people relate to one another in a context of interest in the other, emotional availability, responsiveness, and the intent to understand" (Jordan, 1986, p. 7). In moments of good contact the students did seem to be interested in the frame of reference of the teacher. However, Miller and Stiver (1997) state that mutual empathy also implies an interest in the *growth* of the other person, which we could not observe in the students. Moreover, the teachers did not refer to experiences of being empathetically understood by the students, but − as explained above − more to the joy of enacting a pedagogical ideal or core value.

5.7. Towards a synthesis

If we bring all our findings and relevant theories together, we arrive at the following description of contact. Contact between a teacher and her students is the result of the combination of internal and external contact in the here-and-now, which from the teacher's point of view implies full awareness of and being present to his or her own and the student's thinking, feeling, and wanting, and acting upon it in a way that shows the students that they are being seen, understood, and accepted in their thinking, feeling, and wanting. The more the internal and external contact are becoming intertwined, the more the participants in the interaction will experience an increase in psychological energy.

Our hypothesis is that in both teacher and student, the experience of good *contact* contributes to their perception and validation of the *relationship*. In other words, in line with Noddings (1984) and Wubbels, Brekelmans, Den Brok, and Van Tartwijk (2006), we consider the relationship between a teacher and a student as the accumulation of their momentary contact experiences. These experiences will, of course, not always be positive, hence a mix of positive and negative feelings and memories can be involved in the relationship as experienced. Of course, it could be that what one participant in an interaction may experience as positive contact, the other may not. However, in our experience this is seldom the case. Further empirical evidence for this concurrence of the experience of the relationship in teachers and students is found by Evelein (2005). Hence, we hypothesize that in good contact moments, there is often a kind of *resonance* in the interaction that creates a reinforcing process (shown in Fig. 1).

5.8. Implications

Concluding this article, we might ask "So what?" What is the contribution of our research to the existing literature? First, we think that the distinction made between contact on the one hand and other concepts (relationship, presence, engagement) on the other, is rather fundamental and may open our eyes to what actually happens in the here-and-now of the encounters between teachers and students. In particular, the lemniscate figure may promote awareness of the importance of internal and external

contact on the dimensions of thinking, feeling, wanting, and doing. We think it is not self-evident that good teacher—student contact leads to immediate behavioral outcomes in the student, but our second study suggests indications of this. For example, we often saw reactions in the students that could be interpreted as more self-assurance, autonomy, and engagement, at least in the moment, although we have to be cautious about this interpretation. This could be important in these times where there is much emphasis on educational outcomes, as these aspects may be the crucial link between teacher behavior and learning outcomes in students. We believe this is something that is often overlooked in attempts to raise academic levels in education.

The message emerging from our research is that the quality of the momentary encounters between teachers and students may be pivotal to behavioral effects in students and our research also yields indications for how to enhance the quality of contact moments. Hence, this may not only yield a basis for further research on teacher—student contact, but may also be important to practices in schools and to teacher education. It seems important to train teachers in creating good contact. On the basis of our research, we conclude that this requires that teachers become more aware of their own ideals and core values and are stimulated to act upon them. This requires a specific kind of reflection, in which one re-flects on the *enactment* of one's ideals or on inner obstacles to this enactment. This kind of reflection is characteristic of *Core Reflection* (Korthagen & Vasalos, 2005). Meijer, Korthagen, & Vasalos, (2009); Hoekstra and Korthagen (2011) have shown that supporting teachers in making use of this type of reflection indeed leads to a more positive contact and beneficial outcomes in students. (More details about this line of research is presented in Korthagen, Kim, & Greene, 2013).

In addition, Fig. 1 can be used in teacher education for making teachers more aware of the various dimensions in themselves and in students that determine the kind of contact that occurs, and of the importance of both internal and external contact. Conscious use of the lemniscate may help teachers to deepen their contact moments and enhance resonance. In this respect we believe that although the topic of teacher—student contact is rather under-researched, it is already at the stage where it can be 'taught'. This means that both novice and experienced teachers can be supported in improving their contact with students. We hope that our research has contributed to this important goal.

Acknowledgments

References

Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2008). Auditing quality of research in social sciences. *Quality & Quantity, 42*(2), 257—274.

Andersen, J. F. (1979). Teacher immediacy as a predictor of teacher effectiveness. In D. Nimmo (Ed.), *Communication yearbook 3* (pp. 543—559). New Brunswick, NJ: Transaction Books.

Anderson, R. C., Nguyen-Jahiel, K., McNurlen, B., Archodidou, A., Kim, S., Reznitskaya, A., et al. (2001). The snowball phenomenon: spread of ways of talking and ways of thinking across groups of children. *Cognition and Instruction, 19*, 1—46.

Andrzejewski, C. E., & Davis, H. A. (2008). Human contact in the classroom: exploring how teachers talk about and negotiate touching pupils. *Teaching and Teacher Education, 24*, 779—794.

Brewer, M. (2000). Research design and issues of validity. In H. T. Reis, & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 3—16). Cambridge: Cambriidge University Press.

Brown, L. M., & Gilligan, C. (1991). Listening for voice in narratives of relationships. In M. B. Tappan, & M. J. Packer (Eds.), *Narrative and storytelling: Implications for understanding moral development* (pp. 43—61). San Francisco: Jossey-Bass.

Brown, L. M., & Gilligan, C. (1992). *Meeting at the crossroads*. New York: Bellantine Books.

Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Bryk, A. S., & Schneider, B. (2003). Trust in schools: a core resource for school re-form. *Educational Leadership, 60*(6), 40—45.

Buber, M. (1958). *I and Thou*. New York: Charles Schribner.

Burleson, B. R., & Samter, W. (1990). Effects of cognitive complexity on the perceived importance of communication skills in friends. *Communication Research, 17*, 165—182.

Buzzelli, C. A., & Johnston, B. (2002). *The moral dimensions of teaching*. New York: Routledge Falmer.

Calderhead, J. (1981). Stimulated recall: a method for research on teaching. *British Journal of Educational Psychology, 51*(2), 211—217.

Carr, D. (2005). Professional and personal values and virtues in education and teaching. *Oxford Review of Education, 32*(2), 171—183.

Christophel, D. M. (1990). The relationship among teacher immediacy behaviors, pupil motivation, and learning. *Communication Education, 39*, 323—340.

Chu, J. Y. (2004). A relational perspective on adolescent boys' identity development. In N. Way, & J. Y. Chu (Eds.), *Adolescent boys: Exploring diverse cultures of boyhood* (pp. 78—104). New York, NY: New York University Press.

Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London/ Philadelphia: Falmer Press.

Day, C. (2004). *A passion for teaching*. London: Taylor & Francis.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227—268.

Doyle, W. (2006). Ecological approaches to classroom management. In C. Evertson, & C. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 97—125). New York: Erlbaum.

Evelein, F. (2005). *Psychologische basisbehoeften van docenten-in-opleiding* [*Basic psychological needs of student teachers*]. Utrecht: IVLOS.

Fredrickson, B. L. (2002). Positive emotions. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 120—134). Oxford: Oxford University Press.

Fredrickson, B. L. (2013). *Love 2.0: Finding happiness and health in moments of connection*. New York: Penguin.

Frymier, A. B. (1994). A model of immediacy in the classroom. *Communication Quarterly, 42*, 133—143.

Frymier, A. B., & Houser, M. L. (2000). The teacher—pupil relationship as an inter-personal relationship. *Communication Education, 49*(3), 207—219.

Gest, S. D., Welsh, J. A., & Domitrovich, C. E. (2005). Behavioral predictors of changes in social relatedness and liking school in elementary school. *Journal of School Psychology, 43*(4), 281—301.

Gilligan, C. (2011). *Joining the resistance*. Cambridge: Polity.

Gorham, J. (1988). The relationship between verbal teacher immediacy behaviors and pupil learning. *Communication Education, 37*, 40—53.

Greene, M. (1973). *Teacher as stranger*. Belmont, CA: Wadsworth.

Hamlet, C. C., Axelrod, S., & Kuerschner, S. (1984). Eye contact as an antecedent to compliant behavior. *Journal of Applied Behavior Analysis, 17*(4), 553—557.

Hamre, B. K., & Pianta, R. C. (2001). Early teacher—child relationships and the tra-jectory of children's school outcomes through eighth grade. *Child Development, 72*, 625—638.

Hamre, B. K., & Pianta, R. C. (2006). Student—teacher relationships. In G. G. Bear, & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59—71). Washington, DC: National Association of School Psychologists.

Hansen, D. T. (1995). *The call to teach*. New York: Teachers College Press.

Harper, M., & Cole, P. (2012). Member checking: can benefits be gained similar to group therapy? *The Qualitative Report, 17*(2), 510—517.

Harter, S. (2002). Authenticity. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 382—394). Oxford: Oxford University Press.

Hoekstra, A., & Korthagen, F. (2011). Teacher learning in a context of educational change: Informal learning versus systematically supported learning. *Journal of Teacher education, 62*(1), 76—92.

Jordan, J. V. (1986). *The meaning of mutuality*. Wellesley, MA: Stone Center.

Jörg, T. (2004). A theory of reciprocal learning in dyads: a theory of reciprocal learning in dyads. *Cognitive Systems, 6*(2/3), 159—170.

Kearney, P., Plax, T. G., & Wendt-Wasco, N. J. (1985). Teacher immediacy for affective learning in divergent college classrooms. *Communication Quarterly, 33*, 61—67.

Korb, M. P., Gorrell, J., & Van de Riet, V. (1989). *Gestalt therapy, practice and theory* (2nd ed.). New York: Pergamon Press.

Korthagen, F., & Vasalos, A. (2005). Levels in reflection: Core reflection as a means to enhance professional development. *Teachers and Teaching: Theory and Practice, 11*(1), 47—71.

Korthagen, F. A. J., Kim, Y. M., & Greene, W. L. (2013). *Teaching and learning from within: A Core Reflection approach to quality and inspiration in education*. New York/London: Routledge.

Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In M. J. Bergin, & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed.) (pp. 143—189). New York: Wiley.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. London: Sage.

McAllister, G., & Irivine, J. A. (2002). The role of empathy in teaching culturally diverse students. *Journal of Teacher Education, 53*(5), 433—443.

Meijer, P. C., Korthagen, F. A. J., & Vasalos, A. (2009). Supporting presence in teacher education: the connection between the personal and professional aspects of teaching. *Teaching and Teacher Education, 25*(2), 297—308.

Miller, J. B. (1976). *Toward a new psychology of women*. Boston: Beacon Press.

Miller, J. B., & Stiver, I. P. (1997). *The healing connection: How women form relationships in therapy and in life*. Boston: Beacon Press.

Mingyur Rinpoche, Y. (2007). *The joy of living*. New York: Harmony Books.

Newman, C. S. (2000). Seeds of professional development in pre-service teachers: a study of their dreams and goals. *International Journal of Educational Research, 33*(2), 125—217.

Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkeley: University of California Press.

Noddings, N. (2003). *Happiness and education*. Cambridge, UK: Cambridge University Press.

Noddings, N. (2005). *The challenge to care in schools*. New York: Teachers College Press.

Noddings, N., & Shore, P. J. (1984). *Awakening the inner eye: Intuition in education*. New York: Teachers College, Columbia University.

Palmer, P. J. (1998). *The courage to teach*. San Francisco: Jossey-Bass.

Perls, F. S. (1969). *Gestalt therapy verbatim*. Moab, UT: Real People Press.

Perls, F. S., Hefferline, R., & Goodman, P. (1951). *Gestalt therapy: Excitement and growth in the human personality*. Goulsboro, ME: The Gestalt Journal Press.

Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. Washington, D.C.: American Psychological Association.

Raider-Roth, M. (2005). *Trusting what you know: The high stakes of classroom relationships*. San Francisco: Jossey-Bass Publishers.

Richmond, V. P., Gorham, J., & McCroskey, J. C. (1987). The relationship between selected immediacy behaviors and cognitive learning. In M. McLaughlin (Ed.), *Communication yearbook 10* (pp. 574—590). Beverly Hills, CA: Sage.

Riley, P. (2011). *Attachment theory and the teacher—student relationship*. New York: Routledge.

Rodgers, C. R., & Raider-Roth, M. B. (2006). Presence in teaching. *Teachers and Teaching: Theory and Practice, 12*(3), 265—287.

Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher—student relationships on student's school engagement and achievement: a meta-analytic approach. *Review on Educational Research, 81*(4), 493—529.

Scharmer, C. O. (2007). *Theory U: Leading from the future as it emerges*. Cambridge, Mass: Society for Organizational Learning.

Schaufeli, W., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *The Journal of Happiness Studies, 3*, 71—92.

Senge, P., Scharmer, C. O., Jaworski, J., & Flowers, B. S. (2004). *Presence: Exploring profound change in people, organizations and society*. Londen: Nicolas Brealey.

Simon, K. G. (2001). *Moral questions in the classroom: How to get kids to think deeply about real life and their schoolwork*. New Haven: Yale.

Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: the role of perceived control in children's engagement and school achievement. *Journal of Educational Psychology, 82*, 22—32.

Spencer, R. (2000). *A comparison of relational psychologies* (Work in Progress No. 5). Wellesley, MA: Stone Center Project Report.

Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: the importance of teacher—student relationships. *Educational Psychology Review, 23*, 457—477.

Stieha, V., & Raider-Roth, M. (2012). Presence in context: teachers' negotiations with the relational environment of school. *Journal of Educational Change, 13*(4), 511—534.

Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge, UK: Cambridge University Press.

Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.

Thijs, J. T., & Koomen, H. M. Y. (2008). Task-related interactions between kindergarten children and their teachers: the role of emotional security. *Infant and Child Development, 17*, 181—197.

Valiente, C., Lemery-Chalfant, K., Swanson, J., & Reiser, M. (2008). Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology, 100*(1), 67—77.

Van Manen, M. (1994). Pedagogy, virtue, and narrative identity in teaching. *Curriculum Inquiry, 24*(2), 135—170.

Voerman, L., Meijer, P. C., Korthagen, F. A. J., & Simons, R. J. (2012). Types and frequencies of feedback interventions in classroom interaction in secondary education. *Teaching and Teacher Education, 28*, 1107—1115.

Walberg, H. J., & Tsai, S. (1983). Matthew effects in education. *American Educational Research Journal, 20*, 359—373.

Watson, M. (2003). *Learning to trust: Transforming difficult elementary classrooms through developmental discipline*. San Francisco: Jossey-Bas.

Way, N., & Chu, J. (2004). *Adolescent boys: Exploring diverse cultures in boyhood*. New York: New York University Press.

Wentzel, K. R., & Wigfield, A. (1998). Academic and social motivational influences on pupils' academic performance. *Educational Psychological Review, 10*(2), 155—175.

Wubbels, T., Brekelmans, M., Den Brok, P., & Van Tartwijk, J. (2006). An interpersonal perspective on classroom management in secondary classrooms in the Netherlands. In C. Evertson, & C. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 1161—1191). Mahwah, NJ: Lawrence Erlbaum Associates.