



# Learning to See New Things: Using Criteria to Support Pre-service Teachers' Discernment in the Context of Teachers' Relational Work

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The purpose of this study was to investigate how pre-service teachers' understanding of relational competence can be supported through the use of digital video and explicit criteria. The study is a mixed method intervention study, where pre-service teachers analyzed the teacher-student relationship as depicted in a short video sequence with the support of explicit criteria. These analyses were analyzed with content analysis according to the criteria and a thematic comparison of pre-service teachers' analyses before and after the access to explicit criteria. Findings suggest that the use of explicit criteria supported pre-service teachers' discernment of significant dimensions of teacher-student relationships, so that they were able to discern and discuss aspects of the teacher-student relationship with a specific focus on teacher-student interaction and with greater detail and nuance. The study also provides some tentative evidence that modeling the use of criteria may support pre-service teachers' use of the criteria.

**Keywords:** assessment, criteria, pre-service teachers, relational competency, transparency

## INTRODUCTION

During the last three decades, extensive international research, including research reviews, and meta-analyses, has shown that supportive relationships between teachers and students have beneficial effects on factors such as students' subject-specific performance, social development, satisfaction, well-being, and motivation to learn (e.g., Wubbels and Brekelmans, 2005; Cornelius-White, 2007; Hattie, 2009; Roorda et al., 2011; Sabol and Pianta, 2012; Wubbels et al., 2012). In a summary of research, Hughes (2012) claims that: "we know enough to apply the knowledge gained to the task of increasing teachers' abilities to provide positive social and emotional learning environments" (p. 319). It is not until the last decade or so, however, that researchers have implemented professional development interventions focusing on teacher-child relationships (Sabol and Pianta, 2012). Moreover, although it has been suggested that pre-service training should be a prime target for informing teachers on practices associated with high quality relationships (Sabol and Pianta, 2012), research into relational competence in teacher-education programs is largely lacking (Rimm-Kaufman et al., 2003; Nordenbo et al., 2008; Sabol and Pianta, 2012). This lack of research has made it difficult for educators to work systematically to develop teacher-student relational competence. The study reported here, aims to address this scarcity in contemporary educational research by investigating the development of pre-service teachers' understanding of

relational competence<sup>1</sup>, through the use of digital video and explicit criteria.

## BACKGROUND

The research presented here is based on the assumption that social relationships cannot be considered one factor among others; instead, all types of educational phenomena are fundamentally relational and the teacher-student relationship is the central factor underlying learning and development among students (Aspelin, 2012). In simple terms, the relational competence of teachers represents the capability to develop positive (supportive, caring, trusting, etc.) relationships with students and other significant parties. This definition implies that relational competence does not pertain to relationships in general, but rather to a certain type—educational relationships. Thus, in order for teacher interactions to meet the criteria for relational competence they must be relevant to the aims of the education. This preliminary definition serves as the point of departure for the research project presented in this article.

### Relational Competence in Teacher Education

As mentioned above, there is a general lack of research investigating relational competence in teacher-education programs. However, during the past few years, in Scandinavia, at least two such research projects have been initiated: one in Denmark and one in Sweden.

The purpose of the four-year Danish project, which involved two groups of pre-service teachers, 14 instructors, and 18 elementary school teachers, was to explore and develop the relational competence of pre-service teachers by training “attentive presence and empathy as components of relational competence” through the use of various mental and communication exercises (Skibsted and Matthiesen, 2016, p. 14, our transl.). The project was based on the idea that in order for the students to become effective teachers, they must first become well-versed in their own reactions and relationships (Skibsted and Matthiesen, 2016).

The project could be considered successful in some respects. For example, pre-service teachers who participated in the project to a greater degree than other pre-service teachers developed “a reflective and open mindful approach to their own experiences and reactions as well as to their communication with the students” (Nielsen and Fibaek Laursen, 2016, p. 43, our transl.). In addition, findings suggest that the project influenced the pre-service teachers by changing their pursuit of relational competence from a “hoping for luck” approach to one that is “reflected and intentional” (Nielsen and Fibaek Laursen, 2016, our transl.).

<sup>1</sup>The concept of relational competence is rarely used in the international discourse; terms such as “interpersonal knowledge,” “interpersonal skills,” and “social skills” are more common. The discourse on relational competence in Scandinavia is distinguished by a focus on operationalization, e.g., on how to strengthen teachers’ competence with support from different methods (Klinge, 2016). Today, relational competence is considered to be a central concept within Danish school and teacher education (Skibsted and Matthiesen, 2016).

However, there are also critical views. Matthiesen and Gottlieb (2016) hold that pre-service teachers in the project tended to use exercises and relational competence “functionally”—as tools for solving concrete problems in the classroom—but that these exercises did not lead to any deeper pedagogical insights. In addition, they argue that training in this subject is mainly directed toward the “reflective domain,” with a focus on the pre-service teachers’ understanding of themselves rather than on their relationships with the students and that the actual relational competence of these pre-service teachers has been neglected. Matthiesen (2016) expounds on this criticism and holds that the concept of relational competence, as used in this project, was tantamount to an individualized rationality that urged pre-service teachers “to gaze inward rather than outward in the relationship” (our transl.). As an alternative, Matthiesen champions a “relational judgment discourse” in which the teacher responds judiciously when engaged in particular social interactions and, not least, when confronted with unfamiliar situations.

The Swedish project (performed by the authors), on the other hand, was formulated beyond the individualized rationality that Matthiesen (2016) criticizes. The attention was directed “outwards,” toward interpersonal communication between teacher and student, rather than “inwards,” toward self-reflection by teachers/pre-service teachers.

The project was a small scale pilot study, involving six pre-service teachers, using digital video to investigate how pre-service teachers responded to challenging and unpredictable situations that were “relationally problematic.” The pre-service teachers watched short video sequences and were then asked to:

1. Describe the situation: What do you notice?
2. Analyse the teacher-student relationship: (a) In what way to you think the teacher acts to *support* a positive relationship with the students?; and (b) In what way to you think the teacher *counteracts* a positive relationship with the students?
3. Describe how you think the teacher should handle the situation?

Two major themes were found in the analyses made by the pre-service teachers. First, the analyses of the teacher-student relationship were mostly general and abstract, rather than being nuanced and detailed. Second, the analyses held a view of relational competence as a type of craftsmanship and social engineering. According to such a view, the teacher is someone who designs and maintains relationships, rather than being involved in them. Common to both themes was that they referred to relatively static frameworks, general situations, and conveyance of bodies of knowledge; instead of paying attention to specific actions, or to spatial and temporal contexts and situations. To put it simply, according to the analyses, the pre-service teachers had difficulties in: (a) discerning or describing important aspects of the teacher-student relationship as displayed in the movies, and (b) analyzing the specific situations from a relational perspective. Furthermore, suggested strategies for handling the situations were primarily based on either a didactic or a leadership perspective.

## Supporting Professional Learning

Provided that pre-service teachers have difficulties in discerning important aspects of the teacher-student relationship and analyzing situations from a relational perspective, how can teacher education support pre-service teachers in developing such a relational competence? On the one hand, it has been argued that participation in a “community of practice” and non-formal learning are primary routes for learning to become a professional; starting as a peripheral participant and slowly advancing toward a more central position (Schön, 1983; Lave and Wenger, 1991; Wenger, 1998). In line with this argument, the best way to educate teachers would be to let pre-service teachers act as teachers among experienced professionals. This view is often supported by in-service teachers, as they typically claim that the main way of learning to teach is by doing the job (Metcalf et al., 1996; Knight et al., 2006).

There are, however, some potential drawbacks. For one thing, apprenticeship and non-formal learning are typically more time consuming than formal instruction. Another, and perhaps more serious point, is that workplace-based training might promote socialization into an unwanted occupational culture and outdated practices (Elliott, 1991). Furthermore, workplace-based training does not necessarily support pre-service teachers in reflecting on their practice (Metcalf et al., 1996). Acknowledging the potential drawbacks of workplace-based training, however, is not tantamount to arguing that teacher education should be entirely theoretical or entirely campus-based. Instead, it suggests a distinction as to which competencies are best learned in workplace settings and those more properly learned in other settings. This is because there seem to be limitations as to what can be learned through participation, or through more “vicarious means.” Regarding the latter, Elliott (1991) notes that even though professional learning (just like any other learning) is situated and experiential, it does not have to involve direct participation. Practical situations can also be experienced vicariously, for example by reflecting on case studies and/or discussing different ways to act in relation to simulation exercises. This means that when learning other competencies than actual teaching performance, the classroom is not necessarily the optimal setting. Instead, other settings can offer alternative ways to support the development of specific skills, which is shown by research indicating that different kinds of technology (such as tape recorders in Anderson and Freiberg, 1995, computer simulations in Yeh, 2004, and video in Yerrick et al., 2005) can provide effective support for pre-service teachers when analyzing their own, or others’, instruction. Consequently, technology supported and case-based teaching has been used to support the development of a number of different complex skills, such as “reflective ability” (Metcalf et al., 1996), analyzing classroom situations (Jönsson, 2008), and communication skills (Lucander et al., 2012). Interestingly, several of these studies have made use of explicit assessment criteria, as a means for guiding students in discerning important characteristic in complex situations.

## The Use of Explicit Criteria

According to Polanyi (1967/1983), who introduced the concept of “tacit knowledge,” all human activities, even those that are

highly theoretical or scientific, have a tacit dimension. This tacit knowledge, which is grounded in unspoken traditions and experience, provides the frames for how to interpret problems, and how to go about solving them, within a given community of practice.

Assessment criteria constitute an excellent example of such tacit knowledge, since criteria are generally grounded in unspoken traditions and experience among teachers. Using explicit criteria to communicate expectations to students is therefore often criticized, since the manifest expressions of the criteria (i.e., the words) cannot convey the full complexity of the latent criteria (e.g., Sadler, 2009, 2014). Furthermore, criteria belong to a given community of practice, which means that the meaning attached to them is not easily transferred to other contexts. In other words, in order to understand the criteria, you also have to have some familiarity with the practice to which they belong.

This understanding of criteria is also reflected in findings from empirical research, where several research reviews suggest that explicit criteria (in the form of scoring rubrics) may have the potential to promote student learning by clarifying expectations, but not without a thorough implementation (Jonsson and Svingby, 2007; Reddy and Andrade, 2010; Panadero and Jönsson, 2013; Brookhart and Chen, 2015; Brookhart, 2018). In particular, there is a distinction between school settings, which typically require more comprehensive implementations, and the higher-education context, where students are often able to use criteria productively even with very limited efforts to implement them (Panadero and Jönsson, 2013; Jonsson and Panadero, 2017; Brookhart, 2018). This could be assumed to be a result of higher-education students’ familiarity with the practice to which the criteria belong.

Panadero and Jönsson (2013) also propose that it is not the explicit criteria as such, or the criteria in isolation, that clarify expectations and promote student learning, but the explicit criteria in combination with other activities, such as feedback and/or self-, and peer-assessment. However, the criteria may support the students during these activities, by guiding their attention to important aspects of their own, or others’, performance. Specifically, the transparency provided by explicit criteria has been shown to: (a) reduce student anxiety, (b) aid the feedback process, and (c) support student self-regulation; all of which may indirectly facilitate improved student performance. Furthermore, Jonsson (2014) presents findings from different case studies in professional education, where students found explicit criteria useful for self-regulation (i.e., for planning, monitoring, and evaluating their performance). Important features for supporting students’ understanding and use of the criteria were that the criteria were: (a) closely aligned with the assignments and not too general or abstract, and (b) made accessible through explanations by the teachers, timing (i.e., access during the planning phase, before performing the assignment), and easily obtainable on paper or digitally.

In addition to research suggesting that explicit criteria may facilitate higher-education students’ learning, there are a number of critics arguing against the use of explicit criteria. In most cases, the opposition is a matter of perspective. As meritoriously

explained by Ajjawi and Bearman (2018), people may hold a representational view of criteria (and/or standards), which assumes that a criterion is an accurate and stable representation of something, and that this something is separate from the knower. Criteria, in this view, are more or less easily transferred to other contexts, since each criterion has one single meaning, which does not change in relation to the context or the person who interprets them. This is in contrast to sociocultural perspectives, in which the context and its social and cultural relations are taken into account. In such a perspective, explicit criteria are only “the tip of the iceberg,” while the greater part is tacit, residing in the practices of academic, and professional communities (O’Donovan et al., 2004).

There are, however, some issues with explicit criteria that cannot be dismissed as a matter of perspective. For instance, analytic assessments, which focus on the parts, as opposed to holistic assessments, which focus on the whole, may involve a risk of fragmentation. Sadler (2009) therefore argues against the use of analytical assessment and pre-set criteria, in favor of holistic assessment with “emergent” criteria. Emergent criteria means that assessors should not set any criteria beforehand, but address criteria that surface in the moment of assessing a particular piece of work—much like the appraisal by connoisseurs of art, wine, etc. One of Sadler’s main arguments for this approach is what he refers to as the “indeterminacy of criteria”: When breaking down holistic judgments into more or less discrete components, these components—no matter how many they are and no matter how carefully they are selected—cannot sufficiently represent the full complexity of the multi-criterion qualitative judgment made by the connoisseur. To substantiate this argument, he presents a number of observations in the way assessors approach assessment and/or grading. Most of these observations are about differences between holistic and analytic judgements, such as assessors agreeing on the overall grade/score for a particular work, but not on the level of performance for individual criteria. Sadler also notes that, in his experience, teachers generally have more confidence in their own holistic judgements as compared to analytical assessments and that global judgments are often made through the lenses of the pre-set criteria. The latter means that qualities not visible through those lenses might be filtered out and not taken into account. Instead of relying on analytic assessment and pre-set criteria as a vehicle for transparency in assessment, Sadler therefore argues that students need to develop a conceptualisation of what constitutes “quality” by continuously evaluating authentic work, without being hampered by criteria specified beforehand.

The main problem with this argument is that it is not easy for novices to know what to look for in authentic work. This is all too evident in a number of studies. An illustrative example is provided by Orsmond and Merry (1996), where students were asked to assess each other’s work. Even though all criteria were explained to the students, they were unable to recognize some of these criteria in the work by their peers. As an example, a majority of students had actually drawn a “clear and justified conclusion” (which was a criterion), but did not know it. The question of using pre-set criteria or developing a conception of quality through evaluating authentic work is therefore not a

question of either one or the other. Rather, what seems to be needed is an integration of both. Students need language (i.e., criteria) to know what to look for in authentic work, but they also need to experience authentic work in order to know how the criteria may be realized. Explicit criteria can provide a scaffolding structure for students when learning to identify indicators of quality, but like other scaffolding structures it can be disregarded if not needed and gradually phased out as the students become more independent.

## AIM AND RESEARCH QUESTIONS

The purpose of this study is to investigate how pre-service teachers’ understanding of relational competence can be supported through the use of digital video and explicit criteria. The overarching question is whether explicit criteria can be used to support the discernment of important characteristic in complex situations, provided that the criteria are used as manifest expressions of the (much wider) latent criteria, and that the criteria are contextually situated. Or, more specifically in relation to this study:

How do pre-service teachers’ analyses of teacher-student interaction, as simulated through digital video, differ before and after the introduction of explicit criteria?

## METHODOLOGY

This is an intervention study, where pre-service teachers analyzed the teacher-student relationship as depicted in a short video sequence with the support of explicit criteria. These pre-service teacher analyses were then analyzed by the researchers in order to answer the research question. The research presented belongs to the mixed method research paradigm (e.g., Johnson and Onwuegbuzie, 2004), which means that both quantitative (content analysis) and qualitative (thematic analysis) methods have been used to investigate the data, in order to provide a more comprehensive (and potentially more valid) answer to the research question.

### Sample

Participants were two groups of pre-service teachers [ $n_1 = 7$  (mean age 27 years) and  $n_2 = 10$  (mean age 29)] attending a teacher-education program for teaching in grade 4–6 (i.e., students 10–12 years). The study was performed during the sixth semester of the program (the entire program is eight semesters), when the pre-service teachers attended courses on the professional work of teachers, where the focus of the study could connect to existing learning objectives. All students participated in the study, which means that the low number of participants is an effect of the low number of students attending these courses.

### Procedure

The intervention can be divided into three distinct steps:

1. The pre-service teachers watched a short video sequence, focusing on teacher-student interactions, where the teacher’s relational competency was challenged (**Figure 1**). The movie

was recorded by professional film-makers, in order to make it feel authentic and encourage the pre-service teachers to engage with the situation. The pre-service teachers analyzed the situation, using the same questions as in the pilot study described above:

- a. Describe the situation: What do you notice?
  - b. Analyse the teacher-student relationship: a) In what way do you think the teacher acts to *support* a positive relationship with the students?; and b) In what way do you think the teacher *counteracts* a positive relationship with the students?
  - c. Describe how you think the teacher should handle the situation?
2. The pre-service teachers were given access to explicit criteria for relational competency. The meaning of the criteria were explained to the pre-service teachers by an expert in relational pedagogy.
  3. The pre-service teachers analyzed the video sequence once more, with the support of the criteria.

All three steps were similar for both groups ( $n_1$  and  $n_2$ ), with one exception. For group  $n_1$  the criteria were introduced only orally, but for group  $n_2$  the expert on relational pedagogy also modeled how to use the criteria by analyzing a short sequence of the commercial movie “Precious” (directed by Lee Daniels, starring Gabourey Sidibe). This was done to acknowledge that the criteria are contextually situated and the need for students to be familiar with the practice to which the criteria belong.

## Data and Analysis

Data for this study is pre-service teachers’ written analyses of teacher-student interactions, simulated through digital video before and after the access to explicit criteria about teachers’ relational competency. The responses by the pre-service teachers were analyzed with both quantitative content analysis and qualitative thematic analysis (Braun and Clarke, 2006; Vaismoradi et al., 2013), and the responses before and after the access to explicit criteria were compared in order to identify differences between the two occasions. The content analysis focused on the frequency of pre-service teachers’ use of concepts important to analyze the situation from a relational perspective, using the criteria as analytical tools. The frequencies were compared before and after the access to criteria, but no statistical analyses have been made, due to the small number of participants taking part in the study. Furthermore, the groups have been analyzed separately, since the intervention was slightly different in the groups, but no conclusions will be drawn based on the differences between the groups, again due to the low number of participants.

In addition to the content analysis, a thematic comparison has been made using the entire material before and after the access to criteria. This analysis is based on repeated reading of the respondents’ analyses in search of themes transcending the material. The analysis followed the procedure outlined by Braun and Clarke (2006), which, in this case, means that the following steps were taken:

1. The first step was to read through the pre-service teachers’ analyses and note initial ideas.
2. Interesting features of the data were coded across the data set.
3. Codes were assembled into initial themes, gathering data relevant to each initial theme.
4. Themes were checked against coded extracts and the data set as a whole.
5. The specifics of each theme were refined.
6. A selection of compelling extract examples for this article was made.
7. The extracts were translated to English by the authors.

## Criteria for Relational Competency

In this study, Scheff’s (1990) theory about social bonds was used in order to formulate explicit criteria for teachers’ relational work<sup>2</sup>. The most central concept of the theory is the “social bond,” which, simply stated, can be defined as the forces that hold people and groups in the community together. Although these bonds between people may appear well established and lasting, in reality they are temporary, dynamic, and unpredictable. You can therefore never be completely sure that relationships will have a certain character and social bonds are more or less constantly tested. The quality of social bonds ranges from fragile and uncertain to strong and secure. The bonds can be built, repaired, threatened, or even cut-off. What is crucial for the quality of the bonds is how participants communicate with each other and how well they are “attuned.” “Attunement” refers to people’s cognitive and emotional adjustment to each other in the interpersonal communication, both verbal (what is being said) and non-verbal (how it is said and expressed). The degree of attunement depends on how well individuals understand each other and the extent to which they show each other adequate and due respect.

Another concept is “differentiation,” which refers to the degree of closeness and distance in interpersonal relations. Scheff assumes that differentiation is a fundamental dilemma in human relationships. When two people become so close that they can experience each other’s side of the relationship, yet are distanced enough from each other that they perceive themselves as unique, individual entities, we can speak of optimal differentiation. Neither individual components nor social components are overemphasized in such a relationship; instead a balance is achieved between closeness and distance. However, should one or the other, or both parties, experience excessive distance—that is, if direct contact with the other is absent and the importance of the self is overemphasized—we can speak of *over-differentiation* or *isolation*. Similarly, when individuals experience excessive closeness—lose contact with vital aspects of themselves and when the importance of the other person/group is overemphasized—we can speak of *under-differentiation* or *engulfment*.

Emotions also play a vital role in Scheff’s theory. Stable social bonds imply lasting and relatively deep emotional connections and Scheff defines shame and pride as fundamental social

<sup>2</sup>Scheff (1990) is an American social psychologist/sociologist and his book *Microsociology* is by many considered to be his magnum opus (on which his later works are based). With some notable exceptions (Aspelin, 2006, 2010; Beaulieu, 2016), his theory has rarely been applied to the educational context and, more specifically, to the teacher-student relationship.

Parent: Hi.

Teacher: Hi. Hello Johanna.

Student: Hi.

Teacher: Then let's see. I have received assessments from your other teachers, in other subjects. Then let's see ... eeh. First we have art, that's Marianne, and she writes that you are very good in arts, thorough and take the assignments seriously. But she also writes that you do not say so much in the classroom when you have class discussions and things like that, and that is something you could improve. Do you recognize this?

Student: Uhm.

Teacher: Uhm, then we have physical education, that's Birgitta. Physical education is also looking good, it says that you have a D, but a C or a B at several assignments. That seems good, uhm? It is says that you could have a higher grade if you made spoke up sometimes, if you took a little more initiative, if you were a bit more engaged, uhm. And then we have craft and design, I can see that you've had woodwork this semester. That's Annika. Also good reviews for what you have performed, but under improvements it says that you are very quiet during class discussions and ...

Parent: Now you've got to stop goddammit!

Teacher: What?

Parent: You sit here talking about the same god damn thing over and over again ... that she's quiet. What has that got to do with her school work?

Teacher: Yes, but we have to ...

Parent: Then why are you sitting here nagging about the same thing all over again, that she is quiet? That's who she is, when will you accept that? She is good at what she is doing, is she not? Or what the hell are you looking for really, that everyone should be the same?

**FIGURE 1** | Transcript from the movie that the preservice teachers analyzed.

emotions. Shame and pride are awakened in a context where the individual visualizes how he/she behaves and is valued in the eyes of the other. Positive role-taking is initiated by and leads to feelings of pride, while negative role-taking is associated with feelings of shame. Therefore stable bonds are signaled by feelings of pride and unstable bonds by feelings of shame. Shame and pride are technical terms and umbrella concepts for a range of

emotions within each group. These emotions are not viewed as being inherently positive or negative, but rather as messengers reflecting the qualities of interpersonal relationships.

With the aid of Scheff's theory, a more nuanced description can be made of teachers' relational competency. Scheff holds that attunement is crucial for understanding the quality of the social bond in interpersonal communication. Relationally competent

teachers therefore need to communicate in such a way that they and the students form strong social bonds with each other. As we have seen, this requires mutual understanding and respect. Consequently, teachers need to make themselves understood and understand—and demonstrate that they understand—the students. Teachers also need to show respect for students while acting in a way that promotes students' respect for them. This first aspect of relational competence will be called *communicative competence* and reflects the ability of teachers to communicate both verbally and non-verbally in order to achieve a high degree of cognitive and emotional attunement in relation to students. In this regard, the actions of a relationally competent teacher encourage mutual understanding and respect in the work with students.

The second aspect of relational competency is *differentiation competence*, which reflects the ability of teachers to act in such a way that neither they nor the students become too close nor too distant from each other. A relationally competent teacher acts in a way that space is created to allow both students and teachers to discern themselves as individuals, without jeopardizing social bonds.

*Socio-emotional competence* is the third aspect of relational competency and this concept reflects the importance of teachers' attunement toward emotional signals in interpersonal communication. A relationally competent teacher acts in order to evoke and encourage feelings of pride, while acknowledging and channeling feelings of shame in a direction that is productive from the standpoint of educational goals.

From the three aspects of relational competency described above, criteria relating to communication, differentiation, and emotions were formulated and shared with the pre-service teachers. Furthermore, an additional criterion, focusing on teachers' professional work was added to the framework, since this was the specific content of the courses they attended. The criterion "Professionalism" reflects whether the teacher acts in a way that can be expected from a professional who is accountable for her actions. All criteria can be found in Appendix.

## FINDINGS

In this section, the content analyses (before and after the access to criteria) are presented first, then the thematic comparison. In order not to confuse the pre-service teachers with the teacher or student in the analyses, the pre-service teachers are called "respondents" in this section. The individual respondents are identifiable by letters A-Q and all quotes have been translated from Swedish by the authors.

### Content Analysis Before the Access to Explicit Criteria

In relation to the *communication* criterion, all respondents discussed the verbal communication. The majority of the respondents focused on how the conversation was organized, for instance that the teacher was the one speaking and that the teacher did not ask any questions or invited the student into the discussion. The respondents thought that the student should

have participated in the discussion. Only one respondent made a connection between verbal communication and the purpose of understanding or being understood:

The teacher uses a language that is understandable to herself, maybe not for the student and the parent. (Respondent A, group n<sub>1</sub>)

Besides this example, there were no connections between the verbal or non-verbal communication for the purpose of understanding or being understood. Some respondents claimed that the teacher, through her verbal communication, invited the student to be part of the discussion. However, this was interpreted as a way for the teacher to make the student involved, and not for the purpose of understanding and being understood:

The teacher shows that she wants to invite the student into a dialogue when she asks whether the student agrees. (Respondent C, group n<sub>1</sub>)

.../ the teacher invites the student to the conversation by asking questions. (Respondent O, group n<sub>2</sub>)

One respondent thought that the teacher, through her non-verbal communication, invited the student to be part of the discussion. This was interpreted as a way for the teacher to make contact and not for the purpose of understanding and being understood:

.../ she [the teacher] sometimes looks up and smiles toward the student, indicating that the teacher still wants to make contact. (Respondent K, group n<sub>2</sub>)

In total, about half of the respondents discussed the non-verbal communication of the teacher, such as the way of speaking, facial expressions, and eye contact, as something that matters to the teacher-student relationship:

The teacher has a positive voice when she reviews the assessments. (Respondent D, group n<sub>1</sub>)

A smile usually smooths such nervous and tense situations. (Respondent I, group n<sub>2</sub>)

Some respondents discussed the student's non-verbal communication and thought that the student, through her non-verbal communication, clearly showed that she was uncomfortable in the situation, but that the teacher was not aware of this:

The student shows through her body language that she is uncomfortable in the situation. (Respondent M, group n<sub>2</sub>)

In relation to *differentiation*, only two respondents made reference to this criterion:

The student is not involved in the conversation and the teacher has a somewhat distant relationship with both the student and the parent. (Respondent J, group n<sub>2</sub>)

In relation to *emotions*, the majority of respondents discussed the student’s feelings and thought that the situation was difficult for the student. Almost half of the respondents thought that the teacher failed to acknowledge the student’s feelings. This is linked to non-verbal communication and that the student clearly displayed her feelings with her body language. None of the respondents discussed the teacher’s feelings.

In relation to *professionalism*, only one respondent mentioned this aspect in the analysis:

The teacher has a professional behavior and acts as a teacher. She probably does the same with all the students and does not treat anyone differently. (Respondent E, group n<sub>1</sub>)

The majority of the respondents, however, thought that the teacher needed to respond to the students differently, which can be linked to professionalism and that the teacher acts as can be expected. Above all, didactic perspectives on what the teacher should do next predominated respondents’ analyses, such as making clarifications to the student or being more dialogic in the conversation.

There were no clear differences between the groups’ first analyzes in relation to the criteria Communication and Differentiation (Table 1). However, there were differences in relation to Emotions and Professionalism. Of the respondents in group n<sub>1</sub>, only about half of the respondents discussed the significance of emotions for the teacher-student relationship, as compared to 9 out of 10 in group n<sub>2</sub>. The groups also differed in terms of the extent to which they discussed the teacher’s responsiveness to the students’ feelings, where only 2 out of 7 discussed this in group n<sub>1</sub>, as compared to 9 out of 10 in group n<sub>2</sub>. A difference between the groups in relation to professionalism was the extent to which the respondents mentioned the teacher’s response to the student, where 3 out of 6 respondents in group n<sub>1</sub> mentioned this, as compared to 9 out of 10 respondents in group n<sub>2</sub>.

**TABLE 1** | Comparison of analyses before access to explicit criteria for groups n<sub>1</sub> and n<sub>2</sub>.

	Group n <sub>1</sub> (n = 7)	Group n <sub>2</sub> (n = 10)	In total (n = 17)
<b>COMMUNICATION</b>			
C:1	1	–	1
C:2	1	–	1
C:3	4	4	8
<b>DIFFERENTIATION</b>			
D:1	1	1	2
<b>EMOTIONS</b>			
E:1	3	9	12
E:2	2	9	11
<b>PROFESSIONALISM</b>			
P:1	1	–	1
P:2	3	9	12

## Content Analysis After the Access to Explicit Criteria

After the access to explicit criteria, all respondents discussed the verbal *communication*; that the teacher is the one speaking and that the student should have been more involved. A significant difference in this analysis, as compared to the former, was that the majority of the respondents also discussed that the communication should aim at the teacher and the student understanding each other. Some respondents also mentioned that the communication was not attuned. The majority of respondents discussed communication based on the concept of understanding, both from the perspective of the teacher and from the perspective of the student:

The teacher focuses on explaining, but not on getting the student to understand or to understand the student herself. (Respondent O, group n<sub>2</sub>)

The teacher focuses to some extent on being understood, but does not read the student’s signals. The teacher could have sought to understand the pupil better. /.../ The student cannot make herself understood, since she is not given any room to speak. (Respondent K, group n<sub>2</sub>)

In addition, one respondent wrote that the teacher tried to be responsive to and build on the student’s thoughts. Another one wrote that the teacher tried to follow the student’s thoughts, which also connects to the purpose of understanding.

The majority of respondents wrote that the teacher confirmed, or did not confirm, the student through her verbal communication:

The teacher confirms the student’s presence by saying her name. (Respondent M, group n<sub>2</sub>)

The teacher should have invited the student more, to confirm that she is important. (Respondent C, group n<sub>1</sub>)

Almost half of the respondents also discussed that the teacher and/or the parent/student confirmed, or did not confirm, each other through non-verbal communication:

The teacher confirms the student by looking up sometimes when she talks with the student. (Respondent O, group n<sub>2</sub>)

The teacher and the parent look at each other with small nodding confirmations. (Respondent J, group n<sub>2</sub>)

The teacher does not confirm the student’s obvious body language, showing that the student is not comfortable in the situation. (Respondent Q, group n<sub>2</sub>)

In the first analysis, only a few respondents discussed the teacher’s non-verbal communication as gestures, ways of speaking, facial expressions, body position, eye contact, etc., as something that mattered to the teachers-student relationship. In the second analysis, the majority of respondents discussed the non-verbal



communication of the teacher as something that is relevant to the teacher-student relationship:

The teacher's body language is unsympathetic and distant rather than inviting. (Respondent L, group n<sub>2</sub>)

Also, she is not dialogic in her body language, she does not invite either the mother or the student with her body language. (Respondent L, group n<sub>2</sub>)

Unlike the first analysis, where only one respondent discussed *differentiation* in his/her analysis, the majority of respondents discussed this as something that is relevant to the teacher-student relationship in the second analysis:

The teacher switches between closeness and distance in a way that is not particularly appropriate. The student is also distant by turning her eyes and collapsing into the chair. The parent also moves closer to her daughter, which gives a protective feeling at the same time as she moves away from the teacher. (Respondent Q, group n<sub>2</sub>)

/.../ neither the teacher nor the student tries to approach each other. (Respondent P, group n<sub>2</sub>)

The teacher shows distance through physical placement at the teacher's desk. (Respondent M, group n<sub>2</sub>)

The majority of respondents discussed the student's *emotions*. The respondents thought that the teacher was not sensitive to the student's feelings. In the first analysis, none of the respondents discussed the teacher's emotions, but in the second analysis, almost half of the respondents discussed how the teacher managed her own feelings:

The situation could have been different if the teacher was able to control her feelings. (Respondent F, group n<sub>2</sub>)

The teacher cannot handle her own feelings. (Respondent O, group n<sub>2</sub>)

Unlike the first analysis, when only one respondent mentioned *professionalism* in his/her analysis, all respondents discussed the teacher's actions from this perspective in the second analysis. However, the respondents focused on different aspects. Didactic perspectives were still discussed, but not to the same extent as in the first analysis. Other perspectives on professionalism dominated. Several respondents connected professionalism to accountability:

The teacher acts irresponsibly, probably unwittingly. (Respondent D, group n<sub>1</sub>)

The teacher tries to avoid taking responsibility for the student. (Respondent J, group n<sub>2</sub>)

A couple of respondents made connections to the professional ethics of teachers:

The teacher does not act responsibly, because she does not see the student, which is among the most important things in the profession. (Respondent K, group n<sub>2</sub>)

Several respondents suggested that the teacher was lacking in communicative competence:

Her actions are not really professional when she gets steamrolled by the mother. (Respondent I, group n<sub>2</sub>)

The parent feels forced to take over the conversation from the teacher when the misunderstandings, distances, and feelings go too far from what can be expected during a discussion between teacher, parent, and student on progress in school. (Respondent Q, group n<sub>2</sub>)

Respondents also associated professionalism with other relationship-theory concepts, such as how the teacher managed her emotions:

One should think professionally and then you should not be annoyed, but try to ignore it. (Respondent G, group n<sub>1</sub>)

She cannot handle the parent's annoyance appropriately, but immediately begins to defend herself. (Respondent O, group n<sub>2</sub>)

Overall, only one respondent did not link professionalism to the teacher's response toward the student.

In the second analysis there were major differences between the groups in terms of how they discussed relational competence based on the concepts of communication and differentiation. Nine out of 10 respondents in group n<sub>2</sub> gave examples of how the communication aimed at the teacher and the student understanding each other. In group n<sub>1</sub>, only half of the respondents (4/7) discussed this. All respondents in group n<sub>2</sub> discussed the importance of the teacher's non-verbal communication, such as gestures, way of speaking, facial expressions, body positioning, eye contact etc., as compared to five out of seven in group n<sub>1</sub>. Furthermore, all respondents in group n<sub>2</sub> provided examples of how issues of closeness and distance can be important for the teacher-student relationship, as compared to half of the respondents in group n<sub>1</sub>. The difference remained between the groups in terms of how they discussed the importance of emotions in the teacher-student relationship. All respondents in group n<sub>2</sub> gave examples of how emotions may be of significance for the teacher-student relationship, while about half of the respondents in group n<sub>1</sub> discussed this. Only one respondent in group n<sub>1</sub> discussed the teacher's responsiveness to the student's feelings, while all respondents in group n<sub>2</sub> discussed this. However, this difference was present already in the first analysis and no clear differences between how the groups discussed professionalism can be distinguished. The use of relational concepts in both groups, and both before and after the access to criteria, is summarized in **Table 2**.

**TABLE 2** | Comparison of analyses before and after access to explicit criteria for groups  $n_1$  and  $n_2$ .

	Group $n_1$ ( $n = 7$ )		Group $n_2$ ( $n = 10$ )		In total ( $n = 17$ )	
	Before	After	Before	After	Before	After
<b>COMMUNICATION</b>						
C:1	1	4	–	9	1	13
C:2	1	3	–	8	1	11
C:3	4	5	4	10	8	15
<b>DIFFERENTIATION</b>						
D:1	1	4	1	10	2	14
<b>EMOTIONS</b>						
E:1	3	4	9	10	12	14
E:2	2	1	9	10	11	11
<b>PROFESSIONALISM</b>						
P:1	1	6	–	10	1	16
P:2	3	6	9	9	12	15

## Thematic Comparison of Analyses Before and After Access to Criteria A Change in Focus

In the first analysis, the respondents had didactic aspects in focus when analyzing the situation, despite the fact that they had been explicitly instructed to focus on teacher-student relationship. In particular, the respondents focused on how the teacher communicated the assessments. For example, one respondent wrote:

Regarding the assessment, as mentioned by the teacher, I think it is remarkable that the student has a D in physical education, but has performed at levels C and B at several occasions. It should not be possible to perform at a level B on individual assignments?<sup>3</sup> And I don't think that summative assessments belong in a conversation on student's progress, it should focus on the student's opportunities for further development. (Respondent Q, group  $n_2$ ).

This respondent emphasized that the teacher was not sufficiently prepared for the meeting, that she did not perform the conversation appropriately, and that there were shortcomings in the teacher's assessment practice. With some variations, this pattern was repeated in all analyses, as illustrated by the following citations:

The subjects that the teacher focuses on in the movie are definitely not the ones where discussion is needed, as in civics for example, but not even there I think there is a need to be able to discuss things orally. (Respondent L, group  $n_2$ ).

<sup>3</sup>In the Swedish grading system, all grades are composite measures and as such do not apply for individual assignments. However, while there are explicit requirements for levels A, C, and E in the national curriculum, grades B and D lack such requirements and are used only as intermediate grades between A-C and D-E respectively.

The students should not be assessed by how silent she is, but on how she performs in the classroom and, as said, here the focus is on the silence /.../ The situation can be amended by the teacher explaining better what the teachers mean when they "complain" about the student's silence /.../ (Respondent I, group  $n_2$ ).

The focus of the respondents changed significantly in the second analysis. In the analyses they wrote, the interaction between teacher and student was perceived as the central theme of the situation. For example, respondent Q wrote:

The teacher turns her eyes to the student, but still focuses on her papers as she talks. The teacher also hides her body language behind the table and the pen /.../ The distance from the teacher to the student is closer in the beginning, but is increasing more and more during the conversation. /.../ It is clear that the student is not comfortable with the situation, but despite this, the teacher continues the conversation as if the student does not show anything. /.../ The student shows "hiding behavior", as she looks down at the table trying to hide her face behind her hands on several occasions. (Respondent Q, group  $n_2$ )

Respondent Q focused on describing and interpreting how the teacher and the student behaved, as well as what it meant for their relationship. This pattern permeated respondents' analyses, which is illustrated by the following citations:

However, she [the teacher] does not confirm the student /.../ because she does not see the student giving signals that she is anxious about being silent. The teacher cannot see this since she concentrates on presenting the assessments while the student is quietly staring at the table. (Respondent K, group  $n_2$ )

The student looks down at the bench, holds her head and hides her eyes. The teacher sees that the student is not comfortable but does not pay attention to it. It looks like she tries to escape by continuing to talk about the assessments. (Respondent B, group  $n_2$ )

## A More Specific and Nuanced Way of Understanding Relationships

Most respondents wrote about the teacher-student relationship already during the first analysis. However, the respondents' formulations were comparatively simple and general:

However, the students seem to think that the situation and the assessments were uncomfortable. (Respondent Q, group  $n_2$ )

The teacher needs to change her entire attitude and, above all, create a better relationship with the student. (Respondent L, group  $n_2$ ).

The teacher is quite straightforward and does not seem to take into consideration that conversations about student progress can be uncomfortable for the student and she does nothing to make the situation easier. (Respondent I, group  $n_2$ )

The respondents used quite unspecific expressions, such as "the situation is uncomfortable" and that the teacher "needs to create

a better relationship.” In comparison, their descriptions and interpretations of relationships during the second analysis were comparatively specific and nuanced:

There is no closeness what so ever, although the teacher tries to create some when she asks questions like “recognize this?” and “that seems good?” but there are no questions that the student seems to want to answer or is given the opportunity to answer, because of the way the questions are asked. (Respondent I, group  $n_2$ ).

I think the teacher is too distant from the student. Partly, she does not ask how the student experiences the conversation, and partly she does not read the student’s body language, which means that she does not notice that the student is feeling uncomfortable about the conversation. (Respondent K, group  $n_2$ ).

The communication during the conversation is one-sided. The teacher is the one speaking while the student answers with “uhm” /.../ The way the teacher talks is disrespectful, according to me. She does not look at the student very much. (Respondent B, group  $n_2$ )

The thematic comparison shows that respondents’ descriptions and analyzes significantly changed during the intervention. The change consisted, first of all, of a shift in focus. In the first analysis the respondents focused on questions relating to the organization and execution of the conversation and the teacher’s assessment practice. In the second analysis, they focused on the interaction between the teacher and the student. The second change was from a comparatively general and simplistic way to analyze the situation to a more specific and nuanced way.

## DISCUSSION

This study aimed to investigate how pre-service teachers’ understanding of relational competence can be supported through the use of digital video and explicit criteria. In order to investigate this, pre-service teachers’ analyses of a simulated situation were analyzed with content and thematic analyses, both before and after the access to explicit criteria. As indicated by the findings presented above, there has been a quantitative as well as a qualitative change in the analyses made by the respondents. The content analysis clearly shows that references were made much more frequently by the respondents to important dimensions of the teacher-student relationship when having access to explicit criteria. This is true for all criteria, except for *Emotions*, to which respondents in group  $n_2$  made frequent references already before access to the criteria. Furthermore, the thematic comparison suggests that respondents’ analyses are characterized by a change of focus (from organization to interaction), as well as becoming more detailed and specific. These findings can be interpreted as the respondents’ discernment of significant dimensions of the teacher-student relationships has been affected by the use of explicit criteria, so that they—with the aid of the criteria—may see and analyze aspects of the situation that they did not notice without them.

The findings from this study thus corroborate previous research on the use of criteria, reporting that higher-education students are often able to use criteria productively even with very limited efforts to implement them (Panadero and Jönsson, 2013; Jonsson and Panadero, 2017; Brookhart, 2018). Although the pre-service teachers in this study were not familiar with the specifics of relational competency, they were familiar with other areas of teachers’ professional work, which could have facilitated the interpretation of the criteria. It should be noted, however, that the greatest changes occurred in group  $n_2$ , where the use of the criteria was modeled by an expert. Unfortunately, due to the small number of participants, it is not possible to compare the groups statistically, which means that it cannot be excluded that the observed difference may be a result of chance alone. Still, it is a reasonable assumption that the modeling supported the pre-service teachers in interpreting the criteria. Panadero and Jönsson (2013) have also proposed that it is not the explicit criteria in isolation from other activities, that clarifies expectations and promote student learning, but the combination with for instance feedback and/or self-, and peer-assessment. In this study, it was modeling that contributed to aligning the criteria with the task at hand and making them accessible (cf. Jonsson, 2014).

An alternative interpretation of the findings is that the respondents have learned to use the criteria in a mechanical/instrumental way, without a deeper understanding of relational competence. Based on the content analysis alone, no distinction could have been made between such a surface approach and a deeper understanding. However, the thematic comparison suggests a deeper understanding of the concepts used, at least in group  $n_2$ . For example, the respondents expressed themselves in a more nuanced way about both the verbal and non-verbal *communication*. They also discussed implications of *differentiation* in the teacher-student relationship and they expressed themselves in much more detail about socio-*emotional* aspects of the situation. The most likely explanation is therefore that the pre-service teachers have gained an understanding of how to use the concepts of relational pedagogy to analyze the situation.

Taken together, the findings from this study suggest that the use of explicit criteria supported pre-service teachers’ discernment of significant dimensions of teacher-student relationships in a simulated situation, so that they were able to discern and discuss aspects of the teacher-student relationship with another focus and with greater detail and nuance. The study also provides some tentative evidence that modeling may support pre-service teachers’ use of the criteria.

## LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

There are several important limitations of this study, which need to be kept in mind when interpreting the findings.

First, this is a small scale study with a very limited number of participants. The findings may therefore depend on the specific individuals and the findings may not necessarily generalize to

any other population of pre-service teachers, not even at the same university. Further research is thus needed in order to corroborate the findings.

Second, the focus of this study was to investigate how pre-service teachers analyze simulated situations. Consequently, no claims can be made regarding how the respondents act (or would act) in “real situations.”

Third, respondents only analyzed one simulated situation, which also limits the possibility to make any general claims about students’ proficiency in applying their knowledge about relational competence in other situations.

From the findings and limitations of this study, it is suggested that future research involves other, and larger, samples of pre-service teachers in order to substantiate the findings reported here, but also a wider spectrum of situations. It is further suggested that future research investigates to what extent pre-service teachers may apply their knowledge about relational competence in authentic settings, such as during their practicum.

## IMPLICATIONS

There are two main implications from this study. First, in line with previous research on the use of explicit criteria (e.g., Brookhart, 2018), students in higher education may use criteria productively even with relatively limited efforts of implementation. This would suggest that explicit criteria can be used in different areas, where students are in need of discerning and analyzing/evaluating complex situations.

Second, since research into relational competence in teacher-education programs is largely lacking, it is difficult for educators to design interventions to aid pre-service teachers’ development of relational competence. This study therefore makes a contribution by presenting an intervention, which has been successful in supporting pre-service teachers’ discernment

of significant dimensions of teacher-student relationships. The intervention could be used as a starting point for educators when designing other interventions, aiming to aid pre-service teachers’ development of relational competence.

## ETHICAL STATEMENT

This study was carried out in accordance with the ethical guidelines for the Humanities and Social Sciences set out by the Swedish Research Council. The study has not been subjected to review by an ethical committee since, according to Swedish legislation regarding research on human subjects (2003:460), research needs approval from an ethical committee only in cases where personal and sensitive information is handled, when physical interventions are made, or when the subjects may be harmed. In line with this, approval from an ethical committee is not required by the university where the research was conducted. All subjects have been informed about the purpose of the research, that their participation is voluntary, and that they can interrupt their participation at any time. Written consent have been given by all subjects in accordance with the Declaration of Helsinki.

## AUTHOR CONTRIBUTIONS

All authors have contributed to the design of the study, the literature review, data collection, and writing of the manuscript. The content analysis was performed by PH and the thematic comparison by JA.

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## APPENDIX

### Criteria for Analyzing Teachers' Relational Competency

#### Communication

C:1 Teacher's verbal communication is attuned to the student; the teacher focuses on being understood by, and understand, the student.

C:2 The teacher uses verbal and/or non-verbal communication to invite the students to take part in discussions.

C:3 The teacher's non-verbal communication is attuned to the student; the teacher confirms the student through the communication (gestures, ways of speaking, body position, facial expression, etc.).

#### Differentiation

D:1 The teacher maintains an appropriate distance between herself/himself and the student; the teacher is not too far away or too close in her/his relationship with the student.

#### Emotions

E:1 The teacher is sensitive to the student's feelings; the teacher "reads" the student's emotional expressions, responds appropriately, and manages own feelings.

E:2 The teacher acts in order to create a good atmosphere in the group.

#### Professionalism

P:1 The teacher acts responsibly in relationships; she/he appears as can be expected by a professional.

P:2 The teachers meets every student as an individual.