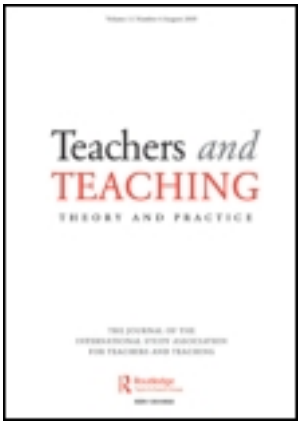

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Preach what you teach! Teacher educators and congruent teaching

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Preach what you teach! Teacher educators and congruent teaching

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Teacher educators seem to agree that, to be able to support their student teachers' learning, they themselves should be good models of the kind of teaching they are trying to promote. However, it is clear from the literature that this *congruent teaching* is not self-evident in teacher education. In the present article, we describe a small in-depth study, in which we attempted to establish whether teacher educators begin to teach more congruently when supported, and the factors influencing the occurrence or non-occurrence of such congruent teaching. To do so, we organised a workshop on the subject. Before and after the workshop, we interviewed the participating teacher educators, using videotapes of their lessons. To discover the possible contribution of the workshop to their congruent teaching, we later compared both interviews. We found that a particularly important aspect of congruent teaching, i.e. the teacher educators' ability to link their own teaching to theory, had improved. Our conclusion is that the acquisition of a language enabling them to talk about congruent teaching helps teacher educators to overcome problems with congruent teaching.

Keywords: teacher educators; theory and practice; modelling; practical knowledge; value education

Introduction

Slogans like 'Teach as you preach' and 'Walk your talk' are popular among teacher educators. They seem to agree that they themselves should be good models of the kind of teaching they are trying to promote, in order to support their student teachers' learning. And yet, despite the popularity of these slogans, student teachers often do not learn a great deal from the model behaviour demonstrated by their teacher educators, because they do not recognise it as such (Wubbels, Korthagen, & Broekman, 1997). For this reason, teacher educators should not confine themselves to (1) modelling,[1] but should also (2) explain the choices they make while teaching (meta-commentary), and (3) link those choices to relevant theory. In the present article, we discuss these techniques as three aspects of what we will here call *congruent teaching.*

It is clear from the literature that congruent teaching is not self-evident in teacher education. Smith (2001), for example, found that school mentors seem to have difficulty in describing their professional skills, no doubt because their practical knowledge is part and parcel of their teaching. Fragmentation of their behaviour, which is an essential part of explanation, appeared to be nearly impossible for most mentors in Smith's study (cf. Slick, 1998).

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This concurs with Bullough (1997), who criticises school-based teacher educators because they seldom share their choices with their student teachers and most of them disregard publicly available theory, relying solely on personal experience, implicit theories and common sense.

Loughran stated that teacher educators find it difficult to make their practice explicit and concluded:

> The ability to articulate the purposes underpinning practice for oneself and others is a desirable professional competency (for teacher educators). However, it is complex and difficult to do and it is particularly difficult to develop alone. (Seminar, November 6, 2003)

In this article, we describe a small in-depth study in which we examined the practice of three teacher educators. The questions we wanted to answer were:

(1) Do teacher educators begin to teach more congruently once supported by our stimulated recall interviews and a workshop?
(2) What factors influence the occurrence or non-occurrence of congruent teaching?

Theoretical background

In the literature, the term 'congruent teaching' is used in different meanings, for example, to emphasise the importance of matching the culture of school and home (see, e.g. Campbell, 1997), or the importance of attuning learning and teaching (for this, Biggs, 1999, uses the notion of 'concrete alignment'). In this article, 'congruent teaching' refers to the attunement of learning and teaching at two levels: attuning the learning of student teachers with the teaching of teacher educators *and* attuning the learning of the student teachers' pupils with the teaching of the student teachers themselves. From the literature, we derived a number of productive approaches to this specific type of congruent teaching. Five of these approaches are described below. We will also show how, in the examples that we present, the teacher educators express certain values through their congruent teaching.

Thinking aloud

'Thinking aloud' involves such practices as starting a session by explaining the reasoning behind the pedagogical structure to be used. Loughran (1996) found that such an introduction made it possible to demonstrate the thinking of the teacher educator about previous lessons, the intentions for the upcoming lesson, possible ideas for subsequent lessons, and the connections between previous, upcoming and later lessons. According to Loughran (1996), 'thinking aloud' ties together – in the 'action present' – the thinking of the teacher educator, the pedagogy used and the student teachers' learning. Through 'thinking aloud', the teacher educator stresses the value of linking teaching and learning.

Thinking aloud and stepping out

Wood and Geddis (1999) extended the 'thinking aloud' manner of explaining pedagogical choices towards a strategy they call 'giving meta-commentary'. In this approach, which involves more than just providing commentary, they also discuss how the comments relate to the teaching done in the schools.

Wood's role was to teach and reflect, while Geddis observed Wood's course and questioned him afterwards. The course began with a couple of lessons about lesson planning,

asking good questions and conducting a lesson. Next, Wood gave a mathematics lesson at secondary school level, which formed the main focus of the study. During the first part of this lesson, his student teachers took the role of pupils. While Wood was teaching this lesson, he occasionally 'stepped out' of the lesson to provide meta-commentary. In the second part of the session, Wood's approach shifted to engaging the student teachers in the kind of thinking he had been modelling.

Reflection breaks

'Thinking aloud' and 'stepping out' are approaches used in congruent teaching, with the teacher educator taking the lead. Reflection breaks are helpful as a means of shifting the initiative from the teacher educator to the student teachers. During a reflection break, the teacher educator encourages the student teachers to present their observations of his or her teaching, to further reflect on those observations, and/or discuss the observations and reflections as a group (Korthagen, Kessels, Koster, Lagerwerf, & Wubbels, 2001). In this way, the teacher educator expresses the value of the student teachers' own responsibility for his or her own development.

Co-teaching

Together with his colleague Berry, Loughran developed a form of explicit modelling (Berry & Loughran, 2002) which makes use of co-teaching. One of them starts the lesson; the other asks questions about the modelling. A debriefing, together with the student teachers, is the next step in the procedure. During the debriefing, situations from the sessions are reframed, and underlying assumptions about practice discussed.

On the basis of their experiences, Berry and Loughran explain that productive modelling is not something that comes naturally to teacher educators. It assumes, among other things, that the latter are prepared to show his or her own vulnerability, a value Berry and Loughran emphasise through their demonstration. This means that the teacher educator needs to be constantly responsive to possibilities for learning experiences for student teachers, for example, by encouraging student teachers to put forward questions about his or her teaching behaviour.

Linking modelling and theory

As Munby, Russell, and Martin (2001) maintain, establishing links between practice and theory is one of the key issues in teacher education. However, it is interesting that in the literature there are few discussions focussing on how teacher educators can not only exhibit model behaviour, but also make the connection with theory. When talking about theory, researchers such as Kessels and Korthagen (1996), and Bullough and Pinnegar (2001) distinguish between personal and public – academic – theory. We believe both are important in framing the modelling behaviour of teacher educators. In the formulation of a personal theory, academic theory can be translated, so that it 'comes alive' and can ultimately influence educational practice.

The role of values

When teacher educators use one of these approaches to congruent teaching, they do so with the aim of stimulating certain views of good teaching among their students. In other words, through congruent teaching, they express certain values. Berkowitz (1995) and Oser (1996)

define values as judgements based on ideas about the relationships between people and their environment, in our case between the teacher educator and the student teachers. We believe, however, that teacher educators should keep in mind that the student teachers are not the only group that must be taken into account in their teaching. They also have obligations to 'the unseen children' (Guilfoyle, Hamilton, & Pinnegar, 1997), the present or future pupils of their student teachers.

In this article, we use the term *teaching value* to cover all those values in teacher education that have a bearing on both these levels. A teaching value is a judgement about a right way of teaching, a value that teacher educators find important in their own teaching, as well as in the teaching of their student teachers. The values mentioned above (the values of connecting teaching and learning, making effective use of time, giving students responsibility for their own development, vulnerability, co-operation, legitimating practice) are all examples of such teaching values.

Participants

As very little is known about congruent teaching as employed by teacher educators, we felt it was premature to carry out an extensive research study among a large group of teacher educators. That is why, as a first step, we decided to carry out an in-depth study into the practices of three teacher educators, focusing on the two research questions formulated in the Introduction section. Our aim was to examine whether it is possible to raise the level of congruent teaching of the three teacher educators and to examine the factors influencing that process.

The educators who took part in the study are employed by the same teacher education institute. It offered its staff members an opportunity to participate in the study as a part of their professional development. Frank, Simon and Harry were three of the staff members taking advantage of that opportunity.

Frank is 49. He studied physics, and started his career as a secondary school science teacher. For the last ten years, he has been a teacher educator. In addition to teaching science, he coaches student teachers during their school practicum periods, and is involved in international projects and distance learning.

Simon is 51. He started his career as a primary school teacher and remedial teacher. After graduating in business studies, he taught at a secondary school. He has been a teacher educator for the past two years. He teaches business studies and coaches student teachers during their professional training and school practicums.

Harry is 57. He started his career as a primary school teacher while still at university, majoring in educational studies. He has been a teacher educator for 27 years. He teaches educational theory, supervises student teachers during their school practicums, and is involved in several projects related to special needs education.

Method

The study consisted of three stages. In this section, we describe the instruments used and the manner in which the data were analysed.

Stage 1

Initial interviews

The first stage consisted of an interview with, an observation of, and a stimulated response interview with each of the three teacher educators.

The initial interview consisted of the following four parts:

(1) Closed questions designed to gather background information about the teacher educator (course of study, experience in teacher education, etc.).
(2) An open discussion focusing on the choice of an observable teaching value that would be the object of study. Prior to the interview, the teacher educator was asked to formulate at least three teaching values. This request was accompanied by an explanation of what was meant by a teaching value, and emphasising the fact that it should be observable.
(3) Closed and open questions designed to gather information about the way the teacher educator thought the chosen teaching value could best be put into practice using the three aspects of congruent teaching, i.e. modelling, explaining and linking modelling to theory. Examples of closed questions related to modelling are:
   - Do you model the teaching value? (no; a few times per year; once a month; every session)
   - At what level do you model? (level of student teachers or level of secondary school students)
   - Do you plan your modelling? (yes; no; it depends on the situation)

The closed questions were followed by open questions in which the teacher educator was asked to elaborate on the above answers by giving concrete examples.

(4) At the conclusion of the interview, the participant was asked whether he had encountered problems with regard to congruent teaching and if so, what these were.

The interview protocol was tested before the study was carried out: one of the researchers interviewed a teacher educator not involved in the study. This tryout led to minor changes in the wording of the questions.

Observations and stimulated recall interviews

After the interview, the teacher educator selected a lesson in which he felt the teaching value would be observable, and invited the researcher to attend the lesson. Afterwards, a stimulated recall interview was held, making use of the videotape of the lesson. Paterson and Graham (2000) describe stimulated recall interviews as retrospective reports of thinking based on the provision of extensive retrieval cues (on videotape) of the preceding activity (cf. Shavelson, Webb, & Burstein, 1986).

In our study, the teacher educator was asked to watch the videotape of the lesson and reflect aloud on the thoughts that occurred during that lesson (Meijer, 2000), specifically those related to modelling, to explain his teaching, and link his behaviour to theory. The focus was on how the teacher educator relived his own lesson, rather than on the observations of the observer. If after 10 minutes comments were still not forthcoming, the researcher asked the teacher educator whether no thoughts were articulated because none had occurred during the lesson, or for some other reason. All comments made by the teacher educator and the researcher during the interview were recorded on audiotape and then transcribed. The protocol was used as a source of data for analysis. The protocol for the observation and the stimulated recall interview was first tested in another setting.

Stage 2

The second stage of our study was a one-day workshop with two interconnected aims: first, to demonstrate various forms of congruent teaching, and second to help the

participating teacher educators to develop ways of enhancing the quality of their congruent teaching.

Stage 3

In the third stage of the study, a second lesson given by each of the three teacher educators was observed and videotaped, followed by a stimulated recall interview.

The interview protocol was the same as in Stage 1.

Analyses

The *interview data* were analysed in two ways. First, the teaching of each teacher educator was determined and illustrated by a number of crucial excerpts from the interview. Second, based on the answers to the closed questions, the value of each teacher educator was concretised into two specific ways of teaching this value congruently, and supplemented by examples given by the teacher educator. The result was sent to the teacher educator for a member check (Merriam, 1998).

For each teacher educator, the data of the two *stimulated recall interviews* (one before and one after the one-day workshop) were analysed by locating episodes of modelling, explaining and linking modelling to theory. Next, for each teacher educator, two protocols were made: one of the relevant episodes before the workshop and one of those after the workshop. Again, examples were added, and the result was sent to the teacher educator for a check.

Findings

Teaching values

In the initial interviews, it appeared not always easy to arrive at a clear and observable teaching value, as the teacher educators tended to mention vague and abstract values. After some attempts, we succeeded in helping them formulate concretisations that matched the objectives of our study. However, for two of the educators this took a considerable amount of time. Frank chose the teaching value ‘explaining clearly’ which, according to him, could be observed because he often gives an overview of the contents of a lesson, and he always answers his student teachers’ questions.

Simon chose the teaching value ‘explaining according to individual student teachers’ needs’. According to Simon, this could be observed because he asks student teachers whether they have understood his explanation; because he clarifies his explanation not only orally, but also on transparencies or on the blackboard, taking into account the different learning styles of his student teachers; and he asks his student teachers how they approached certain tasks and problems.

Harry opted for the teaching value ‘connecting to student teachers’ experiences’, which, he thought, could be observed because he offers student teachers the opportunity to speak up, and he links student teachers’ experiences to subject contents.

Congruent teaching

In the first interview, we also asked the three teacher educators whether they taught congruently. The results are shown in Table 1.

Table 1. Initial level of congruent teaching, according to the three teacher educators.

	No	Now and then	Every lesson
Do you model your teaching value?			Frank, Simon, and Harry
Do you explain your modelling?		Frank and Simon	Harry
Do you link your modelling to theory?	Simon and Harry	Frank	

The interviews showed that the teacher educators always model at the level of the student teachers. They never ask their student teachers to play the role of secondary school pupils in order to demonstrate their teaching value at that level. Frank, Simon and Harry agree that congruent teaching is sometimes planned and sometimes unplanned, i.e. triggered by a situation.

According to the three teacher educators, time pressure can be an obstacle to congruent teaching. They felt that they did not have enough time to prepare congruent teaching, and that there is not enough time during their lessons to explain their modelling and link it to theory. One of them said: 'If I take the time to do that during the lessons, I'm afraid my students will fail their exams'.

The results of the stimulated recall interviews are presented in Table 2.

As predicted by the three educators in the interview prior to the observed lesson, all of them did indeed practice modelling. Harry said in the interview that he also explained his modelling in every lesson. He did indeed do so in the observed lesson. Frank and Simon said they explained their modelling occasionally. In the observed lesson, Simon did so, but Frank did not. None of the three teacher educators linked their behaviour to theory, although Frank said in the interview prior to the observed lesson that he did do so from time to time.

In the analysis of the stimulated recall interviews, two additional points surfaced. First, only a few times during the stimulated interviews did the teacher educators spontaneously point to instances of modelling or the explaining of modelling. Most of the time, they needed a reminder from the researcher. Second, the use of the terms 'modelling' and 'explaining' did not come naturally to them as far as their own work was concerned. The following excerpt from the stimulated interview with Frank illustrates this:

Researcher: Ten minutes of the lesson have passed. While teaching, did you think about modelling, explaining your modelling, or linking your modelling to theory during those ten minutes?

Frank: Uh, well, I did think about the importance of becoming concrete when your students don't understand your explanation. And I put forward questions. But I don't know whether or not that is role-modelling teaching.

In sum, in this first stage of the study, we concluded that the three teacher educators practiced modelling and sometimes explained their modelling. We found that they did not link

Table 2. Level of congruent teaching during a lesson given before the workshop.

	No	Yes
Do you model your teaching value?		Frank, Simon, and Harry
Do you explain your modelling?	Frank	Simon and Harry
Do you link your modelling to theory?	Frank, Simon, and Harry	

their modelling to theory, or did so only incidentally. The teacher educators also seemed to find it difficult to recognise and pinpoint instances of congruent teaching while watching the videotape of their lesson. Thus it would appear that the observation of Loughran (see Introduction) that 'the ability to articulate … is complex and difficult to do' is also applicable to the teacher educators in our study, both during and after the lesson. We also cited Loughran's statement that this ability 'is particularly difficult to develop alone'. For this reason, as the second stage in the study, we organised the workshop.

Enhancing the quality of congruent teaching

The one-day workshop was aimed at helping the participating teacher educators to enhance the quality of their congruent teaching. Among others, problems with congruent teaching were discussed. During this discussion, the teacher educators acknowledged that time pressure was not the only obstacle to congruent teaching. Equally important was the fact that they lacked both theoretical knowledge about congruent teaching and the skills needed to apply it in the classroom. The teacher educators expected the workshop to help them to solve these problems.

The teacher educators were also offered a planning format for a future lesson. The result of the workshop was that at the end of the day, at least on paper, the three teacher educators articulated how they would teach their teaching value congruently in a specific lesson.

Moreover, the three teacher educators planned to make use of the approaches 'thinking aloud' and 'reflection breaks'. They also planned to make a link with theory. It is noteworthy that in two cases the teacher educator wanted to study the theory in order to better prepare himself. Although there is nothing wrong with this, it did raise the question of the degree to which teacher educators have theory at their disposal in an unprepared situation. As Ducharme (1993) has suggested, the theoretical knowledge of teacher educators may be limited, and perhaps confined to their specific specialisation.

After the lesson, in which the teacher educator enacted his written plan, a second stimulated recall interview was held. Table 3 shows the results of these stimulated recall interviews.

Although the lessons did not always follow the plans, the three teacher educators did model their teaching values, explained their modelling and linked their modelling to theory. However, the fact that the three teacher educators did so, did not mean that it came naturally to them, or that they found it easy. Frank said:

> Then I thought: now I have to do these complicated things. I have to explain my teaching and link it to theory. That's what I was thinking of right then. And I was curious how the students would respond.

The analyses showed that the stimulated recall interviews after the one-day workshop were richer than the stimulated recall interviews before the workshop: the teacher educators

Table 3. Level of congruent teaching during the lesson after the workshop.

	No	Yes
Do you model your teaching value?		Frank, Simon, and Harry
Do you explain your modelling?		Frank, Simon, and Harry
Do you link your modelling to theory?		Frank, Simon, and Harry

seemed to have acquired a language to describe their work. Moreover, they seemed better able to reflect on their own teaching, as is clear from the following examples taken from the stimulated recall interview with Simon:

Excerpt from Simon's statistics lesson	Excerpt from the stimulated recall interview with Simon
I am about to explain to you a number of statistical problems. To do so, I will use the direct instruction approach. This approach is described in this book, which you have all studied (shows the book).	*I had planned at the end of my lesson to make a connection with the theory on inductive learning. Here, I make this connection at the beginning of the lesson, but all I do is mention the theory. I don't elaborate on it. I don't think this is effective.*
During the previous lesson, we discussed probabilities. Now we'll move on to combinations. The book gives the example of a fruit machine. For ethical reasons, I did not bring along an actual machine, but I'll explain it using differently coloured pens.	*This is an example of modelling and explaining. I could have extended this example, but that is something I notice now; it did not occur to me during the lesson.*
You can use this demonstration in your own classroom.	

In sum, in the observed and videotaped lesson after the one-day workshop, the three teacher educators did indeed model their teaching value, they explained their modelling, and linked it to theory. During the second stimulated recall interview, the teacher educators were also able to recognise, name and reflect on instances of congruent teaching.

Conclusion and discussion

At three moments during our study (initial interview, stimulated recall interviews before and after the workshop based on videotaped lessons), we asked three teacher educators to report on three aspects of congruent teaching, namely modelling a teaching value, explaining the modelling and linking the modelling to theory. Table 4 shows an overview of the outcomes.

At the beginning of the study, two of the three aspects of congruent teaching were found in their lessons, although the explanation of modelling appeared less often than the modelling itself. At the end of the study, we saw an increase of their level of congruent teaching for the aspect 'explaining modelling', and above all for the aspect 'linking modelling to theory'. On the basis of our study, we cannot be certain whether this was representative of

Table 4. Levels of congruent teaching at three subsequent moments.

Aspects of congruent teaching	Initial level of congruent teaching, according to the three teacher educators	Level of congruent teaching during one lesson before the workshop	Level of congruent teaching during one lesson after the workshop
Do you model your teaching value?	Yes (3)	Yes (3)	Yes (3)
Do you explain your modelling?	Yes (3)	No (1); Yes (2)	Yes (3)
Do you link your modelling to theory?	No (2); Yes (1)	No (3)	Yes (3)

their entire practice. In spite of the limited scope of the study, at least two remarks can be made.

First, it was remarkable that, during the initial interviews, the three teacher educators said that the main obstacle to congruent teaching was time pressure, whereas during the workshop, the teacher educators became aware that time pressure was not the only obstacle. They appeared to lack knowledge on congruent teaching, and the skills needed to put it into practice. They expected the workshop to help them tackle these problems, and these expectations were fulfilled, at least in part. Our study seems to support the suggestion of Ducharme (1993) that the theoretical knowledge of teacher educators may be limited: during the workshop, two of the three teacher educators started planning to study theory to improve their congruent teaching.

Second, learning a language by which to 'talk about' their work was extremely helpful to the three teacher educators in overcoming problems with congruent teaching. The professional community of teacher educators seems to lack such a language. We believe it does exist in the literature, but again, teacher educators are often not sufficiently familiar with this literature.

On the basis of our study, we can elaborate on this finding. In the interviews held before the observations and the workshop, the three teacher educators said that congruent teaching is sometimes planned and sometimes unplanned, i.e. triggered by a situation presenting itself. Because the videotaped lessons were announced beforehand, one might have expected the teacher educators to plan congruent teaching for these lessons. However, in the stimulated recall interview about the first videotaped lesson (the one before the workshop), the teacher educators seldom spontaneously pointed to instances of congruent teaching. Neither the concepts of 'modelling' and 'explaining' nor the use of these terms came naturally to them as far as their own work was concerned. Hence, the outcomes of these first stimulated recall interviews seem to confirm Loughran's conclusion as mentioned in the introduction of this article, that 'the ability to articulate … is complex and difficult to do' (Seminar, November 6, 2003). In the first interview (prior to the stimulated recall interview), extended discussions were needed to help the teacher educators formulate a teaching value that was important to them and could be observed.

The stimulated recall interviews after the one-day workshop were much richer: the teacher educators seemed to have developed a language to describe their work and were thus more capable of reflecting on their own teaching. We presume that having a language available also made it possible for them to link modelling and theory in the second series of videotaped lessons (see Table 4).

We do not know whether the results of this small study can be generalised to include other teacher educators. However, they do raise some important and potentially alarming questions about the professionalism of teacher educators, which, in our view, requires further research. For example, the finding that teacher educators do not seem to have at their command the language needed to discuss and develop their specific professional expertise, suggests that there is an automatic assumption that a good teacher will also make a good teacher educator. It is certainly true that many good teachers have become good teacher educators by being 'thrown in at the deep end'. However, their success may have had more to do with teaching experience and proficiency in a specific subject than with their knowledge, skills or ability as a teacher of teaching (Guilfoyle, Hamilton, Pinnegar, & Placier, 1995). The fact that the transition from teacher to teacher educator is assumed to be non-problematic suggests that the work of teacher educators themselves is neither particularly specialised nor highly valued. This runs counter to explanations of teaching about teaching described by many scholars who are also teacher educators. There are detailed accounts of

the expertise they have developed as expert teachers of teaching (e.g. Bullough, 1995, 1997; Chin, 1997; Clandinin, 1995; Dinkleman, 1999; Kuzmick, 2002; Russell, 1997, 1999).

One important aspect of this expertise is the ability to translate Theory with a capital 'T' to theory with a small 't' (Korthagen et al., 2001). In the light of our discussion of congruent teaching, this means that teacher educators should have a fairly well-developed knowledge of theories as they can be found in handbooks and articles, but most of all that they are capable of concretising such theories for the student teacher, in connection to their own and the student teachers' actual teaching practice.

What this study taught us is that teacher educators need to have more than theoretical knowledge and skills at their disposal, as well as the ability to link this expertise to their own practices and the practices of their student teachers: they need to learn the professional language, not only to enhance the level of congruent teaching, but also in order to learn from the expertise of colleagues, to reflect on their own teaching and to develop as teacher educators. It is likely that a one-day workshop is not sufficient to reach such important goals, and more support may be needed. In our view, this implies that we should take the professional development of teacher educators more seriously (cf. Koster, Brekelmans, Korthagen, & Wubbels, 2005).

Note

1. In this article, for analytical reasons, we use the term modelling in a restricted sense. We are aware of the fact that some authors (see, e.g. Loughran, 1996) include 'giving meta-commentary' in modelling.

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