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Team teaching during field experiences in teacher education : exploring the assistant teaching model

Reference:
Baeten Marlies, Simons Mathea, Schelfhout Wouter, Pinxten Rianne.- Team teaching during field experiences in teacher education : exploring the assistant teaching model
European journal of teacher education: journal of the Association for Teacher Education in Europe / Association for Teacher Education in Europe - ISSN 0261-9768 - 41:3(2018), p. 377-397
Full text (Publisher's DOI): https://doi.org/10.1080/02619768.2018.1448780
To cite this reference: https://hdl.handle.net/10067/1497260151162165141
Team Teaching during Field Experiences in Teacher Education

Exploring the Assistant Teaching Model

Abstract

Teacher education institutes are in search of alternative models of field experiences, inspired by collaborative learning. This study examines team teaching. We focus upon the assistant teaching model, in which the student teacher assists the mentor during teaching. We investigate which assisting activities student teachers prefer, how student teachers and mentors experience these activities and the conditions for implementation they foresee. Data were gathered using activity reports, reflective documents and questionnaires. Results show that the preferred assisting activities mainly consist of guiding pupils during individual and team work and of teaching a part of a lesson in front of an entire class group. The assistant teaching model has both advantages (professional growth,...) and disadvantages (feelings of unfamiliarity,...) for the student teacher. Advantages and disadvantages have also been reported for mentors (support, high workload,...) and pupils (support, confusion,...). Finally, several conditions for successful implementation of the assistant teacher model are discussed.

Keywords: team teaching, teacher education, field experiences, student teacher, mentor
Student teachers’ field experiences are an essential part of teacher education (Kyndt, Donche, Gijbels, & Van Petegem, 2014). In most teacher education programmes, the underlying concept is the same: the student teacher works as a single trainee with an experienced teacher, the mentor (Dang, 2017; Sorensen, 2014). First, he observes a number of lessons given by the mentor, before receiving the responsibility to teach individually. The mentor then observes and coaches (Bacharach, Heck, & Dahlberg, 2010; Birrell & Bullough, 2005; Henderson, Beach, & Famiano, 2009). Teacher education institutes are in search of alternative models of field experiences, inspired by cooperative and collaborative learning, in order to facilitate a gradual transition to self-regulated teaching (i.e. to independently plan, monitor, and assess their teaching) (Gardiner & Robinson, 2009; Guise, Habib, Thiesen, & Robbins, 2017; Nokes, Bullough, Egan, Birrell, & Hansen, 2008; Zeichner, 2002). Team teaching is an example of such an alternative model.

Team teaching refers to two or more teachers working together ‘in some level of collaboration in the planning, delivery, and/or evaluation of a course’ (Baeten & Simons, 2014). Synonyms for team teaching are co-teaching, cooperative teaching and collaborative teaching (Carpenter, Crawford, & Walden, 2007; Dugan & Letterman, 2008; Welch, 2002).

Team teaching can be applied by two teachers, by a teacher and a special education teacher, by two student teachers, by a student teacher and his mentor, etc. Recent studies show that team teaching during student teachers’ field experiences usually takes place between student teachers (Baeten &
and that the role of the mentor as a team teacher has rarely been reported (Ambrosetti & Dekkers, 2010; Clarke, Triggs & Nielsen, 2014). A systematic literature search, resulting in a narrative review, revealed only twelve studies reporting on advantages, disadvantages and conditions for implementation of team teaching between student teachers and mentors during field experiences in primary and secondary education (Baeten & Simons, 2016). In an attempt to contribute to the current literature, the present study focuses on team teaching between student teachers and their mentor. According to the level of collaboration between the team teaching partners, five models of team teaching can be distinguished (Baeten & Simons, 2014; Wynn & Komrey, 2005). Table 1 gives an overview of these five models.

Table 1 near here.

This study focuses on the assistant teaching model. In the assistant teaching model one teacher has full responsibility for the delivery of the course. He takes the lead, while the other teacher becomes an assistant or ‘back-up’ teacher (Smith, 2004) who, for instance, circulates through the classroom providing support to pupils when necessary (Al-Saideh, 2010; Badiali & Titus, 2010; Cook & Friend, 1995; Nevin et al., 2009). Other assisting activities mentioned in the literature are: ensuring that the pupils continue to concentrate, evaluating tasks, ensuring that the materials necessary for teaching a particular lesson are present (Smith, 2004), paraphrasing the explanation given by the teacher, demonstrating how pupils can take notes (Nevin et al., 2009), or offering follow-up activities related to the learning
contents taught by the main teacher (Al-Saideh, 2010). The assistant teaching model requires collaborative planning in advance to enable the assistant teacher to anticipate any potential difficulties that the pupils may experience (Badiali & Titus, 2010). Synonyms of the assistant teaching model are ‘one teaching, one assisting’ (Cook & Friend, 1995), ‘one teach, one guide’ (Badiali & Titus, 2010), ‘tandem model’ (Smith, 2004), ‘monitoring teacher’ (Al-Saideh, 2010), and ‘supportive (co-)teaching’ (Nevin et al., 2009; Thousand, Villa, & Nevin, 2006). Advantages of the assistant teaching model are that it is relatively easy to implement because it does not demand far-reaching adaptations in the mentoring approach. Moreover, by taking on the role of an assistant teacher, the student teacher gradually experiences the teacher’s responsibilities. He or she can start by implementing small assisting activities that do not require a great deal of teaching experience. During this research authentic settings were created as part of teacher training to enable us to investigate the experiences of the stakeholders.

A recent review (Baeten & Simons, 2016) showed that research on team teaching between student teachers and mentors is scarce. A systematic literature search on the assistant teaching model between student teachers and mentors revealed only three studies: Eick, Ware, & Jones, 2004 and Eick & Dias, 2005. In these studies, the assistant teaching model has been applied in the field of teaching sciences. In the study of Eick et al. (2003), the student teacher first observed while the mentor was teaching and then subsequently assisted the mentor during instruction, mainly by supporting the mentor and by
guiding small groups of individual pupils. Afterwards, the roles were alternated, with the student teacher taking responsibility for the delivery of the course while the mentor assisted. Assisting activities of the mentor consisted of answering questions the student teacher could not answer, giving additional explanation and intervening when pupils were misbehaving. In the studies of Eick et al. (2004) and Eick and Dias (2005), two student teachers were assigned together to a mentor. First, both student teachers assisted the mentor with the delivery of the course. Next, one student teacher took the lead for the delivery of the course, while the other student teacher and the mentor assisted. The mentor intervention consisted of adding any information the student teacher forgot, intervening when pupils were misbehaving, emphasizing the learning content, carefully correcting mistakes made by the student teacher, answering questions the student teacher could not answer, etc. Activities of the assisting student teacher were supervising the task-oriented behaviour of the pupils, supporting pupils who required help, taking notes which could be used as feedback for the teaching student teacher.

The studies of Eick et al., 2003 and Eick & Dias, 2005 concluded that the assistant teaching model has many advantages for the student teacher. Due to the presence of the assisting mentor, the student teacher felt comfortable and supported in the teaching task. Furthermore, this support contributed to the professional growth of the student teacher. As the support was provided when needed during the course, instead of after the course, the student teacher could learn on the spot. While the student teacher was assisting the mentor,
opportunities for higher observation arose, enabling the student teacher to learn to differentiate between effective and non-effective ways of teaching (Eick et al., 2003). These experiences enabled the student teacher to reflect more critically and profoundly on the delivery of the course (Eick et al., 2003; Eick & Dias, 2005). Professional growth was also established because the student teacher managed to get a better understanding of the pupils (Eick & Dias, 2005). Finally, student teachers reported more self-confidence regarding teaching, thanks to the presence of the mentor (Eick et al., 2003). A specific aspect of the study of Eick et al. (2003) was that the student teacher could make use of the mentor’s class preparation which enabled him/her to focus more on the learning contents and activities as well as on the delivery of the course itself. Mentors also perceived this as an advantage, because they could adhere to their own class preparation/planning.

The studies of Eick et al. (2003, 2004) and Eick and Dias (2005) show that student teachers can benefit from the assistant teaching model. This indicates that the model can be promising for field experiences in teacher education. However, a number of important challenges and unsolved questions related to this scarcely investigated teacher training approach, still remain. An important element in the success of the assistant teaching model is the mutual communication between the mentor and the student teacher(s). For instance when adjustments of the course planning occur because of changes in the timetable, deliberation between both parties is required. In the study of Eick & Dias (2005) student teacher(s) experienced this as extremely frustrating. In
addition student teachers and mentors will have to be able to agree on which tasks will be done by which party. This is not always easy because student teachers may have other prior conceptions on teaching than their mentors, which can lead to negative learning outcomes (Gijbels, Kyndt, Peeters & Schelfhout, 2016). Another important mediating variable is the degree to which both parties are open for cooperative interaction and dispose of collaborative competence (Kyndt, Donche, Gijbels, & Van Petegem, 2014). These are aspects of a broader, but essential student teacher – mentor relation, which will be very influential in shaping these teaching practice approaches (Schelfhout, Dochy, Janssens, Struyven, Gielen & Sierens, 2006). Because this research focus is relatively new and, given that for teacher education institutes aiming to implement this model, it is important to have an overview of (1) possible assisting teaching activities when implementing the assistant teacher model for other subjects/disciplines other than sciences, and of (2) advantages to value and disadvantages to warn for as well as of conditions for a successful implementation, the research questions central to this study are:

RQ1: Which assisting activities do student teachers prefer to perform in the assistant teaching model?

RQ2: Which advantages and disadvantages do student teachers and mentors experience when implementing the assistant teaching model?

RQ3: Which conditions do student teachers and mentors evaluate as critical in order to successfully implement the assistant teaching model during field experiences?
1. Methodology

1.1 Respondents

This study was conducted in the teacher education programme of the University of Antwerp (Belgium). This one-year programme prepares Master degree students to become secondary school teachers. As officially determined by decree, the teacher education programme encompasses 60 ECTS credits: 30 credits of theory and 30 credits of practice. Student teachers choose their teaching subject based on the Master degree they obtained.

Participants consisted of 18 student teachers (3 males and 15 females), with different teaching subjects: biology (n=2), chemistry (n=2), economics (n=2), French (n=5), behavioural sciences (n=3), Dutch (n=2) and mathematics (n=2). Participation was voluntary. Student teachers were assigned in pairs. Nine mentors, each supervising two student teachers, were involved in the study.

1.2 Procedure

The field experiences consisted of two parts: the orientation phase (first semester) and the growth phase (second semester). During the orientation phase, student teachers learned about the wide spectrum of activities inherent to the teaching profession (micro-, meso- and macro level). They observed four lessons given by the mentor and two lessons given by another student teacher. Each student teacher taught two lessons individually. During the growth phase, student teachers became their mentor’s assistant.
during four lessons. These four lessons formed the scope of this study. Afterwards, each student teacher taught 36 lessons individually.

During the ‘assistance lessons’ the mentor was responsible for the planning/preparation and evaluation of the lesson, while the student teacher participated/assisted. In this way, the student teacher was involved in different aspects of the teaching profession. Beforehand, and based on the literature review (Baeten & Simons, 2016), the following suggestions concerning the assisting activities were made to the student teachers and their mentor: provide individual guidance to the pupils during exercises, coach teamwork, give a short theoretical explanation, give feedback on a task or test, evaluate oral presentation(s), engage in class management activities i.e. ensure that pupils are attentive and task-oriented, prepare materials used during instruction). However, as these were mere suggestions, the mentor and student teachers were free to interpret the assistantship and select alternative assisting activities. If the student teacher needed to prepare a part of the lesson for the assisting activity, this was allowed. The goal was to create sufficient opportunity to implement the approach in a self-regulated way, and to be able to investigate different authentic assistant contexts which could emerge and to inquire about the reasons why the assistance relations were shaped in a specific way.
1.3 Research Instruments and Data Analyses

To provide an answer to the three research questions, multiple research instruments were used. Table 2 presents an overview and clarifies the link between the selected instruments and the research questions.

To gain insight into the selected assisting activities (RQ1), the student teachers were asked to keep an activity report. They received a template (Appendix 1) which they completed after each of the four lessons. The main goal was to get an in-depth view of what exactly had been done as a self-chosen implementation of teaching assistance, and then to compare this with the experiences of the student teacher and mentor involved in the study (as gleaned from the questionnaire).

These activity reports were analysed by a qualitative approach. To ensure descriptive validity (Johnson, 1997), investigator triangulation was applied. Two (main) researchers monitored the data collection and data analysis. In a preliminary phase, the data were read by the 18 student teachers involved in the study and also coded by them. Next, one (main) researcher (the first author) performed an independent coding of the data in two steps to ensure intra-rater reliability. The first step consisted of an explorative, detailed analysis, to develop a coding scheme. In a second step, this coding scheme was applied to all the reports using NVivo10 software. The unit of analysis was every individual assisting activity (e.g., coaching teamwork, introducing a course). Results were compared with the student teachers’ findings.
Inconsistencies in coding were discussed with the second author to establish uniformity.

The experiences of the student teachers and their mentors (RQ2) and the conditions of successful implementation (RQ3) were collected using short questionnaires consisting of open-ended and closed-ended questions (Appendix 2 and 3), based on an extensive review study (Baeten & Simons, 2014). These questionnaires were completed after the four lessons of the assistant teaching model had been given.

The closed-ended questions were answered through a five-point Likert scale, with answer categories ranging from 1 (strongly disagree/very bad) to 5 (strongly agree/very good). These answers were analysed in a descriptive way through mean (M) and standard deviation (SD). If the mean was higher or equal to 3.5, the score was considered ‘high’. If the mean was lower or equal to 2.5, the score was considered ‘low’. If the mean ranged between 2.5 and 3.5, the score was considered neutral. The answers to the open-ended questions were analysed using a qualitative approach. Student teachers also wrote a reflection document (Appendix 4) about their experiences as an assistant teacher. These documents were also analysed qualitatively. The analyses took part in two phases. The first phase consisted of an explorative, detailed analysis of all open-ended questions and reflection documents, with the aim of developing a coding scheme. The advantages, disadvantages and conditions for successful implementation as reported in the literature (Baeten & Simons, 2014) were used as a conceptual framework. This framework was
refined and/or extended based on the data. In a second phase, this coding scheme was applied to all open-ended questions and reflection documents, using NVivo10 software.

2. Results

2.1 Which assisting activities do student teachers prefer to perform? (RQ1)

Fourteen student teachers carried out assisting activities during the mentor’s regular lessons and then they handed in an activity report. Four student teachers chose an alternative timing to complete their assisting activities, namely during a daytrip with the pupils to the courthouse and during a poetry day at school.

Taking the assisting activities undertaken during the regular lessons into account, six different types of activities were identified:

- Guide pupils during teamwork, together with the mentor (n=11 student teachers);
- Teach a part of the lesson for the whole class group (n=11 student teachers): this activity includes several types of tasks i.e. give a (brief) introduction to the course, explain a theoretical content, give instructions regarding an assignment, explain or correct an exercise, supervise during a test;
- Guide pupils during individual work (n=9 student teachers);
- Offer practical support to the mentor (n=3 student teachers), for example using the cursor to show exercises on the interactive whiteboard;
- Teach a part of the lesson to a subgroup of the class (n=1);
- Evaluate individual pupils (n=1).

The type of activities varied greatly among the student teachers. Three student teachers carried out the same activity during each of the four lessons. The other student teachers varied their assisting activities between the lessons. They performed two (n=3), three (n=5) or four (n=3) different activities during the four lessons.

It is interesting to note that the four student teachers who chose an alternative interpretation of teaching assistance as part of a more extensive activity external to the normal lessons did so because they perceived – in interaction with their mentors – that the lessons, as planned by their mentor, offered limited possibilities for an assistant teacher. We will discuss this further in light of the following research question.

2.2 How do student teachers and mentors experience the assistant teaching model (RQ2)?

First the experiences of the student teachers are described, followed by the experiences of the mentors. In both groups, a distinction is made between the advantages and disadvantages for each of the three actors involved in the teaching process i.e. student teacher, mentor and pupils.
2.2.1 Experiences reported by the student teachers.

Student teachers gave a rather neutral answer to the general question ‘How do you evaluate the assistance lessons?’ (M=3.12 out of 5, SD=0.93) as well as to the item ‘The assistance lessons have an added value for field experiences in teacher education.’ (M=2.95 out of 5; SD=1.44). However, the large SD reveals diverging opinions, indicating that student teachers experienced both advantages and disadvantages during these lessons.

**a. Advantages for student teachers.** Table 3 shows that, based on the scores of the closed-ended questions on the added value of the assistance lessons, student teachers experienced professional growth: they felt more prepared to teach individually and reported to have a better understanding of the importance of collegiality (average scores ≥ 3.5). However, they did not feel that these lessons improved their ability to reflect. Furthermore, they experienced growth on a personal level, especially as far as the feeling of self-confidence in front of a class was concerned.

[Table 3 near here.]

An analysis of the open-ended questions and the reflection documents showed similar advantages for the student teacher, namely professional and personal growth (see Table 4).

[Table 4 near here.]

All student teachers (N=18) reported experiencing professional growth. The assistance lessons offered possibilities to learn about the teaching profession, the school culture and to gradually become more involved in it.
(n=12 student teachers). Moreover, these lessons provided an opportunity to become acquainted with the pupils (n=12) and the teaching style of the mentor (n=5). Professional growth was possible because the student teacher could observe the mentor simultaneously and could evaluate different aspects from his/her own perspective. This way, student teachers experienced teaching from very close by: ‘Since you can teach together with the mentor, you learn a lot during the lessons. Otherwise you only can learn when the lesson is over, during the feedback and reflection afterwards’ (student teacher b). Furthermore, student teachers could use these lessons to directly implement suggestions and critical comments given by the mentor. This way, student teachers not only felt more prepared to teach individually, they also gained a better understanding of the importance of collegiality (as shown in Table 3): ‘The mentor and yourself as a student teacher are on the same wavelength. You truly feel as if you are real colleagues. The feeling of being evaluated is far less present, you really feel as an equal’ (student teacher 0).

Besides professional growth, student teachers also experienced personal growth (n=10) (Table 4). Student teachers mostly refer to a growing self-confidence (n=9), for instance ‘You get the opportunity to become familiar with the class group before you have to teach in front of them. This lowers the threshold; it takes away the insecurity that you experience before delivering your first lesson’ (student teacher d). One student also reported an increased motivation for teaching.
Although the student teachers evaluated the statements regarding professional and emotional support rather neutrally (Table 3), the majority of them (n=12) referred in the answers to the open-ended questions and in the reflection documents (Table 4) to the support they experienced. They considered the assistance lessons as a safe way to start their field experiences, taking into account that, at that point, they did not yet have full responsibility for the delivery of the course. There was still a mentor to rely on: ‘During the assistance lessons, I felt comfortable. I knew that I was not alone and that the mentor still could intervene if necessary. This gave me a reassuring feeling.’ (student teacher j).

b. Disadvantages for student teachers. Besides advantages, student teachers also reported disadvantages (Table 4). A majority of the student teachers (n=13) reported a feeling of unfamiliarity with the role of assistant teacher. Some student teachers experienced these lessons as rather strange and asked themselves what their role exactly was. They felt as if they had limited input during these lessons and, therefore, described their role as ‘little helper’, ‘babysit’ and ‘slave’. Despite the fact that all student teachers recognized professional growth to some degree, some student teachers (n=9) at the same time also reported the opposite. These student teachers indicated to have learned little regarding ‘real teaching’. For example, they learned about guiding pupils or class management, but not about the whole process of the planning and delivery of a lesson. Student teachers who reported to have a limited input in these lessons, also reported little learning gains. One student
teacher even admitted dozing off from time to time. Moreover, a few student teachers argued that the assistance lessons were not a correct reflection of the reality (n=2): ‘Two persons teaching is not a realistic situation in real life’ (student teacher n). They also added that problems regarding the mentor’s time management arose, leaving little or no time for the student teacher to do anything (n=2); and that there was a significant difference between their own teaching style and the mentor’s (n=1).

c. Advantages and disadvantages for mentors and pupils. Besides advantages and disadvantages for themselves, student teachers also reported advantages and disadvantages for the mentors and the pupils. When asked if they had the feeling they truly supported their mentor, the student teachers answered rather neutrally (M=2.59 out of 5), but the opinions differed greatly (SD=1.33). Analysis of the open-ended questions and reflection documents (Table 5) showed that some student teachers had the feeling they truly supported their mentor (n=8), for instance by answering the pupils’ questions and by guiding the pupils during exercises. Other student teachers (n=8) indicated being of no support to their mentor. According to these student teachers, the mentor could have given the lessons perfectly well without their assistance: ‘I helped the pupils with individual exercises, but I had the feeling that the mentor could have done it on her own’ (student teacher i).

[Table 5 near here.]

Six student teachers reported advantages for pupils (Table 5). Thanks to the presence of an assistant teacher, pupils received more support and
attention (n=5). They received help more quickly when asking questions and could be guided better during exercises. Furthermore, there were two teachers to maintain classroom discipline (n=1). Nevertheless, two student teachers referred to the fact that the presence of the assistant teacher could be confusing for the pupils, for instance during difficult transitions in the course or when the role of the assistant teacher was insufficiently elucidated.

2.2.2 Experiences reported by the mentors.

Regarding the question ‘How do you evaluate the assistance lessons?’, the mentors (N=9) responded rather positively (M=3.67 out of 5, SD=0.71). The advantages and disadvantages mentors observed for the different actors are reported below.

a. Advantages and disadvantages for student teachers. When asked if the assistance lessons had an added value for the student teachers, the mentors respond rather positively (M=3.63 out of 5, SD=1.30). Five mentors explicitly described some advantages in their answers to the open-ended questions, namely professional growth (n=3), personal growth (n=2) and support (n=2), while all 9 mentors also reported limited professional growth for student teachers (See Table 6).

Table 6 near here.

Three mentors indicated that the student teachers grew on a professional level during the assistance lessons, mainly as far as the interaction with pupils was concerned. The student teachers indeed had closer contact with the pupils and learned to understand their needs better. Concerning
personal growth, two mentors reported that the assistance lessons made the student teachers less anxious and taught them to interact with the mentor in a different way, for instance: ‘The assistantship ensures that the assistant teacher becomes acquainted with the pupils, is less nervous and gains experience’ (mentor i). Finally, two mentors described that the assistance lessons provided support to the student teacher. It was a safe way to become familiar with teaching.

However, although 3 mentors reported professional growth for the student teachers, one mentor also reported limited professional growth for the student teachers.

b. Advantages and disadvantages for mentors and pupils. An analysis of the answers to the open-ended questions (Table 7) showed that the mentors identified both an advantage, namely support (n=6), and a disadvantage, namely higher workload (n=4), for themselves. On the one hand, they indicated that they had less work, that lessons were prepared more intensively and that the student teacher guided some pupils, leaving more time for the mentor to help other pupils. However, when asked if they truly felt supported by the student teacher (see close-ended question in appendix 3), mentors gave rather neutral answers (M=3.33 out of 5, SD=1.23). On the other hand, mentors reported a higher workload (n=4). As such, they found it difficult to devise relevant assisting activities for the student teacher. Planning the assistance lessons also seemed to be difficult. In fact some mentors found it too difficult to define specific assistance tasks during the regular lessons and,
therefore, choose to cooperate with the student teachers during more extensive assignments outside of the regular lessons. Student teachers were not in a position to question this decision, but the open answers of the students in these cases did not indicate that they had a problem with this.

As far as the pupils are concerned, three mentors reported advantages in their answers to the open-ended questions (Table 7). Pupils received more support and attention ($n=3$), for instance ‘This way the class group could be more actively guided. For example, a game was better controlled and it was easier to differentiate’ (mentor d). Furthermore, some mentors noticed that the lessons were more varied for the pupils ($n=2$). None of the mentors reported disadvantages for the pupils.

### 2.3 Which conditions are critical for successful implementation? (RQ3)

As far as conditions for implementation are concerned, both student teachers and mentors made suggestions regarding the preferred timing of the assistance lessons, the required autonomy for selecting specific assistance activities, determining the number of assistance lessons and an adequate preparation for the new roles.

An **adequate timing** was suggested as a first condition. As explained in the Procedure, in this study the assistance lessons took place after an Orientation Phase during which the student teachers already had to give two lessons individually. Most student teachers ($M=2.29$ out of $5$, $SD=1.61$) and
mentors (M=2.22 out of 5, SD=0.97) disagreed with the statement that the assistance lessons were an adequate continuation of the Orientation Phase. The assistance lessons were considered as a step backwards in the growth process as a teacher. Therefore, a majority of the student teachers (n=12) suggested that the assistance lessons should be moved ahead in the field experience, before they had to teach individually. Likewise, five out of eight mentors indicated the same condition, stating that the assistance lessons should take place at the beginning of the field experiences, before the student teachers teaches individually. However, half of the student teachers (n=9) also saw advantages in the current timing of the assistance lessons. These lessons took place after their half-yearly exam period and at the beginning of the growth phase, before they had to teach a number of lessons completely individually. This gave them the opportunity to get used to the teaching process after being absent from the school and the class group for some time. Moreover, the student teachers had more background information on education and teaching at that point, which gave them the opportunity to learn more during the assistance lessons: ‘It is a sort of transition where you see the lessons even more from the point of view of experienced teachers. Meanwhile, you also have enough background to learn a lot from it. It really does feel like the ‘start’ of the growth phase’ (student teacher b).

Furthermore, some student teachers (n=4) and mentors (n=4) suggested that sufficient autonomy should be given with regard to the interpretation of the implementation of these assistance lessons and with regard to the number
and the frequency of these lessons. Both mentors and student teachers should be given enough freedom, because the presence of an assistant teacher is not always possible: ‘I think that the assisting activities can have an added value, if there is an appropriate activity for the assistant. If that is not the case, these lessons seem to be a waste of time. I don’t think this concept is applicable in every context. Not every type of lessons is suited to be given with the help of an assistant teacher’ (student teacher k). Because of this same argument (for three student teachers, however, less sharply formulated), four student teachers chose not to implement the assistance lessons during the regular classes, but during an alternative moment (see 4.1.). Four mentors agreed, stating that not every lesson is appropriate for this model. The role of the assistant teacher was mostly questioned during theoretical or more ‘traditional’ lessons.

With regard to the number of assistance lessons during field experiences, three student teachers agreed that four or even less, would be sufficient, while one student teacher preferred more assistance lessons.

Finally, student teachers (n=8) reported it is important to give sufficient detailed information beforehand regarding the possible interpretations/ways of implementing the assisting activities. It was not always clear to the mentors and the student teachers in which way these lessons could be implemented. Some mentors (n=4) agreed and underlined the need for an adequate preparation towards the new roles: ‘It all was new to me and I realize now that there was a lot more to gain. Maybe more elaborated examples or suggestions could give us a better idea...’ (mentor d).
3. Conclusion and Discussion

The assistant teaching model is a model of field experiences, based on team teaching, where the student teacher takes the role of assistant teacher. In this study, the assistant teaching model was applied in eight schools by 18 student teachers and their mentors during field experiences in several disciplines. This study aimed to give an explorative overview of assisting activities that were selected by the mentor and the student teacher in mutual agreement, in a context of freedom of choice on how to fill in this opportunity. Within this context, the experiences of both student teachers and mentors regarding this alternative model (advantages, disadvantages and conditions for successful implementation) were mapped in order to derive principles for a focused design of this specific approach in future teacher education settings.

Results showed that mentors mostly prefer to implement the assistant teaching model during lessons in which pupils have to work individually or in small groups. During these activities, the student teachers function as a guide so that additional support could be provided to the pupils. These results match the ones found in the study of Eick et al. (2003), in which the assistant teaching model was only implemented in the context of teaching sciences, and where it was stated that the assisting activities mostly consisted of guiding small groups or individual pupils. The assisting activities were valued in a positive way both by the student teachers and their mentors. Nevertheless, student teachers as well as their mentors stated that it was not always possible
or easy to implement assisting activities because they believe that during more theoretically oriented lessons, in which forms of direct teaching or learning conversations take place, there is less chance to assist in coaching the pupils during assignments. As such this makes good sense as far as the coaching of pupils aspect of teaching assistance is concerned. Therefore, mentors should create sufficient opportunities for activating task-based learning in which assisting activities in the form of additional coaching of the pupils are easier to implement. In fact this corresponds to a typical challenge in shaping teaching practice in schools, where teacher education often has to depend too much on the school-based mentors’ definition of good teaching (Ambrosetti & Dekkers, 2010; Feiman-Nemser, 1996; Gijbels, et al., 2016; Tomlinson, Hobson & Malderez, 2010). Thus while shaping teaching assistance one also has to take into account the chance that there will be/is a less rich palette of teaching practice opportunities. However, in the research context of self-determination of teaching assistance practice, four mentors and their student teachers choose to link the teaching approach to an activating initiative external to the normal lessons. It seems that by creating these chances to define assistant teaching in a broader context, for instance within initiatives external to the normal lessons, mentors and student teachers start to define their mentoring relations in a motivating self-directed way, which is supported by research (Ambrosetti & Dekkers, 2010; Hagger, McIntyre & Wilkin, 2013; Schelfhout, et al., 2006; Wildman, Magliaro, Niles & Niles, 1992).
Another interpretation of the assistant teaching model that was implemented by a majority of the student teachers, was to teach a specific part of the course. This assisting activity can be described as rather traditional as it offers limited possibilities to really cooperate in a context of assistant teaching. However, a number of student teachers were content with this form of assistant teaching for different reasons: because of the shorter periods of teaching they felt that starting to teach happened in a more gradual way and it made them reflect more on these shorter teaching periods. Student teachers were also pleased to have more opportunity to compare their approach with the approach of the mentor. This is interesting in light of the typical challenges involved in smoothing the transition between learning to teach in theory and real teaching practice (Britzman, 2012; Hagger, McIntyre & Wilkin, 2013) and challenges related to the difficulties with encouraging student teachers to really reflect on their teaching (Korthagen, Kessels, Koster, Lagerwerf & Wubbels, 2001; Loughran, 2002; Moon, 2013; Svojanovsky, 2017). Therefore, as such this interpretation of assistant teaching can make sense.

Globally, the mentors were more positive about this model of field experiences than the student teachers. Both mentors and student teachers recognized the professional growth, the personal growth and the support for the student teachers. Similar advantages were found in previous research on team teaching during field experiences in general (Bashan & Holsblat, 2012; Birrell & Bullough, 2005; Smith, 2004), as well as for the application of the assistant teaching model by the student teacher and the mentor (Eick et al.,
In contrast to the study of Eick et al. (2003) and Eick and Dias (2005), student teachers in this study experienced some disadvantages for themselves, such as a feeling of unfamiliarity at the beginning of the lessons and a limited professional growth. As far as professional growth is concerned, all student teachers reported positive feelings, but to different degrees. Nevertheless, due to the limited contributions they made during the assistance lessons, related to these lessons half of the students felt they became acquainted with certain aspects of teaching, but not with the whole process. A number of student teachers experienced this as an obstacle to their professional growth process and clearly preferred normal lessons. Likewise, pre-service teachers experiencing co-teaching during the field experience that were surveyed by Darragh et al. (2011) wondered whether it was realistic to have two teachers in the room when employed and whether solo time was needed. All of these observations point to differences between student teachers in their conceptions of student teaching (Dang, 2017). As argued by Oosterheert and Vermunt (2001, 2003) this underpins the need for teacher education to differentiate (more so than at the moment) between student teachers, which also can be applied to approaches to assistant teaching (Endedijk, Donche & Oosterheert, 2013).

While a majority of the mentors indicated to experience support from the assistant teachers, the opinions of the student teachers themselves were less clear. In comparison to the studies of Eick et al. (2003) and Eick and Dias (2005), in which the assisting activities took place one or two mornings a
week for a period of 8 to 12 weeks, in this study, the assistant teaching model was only applied during four lessons. It seems that a number of student teachers needed more time to adjust to their roles and, thus, to overcome disadvantages. With regard to the pupils, both student teachers and mentors mainly reported advantages: more support, higher levels of concentration, more varied lessons and a better class management.

These results show that the implementation of the assistant teaching model can have advantages both for the teacher education institutes as well as for the schools where student teachers perform their field experiences. These schools guide the student teachers during their field experiences and, at the same time, the student teachers have an added value for the schools by providing additional support to the pupils. This way, the schools have more possibility to differentiate between the pupils as indicated by the growing research on cooperative teaching (Guise et al., 2017; Mandel & Eiserman, 2015; Millis, 2012; Murdock, Finneran & Teve, 2015; Solis, Vaughn, Swanson & McCulley, 2012; Tomlinson, 2015).

In the present study, the introduction of the assistant teaching model during student teachers’ field experiences was completely new, both in the teacher education institute and in the schools involved in the study. While describing their experiences, student teachers and mentors suggested similar conditions for future implementation. The assistance lessons should take place at the beginning of the field experiences, before the student teachers teach individually. Both groups requested enough and sufficiently elaborate
examples of assisting activities in order to prepare themselves for their new roles. In this study, some suggestions and examples were given, but the mentors were free to adapt them and/or to implement other activities. For some mentors, this seemed to be rather difficult which corresponds with findings from other studies which indicate that some mentors expect more guidance and steering from teacher education, while other mentors prefer to choose their own approach (Clarke, Triggs & Nielsen, 2014; Wang, 2001). As for the student teachers, a certain amount of differentiated approach to assistant teaching could be allowed by mentors and could even be structurally organised. However, this is not easy because a more structured and far-reaching cooperation between teacher training institutions and teaching practice schools remains a challenge (Zeichner, 2010; Darling-Hammond, 2017). Some mentors and student teachers requested more freedom in the interpretation of the assistance lessons (e.g., the number of lessons). They were of the opinion that not every lesson was appropriate to implement the assistant teaching model, but in most cases they approached assistant teaching solely from the viewpoint of helping the mentor to coach while pupils were working on assignments in a self-regulated way.

This study explored the assistant teaching model within the teacher education programme of the University of Antwerp (Belgium). The model was applied to a small group of participants, covering different disciplines. To generalize these conclusions, it is necessary to repeat this study within a larger population. In this study the answers to the open-ended questions were rather
limited. Combining questionnaires with interviews could result in more in-depth results. Finally, it would be interesting to apply the assistant teaching model in combination with other models of team teaching (e.g., coaching model, equal status model), in order to identify the advantages and disadvantages of the different models.

4. Implications for Teacher Education

Research on teacher education shows that a number of competences, which should be addressed in teacher education (for instance teachers as members of the educational community), are still poorly explored (Oberhofer, Simons & Smits, 2014; Struyven and De Meyst, 2010). Team teaching of student teachers has the potential to reach this competence (Wilkinson, Pennington, Whiting, Newberry, & Feinauer, 2014). The present study showed that assistant teaching of a student teacher and a mentor could constitute an interesting approach to practice specific competences in a safe, feasible and delineated way. We would like to conclude by giving some specific implications of this study for teacher education and for teacher educators:

- Teacher education institutes are in search of alternative models of field experiences inspired by cooperative and collaborative learning, in order to facilitate a gradual transition to self-regulated teaching (i.e. to independently plan, monitor, and assess their teaching) (Darling-Hammond, 2017; Gardiner & Robinson, 2009; Guise et al., 2017;
Nokes et al., 2008; Zeichner, 2002). This study showed that the assistant teaching model has the potential to do achieve this.

- Team teaching, i.e. the assistant teaching model between a student teacher and a mentor, is relatively easy to implement in teacher education as it corresponds to the most frequently applied concept of field experiences i.e. a student teacher working as a single trainee with an experienced teacher, the mentor (Sorensen, 2014). Further, the assistant teaching model is less intrusive and requires less collaboration between the teaching partners than other possible team teaching models, which makes it an interesting ‘transition model’. Our study clearly showed that the assistant teaching model can provide extra support to student teachers, which is given when required during the course and enables student teachers to learn on the spot. Consequently, the assistant teaching model has a lot of potential with regard to the student teachers’ professional and personal growth, if these experiences are well organized and adapted to the student teachers’ needs in cooperation with the mentor (Davis & Fantozzi, 2016; Mena, García, Clarke & Barkatsas, 2016).

- The assistant teaching model makes it possible to take full advantage of the benefits of team teaching while at the same time reducing any possible disadvantages of other team teaching models (e.g. practical disadvantages such as changing classrooms in the parallel teaching model; competition between two student teachers in the sequential
teaching model (Baeten & Simons, 2016)). The assistant teaching model also enables the student teachers to become progressively, though in a controlled way, acquainted with individual teaching.

- In order to ensure a successful implementation of the assistant teaching model in teacher education, it is important that the assistance lessons are organized at the beginning of the student teachers’ field experiences, before the student teachers teach individually. If not, it could be experienced as a ‘taking step backwards’.

- The application of the assistant teaching model during field experiences has the best chance to succeed if all actors involved, primarily the student teachers and their mentors, are well prepared for their roles (Baeten & Simons, 2016; Bashan & Holsblat, 2012; Britton & Anderson, 2010; Nokes et al., 2008). Both need to know what is possible and what is expected (e.g. which assisting activities are possible and with which frequency; what kind of feedback is required). Teacher educators could inspire their student teachers (and their mentors) by explaining or showing examples of assisting activities as well as by applying assisting activities during their own lessons.

- Teacher educators should promote communication between the student teacher and his/her mentor, not only during the lesson preparation, but also during the evaluation and reflection.

- Taking into account the student teachers’ various individual profiles (Davis & Fantozzi, 2016; Mena et al., 2016), teacher educators can
vary the manner in which the assistant teaching model is applied e.g. the degrees of freedom in the choice of possible assisting activities; the possible use of the mentor’s class preparation; the frequency of the assisting activities.

- The application of the assistant teaching model does not imply the substitution of individual teaching (Baeten & Simons, 2016). This concept of teaching is still widespread (Sorensen, 2014), while team teaching is used rather infrequently (Higgins & Litzenberg, 2015) and deserves sufficient attention during teacher education. The assistant teaching experiences should form an integrated part of a broader and well-elaborated learning process, in which the student teachers are encouraged to learn from previous experiences in order to improve future teaching.

We would like to emphasize that it is important for student teachers to be integrated into a group of teachers (student teachers as well as experienced teachers), to enable them to acquire the competencies related to ‘teachers as members of the educational community’ better and more efficiently (Darling-Hammond, 2017). In this respect, the assistant teaching model shows promise.

**Acknowledgements**

We are grateful to all the participating students and mentors. This study was supported financially by the Flemish Government and the University of Antwerp (Belgium).
References


Appendix 1

Overview of the assisting activities per lesson

<table>
<thead>
<tr>
<th>Lesson X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: 21-30; 31-40; 41-50; 51-60</td>
</tr>
<tr>
<td>Gender: Information about the mentor (teaching experience):</td>
</tr>
</tbody>
</table>

Date and time: 
Class group: 
Subject of the lesson: 
Number of pupils:

Description of the assisting activity/activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Objectives</th>
<th>Learning content</th>
<th>Learning activities/ Group forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(...)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2

Questionnaire for the student teacher

1. How do you evaluate the assistance lessons? (Circle the answer that reflects your point of view and elaborate.)
   - Very bad
   - Bad
   - Average
   - Good
   - Very good

2. According to you, what is positive about the assisting activities?

3. According to you, what is negative about the assisting activities?

4. How do you evaluate the collaboration with your mentor during the assistance lessons? Why?

5. Statements. (Circle the number that reflects your point of view: 1= strongly disagree – 5 = strongly agree.)

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The assistance lessons have an added value for the field experiences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the assistance lessons, I had the feeling I truly supported my mentor. Explain:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The assistant teaching lessons were an adequate continuation of the orientation phase. Explain:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>By assisting my mentor, …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… I felt better prepared to teach individually.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… I reflected better on effective and non-effective ways of teaching.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… I have a better understanding of the importance of collegiality.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… I felt more self-confident in front of the class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| During the assistance lessons, …                                          |   |   |   |   |   |
| … I felt sufficiently supported professionally by my mentor.              |   |   |   |   |   |
| … I felt sufficiently supported emotionally by my mentor.                 |   |   |   |   |   |
6. Do the assisting activities have an added value for a beginning teacher? Why (not)?

7. Do you think the role of assistant teacher in general is relevant in a teacher training program? Why (not)?

8. How can these assistance lessons be improved?
Appendix 3

Questionnaire for the mentor

1. How do you evaluate the assistance lessons? (Circle the answer that reflects your point of view and elaborate.)

Very bad - Bad - Average - Good - Very good

2. Statements. (Circle the number that reflects your point of view: 1= strongly disagree – 5 = strongly agree.)

<table>
<thead>
<tr>
<th>The assistance lessons have an added value for the student teacher.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the assistance lessons, I felt truly supported by the student teacher. Please explain:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The assistant lessons were an adequate continuation of the orientation phase. Please explain:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. Do you think the role of assistant teacher in general is relevant in a teacher training program? Why (not)?

4. How can these assistance lessons be improved?
Appendix 4

Reflection document for the student teacher

During the four assistance lessons, you have done different activities. In this reflection document, you will think in a structured way about these activities. You will do this through three rubrics: I. General aspects; II. Analysis of the activities carried out as an assistant teacher, and III. Conclusion(s) and most important strengths and weaknesses.

I. General aspects (1 page)

II. Analysis of the activities carried out as an assistant teacher (1 page)

III. Conclusion(s) and most important strengths and weaknesses (0,5 page)
## Table 1

**Team teaching models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Role partner 1</th>
<th>Role partner 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level of collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Observation model</td>
<td>Full responsibility Teacher</td>
<td>Observer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Coaching model</td>
<td>Full responsibility Teacher</td>
<td>Coach</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Assistant teaching model</td>
<td>Main responsibility Teacher</td>
<td>Assistant (e.g., provide support to pupils, use media)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Equal status model</td>
<td>Identical status and responsibilities</td>
<td></td>
</tr>
<tr>
<td>a. Parallel teaching model</td>
<td>The class group is divided into subgroups.</td>
<td>Each teacher teaches the same learning contents/activities to a subgroup.</td>
</tr>
<tr>
<td>b. Sequential teaching model</td>
<td>The learning contents or activities are divided.</td>
<td>Each teacher is responsible for a different phase of the lesson.</td>
</tr>
<tr>
<td>c. Station teaching model</td>
<td>The class group and the learning contents/activities are divided.</td>
<td>Each teacher teaches a specific content/activity to a subgroup.</td>
</tr>
<tr>
<td>High level of collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Teaming model</td>
<td>Full collaboration in the planning, delivery and evaluation of the lesson.</td>
<td>Considered to be ‘true’ team teaching.</td>
</tr>
</tbody>
</table>
Table 2

*Overview of the instruments in function of the research questions*

<table>
<thead>
<tr>
<th>Student teachers</th>
<th>Mentors</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Activity report (RQ1)</td>
<td>- /</td>
</tr>
<tr>
<td>- Questionnaires (RQ2 &amp; RQ3)</td>
<td>Questionnaires (RQ2 &amp; RQ3)</td>
</tr>
<tr>
<td>o Closed-ended questions</td>
<td>o Closed-ended questions</td>
</tr>
<tr>
<td>o Open-ended questions</td>
<td>o Open-ended questions</td>
</tr>
<tr>
<td>- Reflection document (RQ2)</td>
<td>- /</td>
</tr>
</tbody>
</table>
Table 3

Scores of the student teachers (N=18) on the statements on the added value of the assistance lessons (see appendix 2)

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- By assisting my mentor, I feel better prepared to teach individually.</td>
<td>3.89</td>
<td>0.83</td>
</tr>
<tr>
<td>- By assisting my mentor, I can reflect better on effective and non-effective ways of teaching.</td>
<td>2.78</td>
<td>1.06</td>
</tr>
<tr>
<td>- By assisting my mentor, I have a better understanding of the importance of collegiality.</td>
<td>3.56</td>
<td>1.10</td>
</tr>
<tr>
<td>Personal growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- By assisting my mentor, I feel more confident in front of the class.</td>
<td>4.11</td>
<td>0.58</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- During the assistance lessons, I felt sufficiently professionally supported by my mentor.</td>
<td>3.17</td>
<td>1.10</td>
</tr>
<tr>
<td>- During the assistance lessons, I felt sufficiently emotionally supported by my mentor.</td>
<td>3.14</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Note. Scores ≥ 3.5 are represented in cursive.
Table 4

Advantages and disadvantages reported by the students teachers (N=18) when answering the open-ended questions and the reflection documents (see appendix 2)

<table>
<thead>
<tr>
<th>(f)*</th>
<th>Advantage</th>
<th>(f)</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Professional growth</td>
<td>13</td>
<td>Unfamiliarity</td>
</tr>
<tr>
<td>12</td>
<td>Support</td>
<td>9</td>
<td>Limited professional growth</td>
</tr>
<tr>
<td>10</td>
<td>Personal growth</td>
<td>2</td>
<td>Limited sense of reality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Time management mentor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Lack of compatibility</td>
</tr>
</tbody>
</table>

*(f) = Frequency
Table 5

*Advantages and disadvantages for mentors and pupils, reported by the students teachers (N=18) when answering the open-ended questions and the reflection documents (see appendix 2 and 4).*

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for the mentor</td>
<td>Limited support for the mentor</td>
</tr>
<tr>
<td>Support and attention for the pupils</td>
<td>More confusion for the pupils</td>
</tr>
<tr>
<td>Better class management for the pupils</td>
<td></td>
</tr>
</tbody>
</table>

*(f) = Frequency*
Table 6

*Advantages and disadvantages for student teachers, reported by the mentors (N=9) when answering the open-ended questions (see appendix 3)*

<table>
<thead>
<tr>
<th>(f)*</th>
<th>Advantage</th>
<th>(f)</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Professional growth</td>
<td>1</td>
<td>Limited professional growth</td>
</tr>
<tr>
<td>2</td>
<td>Personal growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Support</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(f) = Frequency*
Table 7

*Advantages and disadvantages for mentors and pupils, reported by the mentors (N=9) when answering the open-ended questions (see appendix 3)*

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(f)</em> = Frequency</td>
<td></td>
</tr>
<tr>
<td>Support for the mentor</td>
<td>High workload for the mentor</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Support and attention for the pupils</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>More varied lessons for the pupils</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>