Transitioning into teaching

Experiences of second-career (student) teachers and their colleagues in school

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CHAPTER 5

Second-career student teachers entering schools: Experiences of colleagues

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Abstract

To address the teacher shortage, alternative teacher-training programs have been developed to encourage a more diverse range of students to enter teacher training. One of these groups is second-career teachers (SCTs). While schools generally welcome SCTs, integrating them effectively into the school can be challenging. Using the lens of Activity Theory, we studied the contributions and challenges that are experienced by colleagues when SCTs enter schools. Questionnaires with open-ended questions (*n* = 53) and interviews (*n* = 26) were conducted.

Colleagues perceived a substantive, cultural and organizational contribution from SCTs to the school as a learning environment for secondary school students (Activity System 1) but also identified challenges for the school as a learning environment for student teachers (Activity System 2) and tensions between these activity systems. These findings reveal potential reasons for the ambivalent reception of SCTs in schools and provide guidelines to better support these students during their training.

5.1 Introduction

Many countries are facing a teacher shortage (OECD, 2018). To address these shortages, alternative teacher-training programs (ATTPs) are established to make the transition to the teaching profession more attractive to a larger group of people (Coppe et al., 2022; Paniagua et al., 2018). ATTPs help tailor education to second-career teachers (SCTs) a group primarily attracted to the program (Paniagua et al., 2018). However, retaining SCTs during and after training, appears to be a challenge (Dutch Ministry of Education, 2020).

Considerable research aimed at gaining insight into SCTs' retention focuses on their experiences when entering education. SCTs appear to experience tensions related to their new positions as a starter; their ideals related to the teaching profession; their needs regarding their learning route; and the combination of work, study, and family life (Tigchelaar, 2010; Williams, 2013).

SCTs are a distinct population entering the teaching profession (Brindley & Parker, 2009) and their retention requires induction support from principals, mentors, and colleagues in school tailored to SCTs (Ruitenburg & Tigchelaar, 2021). Actors in school are ultimately essential in supporting student teachers and there is evidence that those actors are even more important for SCTs, (Richter et al., 2022) whose socialization process is mainly on the job (Coppe et al., 2022). However, schools face a new and challenging phenomenon when SCTs enter the school as starting teachers. Their characteristics, needs, and competencies bring both opportunities and challenges for colleagues in school. The way in which actors in the school recognize and address these opportunities and challenges influences SCTs' prospects for success. However, there is little knowledge available regarding the experiences of those actors.

Therefore, this study aims to gain insight into the experiences of colleagues in the schools who work with SCTs. What added value do they perceive with the arrival of SCTs, and which challenges do they encounter? Gaining insight into those experiences may help in better preparing these colleagues to effectively support SCTs entering education. Those experiences can be better understood in relation to the cultural context in which they occur. The Cultural Historical Activity Theory (CHAT) (Engeström, 2015) appears to be well suited for this purpose.

The school as an activity system

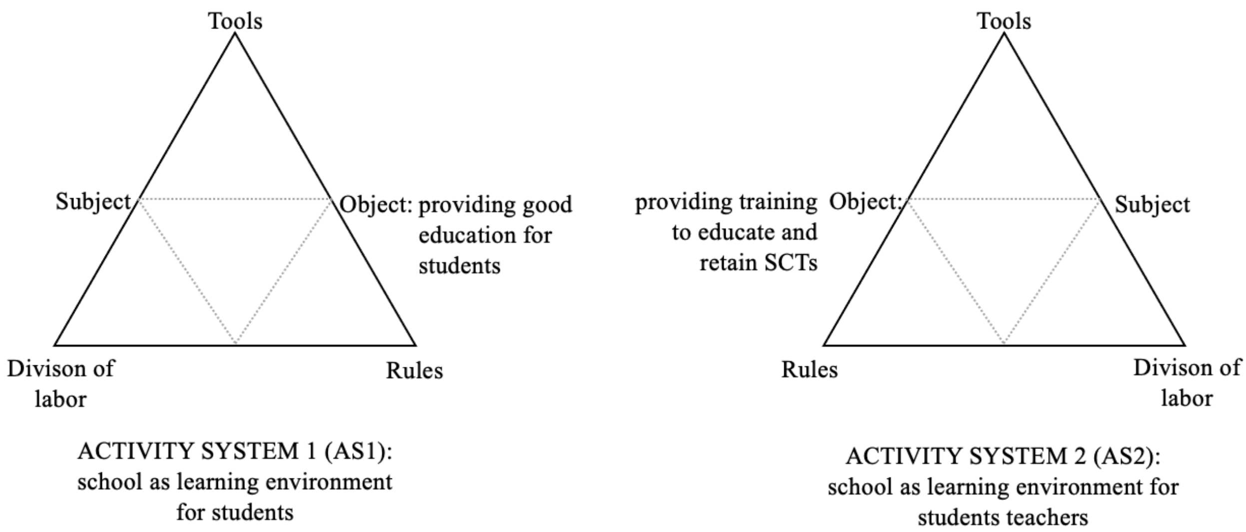
Engeström (2001) describes an activity system as a community with a cultural history that is oriented toward an object pursued by all the subjects (in our case, colleagues) within the system (Tsui & Law, 2007). The activities for achieving objects are mediated by three aspects: the available tools, the division of labor, and the rules within the activity system (Engeström, 2015). By viewing the school as an activity system, we can link the colleagues' experiences to the three aspects involved with achieving the system's object, which makes the influence of SCTs entering the schools' activity system tangible.

Delving deeper into those three aspects, Engeström (2015) asserts that an activity system is organized according to a division of labor that influences how subjects behave and act. In the school context, the division or labor is shaped by various roles within a school, such as managers, teachers, and coaches. Subjects' actions within the activity system are also mediated by the rules, which, in school, concern how to act and interact. Additionally, the available tools within an activity system also influence the subjects' actions. These tools can be concepts, artifacts, theories, strategies, signs, and symbols that mediate members' interactions within the system (Engeström, 2015; Waitoller & Kozleski, 2013). Within the school context, tools may include classroom furniture, timetables, educational approaches, and concepts.

Engeström et al. (1995) refer to the polycontextuality of activity systems to indicate that subjects not only perform multiple tasks within one activity system but are also simultaneously involved in multiple activity systems. Subjects constantly travel between these systems, and by doing so, cross boundaries. Schenke et al. (2017) emphasize that boundaries may be situated between two institutes (e.g., university and school) but also within one institute (e.g., between teachers, management staff, and administrative staff).

When SCTs enter school, one of the boundaries they cross is between their previous profession and the school context. However, within the school context, two activity systems receive student teachers (Tsui & Law, 2007): one with the object of providing high-quality education to students (AS1) and another with the object of training student teachers well (AS2). These systems are depicted in Figure 5.1. In the next section, we more closely examine the school as an activity system whose boundary is crossed by SCTs.

Figure 5.1
Activity System in school in which SCTs participate when entering education



SCTs as boundary crossers entering the school's activity systems

Although boundary crossing is mainly studied from the boundary crossers' perspective, there is evidence that boundary crossers also inform and influence the context they enter (Akkerman & Bakker, 2011; Tsui & Law, 2007; Waitoller & Kozleski, 2013). Thus, it is probable that the arrival of SCTs in schools also influences the school's activity system. This influence may manifest as learning opportunities, given that boundary crossing encompasses the potential for learning, not only for the boundary crosser (Akkerman & Bakker, 2011; Zheng et al., 2019) but also for the community whose boundary is crossed (Waitoller & Kozleski, 2013). These learning opportunities always start with confrontations that entail discontinuities (Engeström, 2015; Akkerman & Bakker, 2011).

Previous studies have examined the experiences and perspectives of SCTs when they enter school. SCTs appear to add value for students and the school due to their previously acquired skills and knowledge (Williams, 2013) as well as the characteristics they bring into education (Resta et al., 2001). This enables them to learn the teaching profession faster and more independently than first-career teachers (FCTs) (Baeten & Meeus, 2016). However, introducing SCTs into teaching may also entail challenges. After studying SCTs' experiences, Tigchelaar et al. (2010) claim that facilitating the transfer of existing competencies to teaching can be challenging and that SCTs' beliefs and convictions seem difficult to change.

This calls for organizing tailored trajectories to meet the specific needs of SCTs. They need support in learning to manage the complexity of the teaching profession and their new role as a novice teacher (Van Heijst et al., 2024a). Previous research suggests that in such trajectories, attention should be paid to providing SCTs with emotional, pedagogical, and administrative support (Koballa et al., 2008).

Purpose of the study

Knowledge about the experiences of SCTs when entering a school is available. These students are motivated to learn the teaching profession, but they also encounter challenges when making this career change (Ballado, 2022; Williams, 2013). However, little is known about the experiences of actors in school who work with SCTs. This is a serious omission, as the social environment has been found to play a crucial role in retaining SCTs during their development as teachers (Coppe et al., 2022). This study therefore aims to gain insight into the impact of SCTs as experienced by school actors—including direct colleagues, school-based teacher educators (SBTEs), and management staff—who work with SCTs. The following research questions guided our study:

- What contributions do direct colleagues, SBTEs, and management staff experience when SCTs join school?
- What challenges do direct colleagues, SBTEs, and management staff perceive when SCTs join school?

We approached these research questions by focusing on the school as an activity system that welcomes SCTs as boundary crossers. These insights may help schools to adequately introduce SCTs into education and understand their potential for developing the school and its actors. By examining the experiences of actors in the activity system that is being crossed into, this study also aims to contribute to boundary crossing theory, which has mainly focused on the boundary crosser's learning processes or on communities that need to collaborate.

Context

This study was conducted at schools that work with SCTs following an alternative teacher-training program (ATTP) at the University of Amsterdam. Mentors, school-based teacher educators (SBTEs), and school managers were asked to participate. In the Netherlands, SCTs can apply for training scholarships. To do so, they must first pass an assessment of their suitability for a teaching job and their capability of completing the training within two years. Another condition for obtaining this scholarship is that SCTs are employed as paid starting teachers at a school. This means that schools working with these SCTs hire someone who is both a trainee teacher and a starting teacher and whose induction and training period occur simultaneously.

5.2 Methodology

Research design

We used a qualitative study to explore and examine the experiences of SCTs' colleagues, school-based teacher educators, and management staff. To enhance the outcomes' validity and reliability, we employed a sequential design that used multiple sources of data: open questionnaires followed by semi-structured interviews.

Participants

Direct colleagues, SBTEs, and management staff working with SCTs who followed an ATTP at the University of Amsterdam between September 2019 and September 2022 were asked to participate. The first author, who coordinated the ATTP, had access to these potential participants. Additionally, contact information for potential participants was obtained through training coordinators at schools that collaborate with the ATTP and through the SCTs themselves. This process generated a list of 73 potential respondents.

Questionnaires were sent to these 73 respondents, 20 of whom did not complete the questionnaire due to pregnancy, a perceived lack of experience with SCTs, or unknown reasons. The participants who responded (*n* = 53) were direct colleagues (mentors and subject peers), management staff, and SBTEs. Subsequently, 26 respondents also agreed to follow-up interviews (see Table 5.1).

All participants were informed about the nature of this study and gave active consent to participate, and the study was approved by the Ethics Review Board of the Faculty of Social and Behavioral Sciences of the University of Amsterdam. Pseudonyms were used to ensure anonymity.

Data collection

A survey with open-ended questions was developed and distributed via Qualtrics to the consenting participants. Before distribution, we discussed the survey with two training coordinators to verify whether the questions were clear for school colleagues. The feedback prompted us to make minor adjustments to the wording of the questions and use display logic to adapt the questions to the participant's role.

The questionnaire first asked respondents to indicate their role toward SCTs. Subsequently, participants were invited to write about their experiences—particularly the SCTs' contributions and challenges—when working with SCTs. The survey ended by inviting participants to participate in a follow-up interview. These interviews were conducted online via Teams. We performed a pilot with two teacher trainers, which made us schedule a tight timeframe to discuss all topics within 60 minutes. The interviews were conducted in homogeneous pairs of participants in terms of their role toward SCTs—direct colleagues (4 pairs), SBTEs (4 pairs) and management staff (4 pairs). Homogeneous groups were chosen to prevent hierarchical influences during the interview, which might have affected the reliability of the answers. Additionally, two interviews were conducted individually (with an SBTE and a school manager) due to an uneven distribution of consenting participants across the various roles. The average duration of the interviews was 60 minutes (ranging between 47 and 71 minutes). With the interviews, we delved deeper into the data obtained from the questionnaires, focusing on the challenges and contributions SCTs present for the school.

Table 5.1

Number of participants

Group	Number of participants total (survey + interview)	Number of participants interviews
Direct colleagues	$n = 25$	$n = 8$
SBTEs	$n = 10$	$n = 9$
Managers	$n = 18$	$n = 9$
Total respondents	$N = 53$	$N = 26$

Data analysis

Interviews were transcribed verbatim, and Atlas-ti 9 was used to code the input from both the survey and the interviews. We performed the analysis in several rounds. First, the contributions and challenges the participants mentioned were coded in a semi-grounded way (Glaser & Strauss, 1967). Then, to identify patterns, we conducted a thematic analysis (Braun & Clarke, 2006). In the second step, we coded the contributions and challenges pertaining to the school as a learning environment for students (AS1), the school as a learning environment for student teachers (AS2), or both activity systems. Third, we continued with axial coding, in which we searched for overarching themes within these categories. This process identified the themes described in this study's results section. Fourth, we generated tables to determine the number of participants who mentioned a certain contribution or challenge related to the arrival of SCTs in school (as summarized in Tables 5.2, 5.3, and 5.4). In the final round, we interpreted the coded material in terms of the constituting elements of activity systems (tools, rules, division of labor etc.) (Engeström, 2015).

To enhance reliability during the coding process, one of the authors began the coding process. Subsequently, these codes were reviewed, and doubtful codes were discussed with the research team. Then, the coding scheme and codebook were adapted, and one of the authors recoded the data.

5.3 Results

SCTs' colleagues in school—direct colleagues, SBTEs, and management staff—perceived that SCTs' arrival contribute to the activity system of the school as a learning environment for students' learning (AS1). However, SCTs' arrival also brings challenges to the activity system of the school as a learning environment for student teachers (AS2), and tensions between both activity systems (AS1 and AS2).

Contributions of SCTs to the school as learning environment for students (AS1)

Colleagues in school stated that SCTs positively contribute to the school as a learning environment for students. This contribution is substantive, related to the new knowledge SCTs bring into education. We also found a cultural contribution involving specific characteristics of SCTs compared to their teacher colleagues. SCTs are also valued because of their organizational contribution, which reduces workload. Table 5.2 summarizes these results.

Substantive contributions

Colleagues noted that student teachers bring new teaching ideas from teacher training, causing teachers to reflect on their own way of working. This was perceived as a positive contribution not only with SCTs but also with student teachers in general (n = 20). Eddy (direct colleague) referred to the call for reflection, "It made me start looking at my own teaching method too [...]. This is because you talk with someone about what happened in the classroom and how to do it differently. Yes, and then I asked myself, 'Why should I not do it in that way myself?'"

The contribution of SCTs stands out because of the kind of knowledge and skills they bring to the school. Many colleagues (*n* = 37) mentioned the usefulness of SCTs' content knowledge and network for narrowing the gap between theory and practice for students (e.g., by enriching their lessons with practical examples or organizing field trips). Suzy (management staff) reported the following, "What I find very positive is that [SCTs] create the link to practice in a world that is recognizable for students. The SCT invited a pizza company [i.e., one of her business customers] [...] This really brings mathematics alive."

Colleagues (*n* = 28) also mentioned the knowledge and skills that are relevant for non-teaching-related tasks. Management staff and SBTEs were especially aware of this contribution, as Ally (management staff) explained, "We have an SCT [...] coming from the publishing world [...]. She helped me with a newspaper for the open house. She and her network really helped with this, so that helped us a lot."

Table 5.2
Contributions of SCTs when they enter the AS of the school as a learning environment for students (AS1)

	DCs	SBTEs	MS
Substantive contribution			
New teaching ideas (*n* = 20)	*n* = 14	*n* = 0	*n* = 6
Practical knowledge and network (*n* = 37)	*n* = 13	*n* = 9	*n* = 15
Knowledge and competencies for schools and teams (*n* = 28)	*n* = 8	*n* = 8	*n* = 12
Cultural contribution			
Refreshing perspectives (*n* = 34)	*n* = 11	*n* = 8	*n* = 15
Contributing to diversity within the school team (*n* = 29)	*n* = 12	*n* = 7	*n* = 10
Bringing positive energy in school (*n* = 25)	*n* = 11	*n* = 4	*n* = 10
Organisational contribution			
More teachers (*n* = 40)	*n* = 18	*n* = 9	*n* = 13

DCs = direct colleagues (*N* = 25)
SBTEs = school-based teacher educators (*N* = 10)
MS = management staff (*N* = 18)

In terms of the constituting elements of the activity system, SCTs' substantive contributions led to discontinuities when the rules of AS1 are challenged. Colleagues experienced that teaching can be more than offering knowledge from books and can also involve showing students how knowledge functions practically through field trips or guest lectures. The arrival of SCTs also influences the division of labor within AS1. Where novice teachers typically focus on learning to teach, SCTs immediately became involved in more than just teaching by performing additional tasks within the school, based on their expertise. Finally, the arrival of SCTs primarily leads to the expansion of tools through SCTs' competencies and knowledge. The examples given by colleagues show that the additional tools SCTs provide enrich the teaching repertoire of colleagues in school, adjusting or expanding actions to achieve the object of the AS1. It is notable that SCTs' knowledge and competencies seemed to be taken more seriously than those of FCTs, as Anna (management staff) argued, "I think that SCTs […] may be taken more seriously for new ideas than [FCTs], who, in the eyes of the teachers, may not yet have as many additional insights to offer."

Cultural contributions

Colleagues also felt that SCTs positively contribute to the school culture. As mentioned by most management staff members and SBTEs and almost half of the direct colleagues (see Table 5.2), colleagues (n = 34) appreciate the refreshing perspectives that SCTs bring into school. Because of the critical questions SCTs pose, the ideas they share, and the thoughts they express, colleagues start looking differently at their own practice. Ivar (direct colleague) explained as follows, "It is really an opportunity to improve your organization [...]. [SCTs] make me think, "I am so immersed in school teaching and school thinking that I [can] never have a view that is that open."

Another positive cultural contribution for students and colleagues relates to the increasing diversity of colleagues in school due to SCTs' arrival (n = 29). SCTs differ from other colleagues because of their age and experiences. For example, the personal resilience of SCTs was viewed positively. Pablo (SBTE) explained, "We have some difficult students [in school] who overrule colleagues [...]. However, [the SCT] [...] served in the army […], and then an 11-year-old boy tries to act tough, which did not really impress [the SCT]." Participants also welcome SCTs' work ethic (n = 6). Ally (management staff) mentioned, "[SCTs] bring a work culture that is less focused on a from 9 to 5 mentality."

To conclude, SCTs are seen as committed, reflective, and proactive individuals who exhibit a strong motivation to acquire and execute their professional tasks (n = 25). Ivar (direct colleague) observed these qualities when he reconnected with a second-career colleague after four years, "He still has that eagerness that I miss with a lot of colleagues who, like me, have been a teacher for 20 years." SCTs' motivation and attributes elicit positivity and enthusiasm among the team members, who find it refreshing to work with someone with a different background and with whom they can engage in interesting and in-depth conversations.

In terms of the constituting elements of the activity system, the results show that SCTs' arrival directly influences the school as a learning environment for students (AS1) by increasing diversity within its community. Actors in school perceived this diversity to benefit both students and the school team. Additionally, SCTs' critical questions, positive energy, and different work ethic implicitly challenge the rules within AS1 by subjecting them to discussion among colleagues. Amelia (SBTE) provided the following example, "[The SCT asked], "Why do you actually do it this way? Is it not much more convenient to do it this way?" [...] I think that is very refreshing."

Organizational contributions

The study's participants also mentioned SCTs' organizational contributions. SCTs joining the school alleviates the pressure on the activity system by reducing the teacher shortage. This effect was noted by most (*n* = 40) of the participants. Ben (direct colleague) asserted, "One factor we have not mentioned yet, but which certainly plays an important role is, of course, teacher shortage. [SCTs help] to reduce teacher shortage." The organizational contribution directly influences the division of labor in AS1, as the arrival of SCTs improves workload distribution among multiple colleagues.

Challenges related to SCTs entering the school as a learning environment for student teachers (AS2)

The arrival of SCTs impacts not only the school as a learning environment for students (AS1) but also the school as a learning environment for student teachers (AS2). The impact in AS1 relates to SCTs' contributions, while the impact in AS2 mainly concerns the challenges associated with adequately educating SCTs. These challenges pertain to adapting the guidance to SCTs' needs, seniority, lack of time, and beliefs and images about the profession, as summarized in Table 5.3.

Adapting to SCTs' specific and diverse learning needs

Colleagues have discovered that adequately training SCTs can be challenging. First, many perceived difficulties in adapting the guidance to the SCTs' specific needs (*n* = 19). These needs differ because of the large diversity of SCTs (*n* = 10). Karter (direct colleague) expressed, "This is the second SCT I am mentoring, but these two persons are completely different […], and I need to adapt my guidance to this diversity." Additionally, colleagues mentioned that guiding SCTs requires a strong emphasis on pedagogical skills (*n* = 12). Anna (management staff) explained, "What I hear most

Table 5.3
Perceived challenges when SCTs enter the AS of the school as a learning environment for student teachers (AS2)

	DCs	SBTEs	MS
Adapting to SCTs' specific and diverse learning needs (n = 19)	n = 8	n = 7	n = 4
Adapting guidance to SCTs' seniority (n = 23)	n = 10	n = 6	n = 7
Helping SCTs manage their time (n = 15)	n = 3	n = 8	n = 4
Making SCTs' beliefs and images more fluid (n = 26)	n = 9	n = 8	n = 9

DCs = direct colleagues (N = 25)
SBTEs = school-based teacher educators (N = 10)
MS= Management staff (N = 18)

frequently as a challenge is teaching [SCTs] how to manage a class." Finally, helping SCTs adapt their knowledge to that of the students is also perceived as a challenge (n = 5). Norah (direct colleague) indicated, "When [SCTs] come from the business world, they tend to communicate using a completely different language than students use […]. They need to [...] align with the students' level, and that can be quite challenging."

In terms of the constituting elements of the activity system, actors partly attribute the challenges associated with adapting the SCTS' training to their specific needs to a lack of tools (i.e., the actors lack knowledge and competencies for adequately guiding SCTs). Through working with SCTs, they discovered that guiding this group requires different approaches than guiding FCTs. The arrival of SCTs thus influences the rules within AS2.

Colleagues (n = 12) stressed the importance of adapting guidance to the needs of SCTs. Maaike (management staff) explained the importance of conversations for this purpose, "With a younger colleague, I tend to know sooner what is needed [...] With a [SCT…], I first take time to listen and ask questions to understand what kind of person I am dealing with."

Colleagues (n = 7) have also aligned their actions with what they recognized SCTs need to learn about the profession: learning the basics with a focus on pedagogical content and adapting language and content to the student's level. Winny (direct colleague) described this adaptation:

> I changed my approach […]. With first-career teachers, you are mainly focused on what happened during the lesson and what was good and not, […] whereas with SCTs, you really focus on basic points […] for example, [...] how to be consistent toward students.

To adequately guide SCTs, including adapting suitably to their needs, colleagues (*n* = 16) transformed the guiding structure. In other words, in terms of the constituting elements of AS2, these challenges stimulate changes in the division of labor. Bart (management staff) explained, “We provide extensive support for [SCTs]. We provide […] a general coach for [SCTs’] well-being […] and a subject-specific coach who ensures that the curriculum for students runs smoothly.”

Adapting to SCTs’ seniority

Challenges also related to the SCTs’ seniority (*n* = 23). Participants mentioned that sometimes SCTs seem to be less flexible than FCTs (*n* = 13), as Garry (direct colleague) stated, “Older SCTs tend to appear somewhat more resolute and firmer in a conservative teaching approach.” Colleagues also mentioned (*n* = 6) overestimating these SCTs because of their seniority. Ben exemplified this phenomenon:

> When you see a 50-year-old man consciously making the transition into education, you expect him to be able to take care of himself. After all […] as a manager he has led meetings and managed 150 employees […] However, a classroom situation is completely different.

SCTs’ seniority sometimes also seems to be accompanied by impatience regarding the pace of their development as teachers. Therefore, colleagues (*n* = 7) experience more pressure, as Molly (management staff) explained, “There is more room for growth with younger individuals […] The older individuals do not have that time, and they just want to know if things are going well [immediately].”

In terms of the elements of an activity system, as mentioned in the preceding section, guiding SCTs made colleagues aware of their lack of tools associated with the knowledge and competencies needed to adequately train SCTs. This influences the rules: training SCTs differs from training FCTs.

In this regard, colleagues (*n* = 11) became aware of the necessity of adapting guidance to SCTs’ seniority. Marcy (management staff) explained, “They are mature and resilient individuals […]. Feedback can be more open [compared to with first-career teachers], as it is less likely that it will impact their personalities, given the ability to put things into perspective.” Seven of these colleagues emphasized the importance of being able to be directive in the SCTs’ learning process. Liv (SBTE), “You need to be willing to be demanding. Often, the mentor is younger and may feel like, ‘Who am I to guide [an SCT]?’ While I believe that setting expectations […] is beneficial.” Guiding SCTs properly also influences the division of labor when schools establish a specialized support structure for SCTs.

Helping SCTs manage their time

Colleagues (*n* = 15) mentioned the challenge of helping SCTs successfully change their career into education because of SCTs' time management problems in combining family life, study, their work in a school, and sometimes also another job. Daniella (SBTE) reported, "The workload of SCTs is very high—work obligations, study, personal life—so finding time for conversations and collective moments with other students or colleagues is quite challenging."

In terms of the elements of the activity system, colleagues (*n* = 17) expanded their guiding tools by placing greater emphasis on supporting SCTs with patience, empathy, and attention to the SCTs' workload, as Kelly (management staff) explained:

> [SCTs] say, "Yes, I would like to do that, and I would like to do that too." Then I let myself be influenced by that enthusiasm, and I think, "Great, then we have solved that problem. "While I realize very well that I sometimes need to protect these people from themselves and say, "No, it is enough now."

The challenge of helping SCTs manage their time also influenced the rules (training SCTs differs from training FCTs) and the division of labor (where schools establish a specialized support structure for SCTs).

Making SCTs' beliefs and images more fluid

Challenges in guiding SCTs also pertain to managing their views and beliefs (*n* = 26), particularly rendering them amenable to change (e.g., views about students' behavior and teachers' workload). Marcy (management staff) explained, "The challenge sometimes lies in the prejudice about education […]. The whole idea of "I am here to save the world" that does not always work out that easily […]. Adolescents can [exhibit challenging behavior]." These images also concern the employability of SCTs' previously acquired skills and knowledge. Winny (direct colleague) illustrated this as follows:

> [Sometimes SCTs] say, '[...] I led a team of […] 150 people, so I definitely will be able to handle those 30 students.' Well, the ones who say that are actually always the ones who fail and dropout […].
> I [also] had an SCT who had a high position at Shell […]. [We told him], 'You are going to get busy.' He laughed and told us he was used to 60-hour work weeks. However, he was accustomed to occasionally sitting in front of his computer, ignoring the rest of the world […]. That is not possible in front of a class.

SBTEs and management staff also mentioned the challenge of managing SCTs' expectations about salary and working hours, as Molly (management staff) explained, "Salary expectations are often higher than we can offer. They expect the highest salary scale, while even experienced teachers do not receive such a salary. [SCTs also] think they can teach for a full day with an eight-hour contract."

Regarding the constituting elements of an activity system, colleagues expanded their tools to cope with SCTs' images and ideals of the teaching profession. Colleagues (n = 13) have learned that educating SCTs requires explicitly defining SCTs' perceptions of the profession before training begins to assess how realistic these perceptions are. Bart (management staff) mentioned, "I have noticed that it is important to explain to SCTs that they should not enter education based on an image of their own educational experiences."

These experiences created insights wherein the rules are expanded—educating SCTs differs from FCTs—and a specialized guiding structure for SCTs changes the division of labor in AS2.

Providing quality education for students while simultaneously training SCTs

Challenges also existed in tensions between the two activity systems, AS1 and AS2. These challenges related to the complexity of treating SCTs as both novices and experts. SCTs are starters because they need to learn the profession, but they are also experts in their other professions with valuable knowledge that can be deployed in school. We found challenges related to a lack of time for guiding SCTs adequately (AS2) because colleagues felt they needed to focus on their tasks in AS1, providing quality education for students.

Table 5.4

Challenges between AS1 and AS2

	DCs	SBTEs	MS
Approaching SCTs as experts or as starters (n = 7)	n = 0	n = 3	n = 4
Investing time required to train SCTs (n = 22)	n = 10	n = 6	n = 6

DCs = direct colleagues (N = 25)

SBTEs = school-based teacher educators (N = 10)

MS = Management staff (N = 18)

Treating SCTs as experts or as starters

Management staff and SBTEs (*n* = 7) mentioned challenges regarding approaching SCTs as experts or starters. They reported facing a dilemma between their desire to utilize the SCTs' knowledge because it enriches AS1 and their awareness that SCTs need time and energy to learn the teaching profession. Lenny (management staff) exemplified this challenge:

> I feel a bit of a tension between what I would actually want from [these SCTs] because I see what they are able to do [...]. I think, 'Give us all your ideas' [...], and at the same time, I think, 'Slow down, because those people have to be able to find their way in becoming teachers.'

However, colleagues (*n* = 7) mentioned the importance of recognizing SCTs' knowledge and not automatically thinking that the focus should be on learning to teach. These dilemmas made colleagues in school reflect on and consider changes in the rules of the activity system of the school as a learning environment for student teachers. SCTs appear to need space for additional tasks that they can and want to perform alongside their role as a student who is learning the profession. Faye explained this phenomenon:

> There are indeed [situations] where you might say, 'Okay, well, it is not directly part of your duties, but it should be possible to do this in parallel [to your other tasks], both out of motivation for the [SCT] and because it is meaningful for the school.'

Time investment required for guiding SCTs

Several colleagues (*n* = 10) noticed that SCTs can transition from AS2 to AS1 more quickly than first-career teachers. However, there were challenges regarding the time needed to guide SCTs adequately (*n* = 22). Colleagues (*n* = 15) experienced a lack of time to guide SCTs (AS2) because their main task is to educate students (AS1). Ally (management staff) asserted, "You need someone [because the SCT] is entitled to guidance […]. Our staff is occupied with teaching, so giving them an additional supervising role and allocating hours for that is challenging." Moreover, colleagues (*n* = 13) observed that this time investment is not always rewarded with a new teacher. Carla (SBTE) stated, "It is a relatively high amount of work, […] and you are not always certain that it will be successful."

The challenges of dividing the time between AS1 and AS2 can be interpreted as a lack of tools—when time is not being made available by the activity system—but it can also be explained by the rules within the activity system: the object of AS1 takes precedence over the object of AS2.

5.4 Conclusion and discussion

This study aimed to gain insight into the experiences of direct colleagues, SBTEs, and management staff when SCTs join their school, particularly into the contributions and challenges they experience. We used the lens of Activity Theory to interpret these experiences. Where most studies focus on boundary crossing from the perspectives of those crossing the boundary between two activity systems, this study analyses the perspectives of members of the activity system that receives the boundary crosser.

Our findings indicate that colleagues—including direct colleagues, SBTEs, and management staff—experience that SCTs contribute positively to the school as a learning environment for students, which can be seen as the first activity system involved in SCTs' arrival (AS1). However, their arrival also evokes challenges. Our activity-theoretical lens showed that these challenges mainly relate to a second activity system, the school as a learning environment for student teachers (AS2). Challenges also relate to tensions between these two activity systems. Below, we discuss how SCTs' contributions and the challenges they evoke, may explain the ambivalence of colleagues toward SCTs entering the school and what suggestions it yields for resolving this ambivalence and improving the guidance of SCTs.

SCTs' contributions foster a positive attitude toward SCTs

Previous studies focusing on the perspectives of SCTs have shown that SCTs' knowledge and skills add value to students and schools (Hogg et al., 2023; Tigchelaar et al., 2010; Williams, 2013). Our study adds that this positive contribution of SCTs to the school as a learning environment for students (AS1) is also perceived by colleagues. SCTs enrich the school with their knowledge and experiences, which are seen as a welcome expansion of the tools that are available to provide a quality education for students. These new tools enrich the repertoire of possible actions of colleagues and make them reflect on their own way of teaching.

Research on SCTs' experiences has also shown that SCTs share a high level of motivation to learn teaching (Ballado, 2022; Tigchelaar et al., 2010; Williams, 2013). We found that SCTs are perceived to contribute to the school culture through this motivation as well as their positive attitude and refreshing perspectives. This positivity is adopted by colleagues, and SCTs' refreshing perspectives elicit reflection, resulting in colleagues becoming more aware of their school's prevalent customs in behavior and thinking (the rules) and make these customs more susceptible to change. Colleagues express that this rekindles their motivation and enhances job satisfaction.

A final reason for schools' eagerness to recruit SCTs is the organizational contribution of their arrival reducing teacher shortages. This reduction influences the division of labor within the activity system and decreases the workload among colleagues. However, when this is perceived as the primary contribution of SCTs by the school, the school may experience the risk of SCTs' attrition more intensely.

Challenges that elicit a hesitant disposition toward SCTs

Colleagues also experience challenges associated with SCTs entering the school. These challenges mainly relate to adequately guiding SCTs (AS2). Despite schools' wealth of experience with student teachers, educating student SCTs has a relatively brief history. Therefore, colleagues cannot build upon extensive experiences and knowledge.

Previous research on the experiences of SCTs has shown the large variety of knowledge and experiences this group brings to school (Humphrey & Wechsler, 2008). Such skills and knowledge can have both beneficial and hindering influences on SCTs' development (Den Hertog et al.,2023). Acknowledging and using SCTs' previous experiences (Baeten & Meeus, 2016) and supporting them to use this knowledge adequately as a teacher is important (Den Hertog et al., 2023). Our study confirms that SCTs' expert knowledge can obstruct them from aligning with the students' learning level, but it can also add value. Colleagues experience challenges to adequately deploy SCTs' skills and knowledge and face a dilemma between acknowledging and using SCTs' knowledge and skills in school (AS1) and allowing SCTs time to learn the teaching profession (AS2).

SCTs indicate that their seniority helps in their development as teachers because of the associated (professional) life experiences (Van Heijst et al., 2024b). Our study indicates that this seniority also presents challenges regarding training SCTs. Younger colleagues particularly can find it challenging to guide someone older than them. Moreover, colleagues face challenges as they may overestimate these SCTs, increasing the risk of SCTs not receiving adequate guidance for successfully transitioning to education.

During teacher training, many SCTs lack time when combining family life, study, and other responsibilities (Van Heijst et al., 2024a), and our study reveals that colleagues experience the challenge of helping SCTs manage their time adequately. Moreover, colleagues themselves also indicate that they struggle with their own time management. Humphrey and Wechsler (2008) mention the importance of time and resources for guiding students through ATTPs. Nevertheless, mentoring is mainly perceived as an additional task (Jaspers et al., 2014). Our study confirms that time for guiding SCTs is not always perceived as available. Colleagues seem to prioritize providing quality education for students over quality training for student teachers. This prioritization of the tasks in AS1 over those in AS2 might even be reinforced by teacher shortages, which make schools focus on ensuring there are teachers in classrooms now rather than training someone who can teach classrooms later.

Finally, previous studies based on SCTs' experiences have shown that a reason for SCTs choosing the teaching profession is their desire to contribute to society (Powers, 2002) by providing quality education for students (Van Heijst et al., 2024a). They seem to have clear convictions about the way they can achieve this (Tigchelaar et al., 2010) and possess a high amount of self-efficacy beliefs (Troesch & Bauer, 2017), which may stimulate their persistence in pursuing their ideals. However, SCTs enter a new world where change processes might unfold differently than in their previous jobs and their view of ideal education appears to be less easily attainable than anticipated. Our study demonstrates that colleagues in school perceive the importance of supporting SCTs in managing their views and ideals. They have modified their actions by discussing these views and beliefs with the SCT before the training to make them more fluid and open to change. This may prevent SCTs' attrition.

Limitations and implications for future research and practice

This study has some limitations. First, the first author, who conducted the interviews, was also the coordinator and teacher educator of the ATTP for SCTs at her university. On the one hand the advantage was that respondents were easily accessible and willing to participate in this study. On the other hand, as a result, respondents sometimes had the tendency to provide feedback on the ATTP instead of describing their experiences with SCTs in general. We addressed this limitation by informing interviewees explicitly that the questions concerned SCTs from diverse training programs, and the interviewer reiterated this focus throughout the interviews. A second limitation is that this study has been conducted in a specific national (Dutch) context where most SCTs are both paid and student teachers. We focused on challenges that we think also occur in other national contexts. Nonetheless, it would be valuable to address a more international context involving a larger group of respondents in future research.

In-service support might prevent SCTs' attrition (Redding & Smith, 2019) and through this study, we aspire to recognize the importance of AS2 as a full-fledged activity system within the school for the success of SCTs. It is essential that colleagues have time to adequately guide SCTs. Our study also shows that teacher educators who guide student teachers are not automatically able to guide SCTs adequately. Based on the insights gained from this study we can provide suggestions for how to structure this support to better manage challenges and deploy the potential of SCTs. A specific training program for SCTs' educators—including mentors, direct colleagues, SBTEs, and management staff—may be useful to help them align their support with SCTs' individual needs, considering the diversity and seniority of this group of students (Humphrey & Wechsler, 2008).

An important aspect of such a program to pay attention to is that SCTs' educators become aware that SCTs sometimes may underestimate the demands of the profession, whereas colleagues in school may overestimate SCTs. Colleagues need to realize that they are crucial in helping SCTs successfully transition to teaching. The level of support required for this transition is not less—it even appears to be slightly more at the beginning of training—but different compared to the support that FCTs need.

Previous research has revealed that SCTs bring useful skills and knowledge to the school (Hogg et al., 2023; Williams, 2013). Our study shows the potential benefit of

SCTs' educators learning to balance deploying the knowledge that SCTs bring into school so that the SCTs feel appreciated with reserving enough time for their professional teacher development.

In conclusion, educating SCTs evokes challenges for colleagues in school. However, these challenges are mitigated because SCTs immediately contribute to the school regarding knowledge, school culture, and organization. Our activity-theoretical lens has yielded insights into how the school as a learning environment for SCTs can be improved so that they can optimally contribute to the school as a leaning environment for students. The insights of this study can contribute to adequately introducing SCTs into education and unlocking their potential for the development of their school, colleagues, and students.