Influence of school culture on pedagogical knowledge sharing between an education student and a training teacher

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Abstract

Students undergo a demanding socialization process at the beginning of their practice, which they subjectively perceive. At the time of this socialization process, the process of knowledge sharing begins, and this process must include reflection on and explanation of new pedagogical experience if students are to establish suitable conditions for practice. Not only the training teacher but also others who form the so-called school culture may neglect to address new experiences and provide sufficient support. This research aimed to explore the effects of the school culture on a student's career at the beginning of her teaching and pedagogical knowledge sharing. Based on the results of the analysis, we answered the following research question: "How does the school culture influence a student's pedagogical knowledge sharing with her training teacher?" We found that the student's subjective theories should correspond with the school culture; otherwise, the student may leave the profession earlier. In addition, support from colleagues and sufficient explanation (modelling of the teacher's thoughts) in school practice create a space to share pedagogical knowledge and clarify the student's doubts about education. We identified the teacher's career, the school culture, and the training teacher as sources of support for the education student. The data were collected via interviews with the use of the "clean language" method and analysed through open coding.

Keywords School culture · Pedagogical practical knowledge sharing · Clean language

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Introduction

A student's subjective theories that inform his/her decision to enter an educational programme form a strong foundation for his/her further learning. Research has suggested that preparatory education and learning practice (Borg 2003) influence subjective theories; other authors have noted that subjective theories should be identified and further directed in education programmes (Joram and Gabriele 1998). However, such an approach may be demanding in the current context, with a large number of students being prepared in education programmes. Importantly, education students acquire knowledge to advance their professional development, not only through theoretical training but also through practical preparation. When a student first enters practical preparation, he/she undergoes a socialization process. The student is introduced to the environment and his/her colleagues. Then, he/she starts the process of reflection, which should be followed by pedagogical knowledge sharing if the conditions are suitable. Theoretically, we assume that pedagogical knowledge is defined as "a broader cognitive structure that includes theoretical knowledge and practical knowledge" (Janík 2005, p. 26). Attention is given to pedagogical practical knowledge, which is provided by training teachers and is the main subject of knowledge sharing related to practice. The school culture can provide a space for efficient knowledge sharing, or on the other hand, it can close this space. School culture has a strong influence on professional identity formation, and a student sees effects through the lens of his/her subjective theories. Practical knowledge is mainly shaped by the experience of teaching practice (Eraut 1994), is reflected in the teacher's behaviour, and is interpreted during reflection. Students view practical knowledge through the lens of their subjective theories (Mareš 2013), which are relatively resistant to change. These subjective theories act as a sort of filter in accepting and interpreting new experiences that students gain in theoretical instruction (Eraut 1994; Mareš 2013). Lortie (1975) emphasized that what students learn about teaching is intuitive and based on their individual characteristics and experiences rather than on pedagogical principles. Therefore, not only the training teacher but also others who form the so-called school culture may neglect to address many new experiences and provide sufficient support. Practical knowledge sharing depends on the individual's experience. Sharing is easier when individuals have a similar level of experience. In our case, however, the education student and the training teacher have different levels of experience. An education student lacks pedagogical experience, so practical pedagogical knowledge is formed. On the other hand, an experienced training teacher may already have developed practical pedagogical knowledge. During teaching practice, the student and the training teacher enter a relationship that can be described as an apprenticeship (Glazer and Hannafin 2006).

Socialization

The basic process of a student's entry into practice is the socialization process, in which the student interacts with the environment to satisfy his/her social needs. Socialization is a process through which newcomers construct their particular roles

in the teaching profession and community as they interact and engage with others (Zeichner 1980). This input process is individual and is perceived subjectively. The subjective perceptions of socialization processes, as a series of confrontations between the individual and the environment, were described in Lacey's (1977) study, which outlined three basic management strategies that emerging teachers choose in conflict situations: strategic compliance, internalized adjustment, and the strategic redefinition of the situation. However, the socialization process mostly means socialization into the stable patterns of a conservative school culture (Zeichner 1981 in Pířšová 2005, p. 49), which the student cannot change.

In the Czech Republic, teachers generally have consistently high prestige. Based on a comparison of the results of sociological research conducted from 2004 to 2013 (Tuček 2013), over the past 20 years, there has been no radical change in how Czech society perceives the work of teachers. In 2004 and 2007, primary school teachers ranked fourth in the ranking of professions, and in 2011 and 2013, they ranked fifth. Public perception of teachers' status is different from the perception of prestige by teachers themselves, who think that their profession is underestimated by the public. A sceptical perception of the teaching profession could affect the whole school culture and have an impact on knowledge sharing, and it is in one of the factors that may contribute to some teachers leaving the profession. Teachers take top positions seriously. They often experience disrespect in personal interactions. Havlík (1998) identified reasons for teachers' low professional self-confidence. Such low self-confidence is primarily a response to low pay compared to that of less skilled jobs and professions requiring higher education. Other reasons for lower professional self-esteem include the perception that preparing for teaching is easier than preparing for other professions, what is more it is said that it is because of the low quality of teacher education programmes; a high degree of the feminization of teaching staff; the large number of teachers ("less rarity"); personal experiences of interaction between teachers and parents; the fact that the "clients" are pupils and students; the constant social control and lack of objective criteria to assess the effects of their work, with unqualified public and mass media assessments often being used instead; and the absence of full-fledged professional organizations that set standards and defend the interests of external teachers.

School culture as a source of student support in learning to teach

In the early career of a teacher, external influences are crucial to career growth. External conditions that can be found in the literature include the school atmosphere (Gudmunson and Gudmundsdottir 2014), school climate (Chráska et al. 2003), and school culture (Hinde 2004). Often, the definitions of these terms are partly unclear or inaccurate (Grecmanová 2003). School culture refers to a set of behavioural patterns that have evolved into more or less binding, implicitly or explicitly enhanced behavioural norms within a context of universally reflected values and attitudes (Deal and Peterson 1999). For our research, which is focused on providing support for education students' professional growth, we will use the term school culture.

Another factor that stands out in the “background of school culture” is the hidden curriculum. Its influences can be inferred from the character of the psychosocial climate, the daily interactions and the nature of communication between individual teachers or between teachers and pupils, the organization of time and space, or the mere visual impression or spatial arrangement of the school building (Lorenzová 2015). In a broader sense, the hidden curriculum can be understood as the unintended effects of being in school on educational actors, that is, as uncontrolled, implicit socialization (Svec 2008, p. 130). These influences develop and operate in parallel with the official (formal and realized) curriculum and are carried out independently of the intentional and conscious work of teachers and school. There is only one curriculum at school, but it has three aspects (Janík et al. 2010, p. 13): (1) what is planned (intended curriculum), (2) what is taught (implemented curriculum), and (3) what experience pupils will receive (curriculum achieved). According to the Janík et al., the effect of the hidden curriculum seems to be most pronounced in the implemented curriculum. In general, however, this term describes the influences that shape students and through which students can learn attitudes towards authority, obedience or disobedience, learning values and cultural habits, and cultural or political socialization (Vallance 1991).

The element that is associated with the support of a student at the beginning of his/her professional training is a positive school environment where teachers and students want to be and that is characterized by mutual support and encouragement (Hansen and Childs 1998), where actors learn with an open heart and collaborate; the shared standards of such an environment include collegiality, improvement, and hard work, which lead to learning success, a shift in teacher work, and parental expectations (Peterson and Deal 1998). The basic prerequisite for cooperation is mutual trust (Hargreaves 2002). The persistence of a supportive school culture depends on the ability of the school to create practices that new people incorporate into the school culture (Pol and Lazarova 1999) because an enrolling student has personal experience, values, standards, and previous education that affect his/her opinion on the curriculum, pedagogy, and change before entering the classroom. Any change that is proposed and that is contrary to the students’ subjective theories may be difficult to access. This conflict of cultures can provide an impulse for teachers to leave (Hinde 2004), especially if education students are isolated in their classrooms without sufficient collegial support and lack feedback. For novice teachers, a lack of feedback and forced isolation are particularly painful (Příšová 1999, pp. 40–42), which results in uncertainty and is associated with inadequate defence responses (Lortie 1975). A key reason for the increased departure of teachers from the teaching profession is that “education students report that they are often overwhelmed by the multiplicity of problems they encounter and the many decisions they must make during the school days of their internship” (Warren 2005, p. 49); in addition, they struggle to craft an identity in the teaching community (Feiman-Nemser 2003). Moreover, in a culture of non-interference, non-interference is understood as a statement of respect and equivalence (Huberman 1993, p. 29), a request for advice is perceived as unprofessional, and an offer of assistance is considered an expression of arrogance. In such a culture, communication is narrowed only to the social level, not the professional level.

An education student learning to teach with the support of a training teacher

Teachers are an integral part of the school culture. For our research, the initial socio-constructivist theories are relevant; among these theories, the influential work of Vygotskij (1976) indicated that “I” is never independent of its socio-cultural existence, that it is formed within the external cultural world in which it is located, and that it interprets the world, and that this interpretation occurs in cooperation with other people. The key principles of this theory related to learning support were summarized by Randall and Thornton (2001, pp. 51–52), who argued that knowledge is constructed through dialogue between a student and a more experienced teacher, that knowledge first exists in the social interaction (external environment) and later in the mind of the student (inner environment), and that the learning takes place through the shift from the social environment to the inner environment. This shift occurs in the model of collaborative apprenticeship (Glazer and Hannafin 2006).

In our research, apprenticeship is based on the concept of collaborative apprenticeship proposed by Glazer and Hannafin (2006), which is focused on pedagogical knowledge sharing. One important task of the teacher is to support the development of the practical knowledge of the education student because this knowledge can be learned only in practice. Collaborative apprenticeship can help the education student gain access to the everyday experience through modelling. Modelling enables teachers to make experiences accessible and support the development of knowledge that is unlikely to be learned alone (Van Velzen et al. 2012). “Give students of education access to the thoughts and knowledge of training teacher by explicating the underlying purpose of his/her teaching performance. This is in stark contrast to the misconception that modelling is a mock teaching demonstration or a tacit call for students of teaching to ‘teach like me’” (Loughran 1996, p. 95). An education student reflects the teacher’s thoughts and thus develops his/her pedagogical knowledge. The teacher’s reflection mirrors the education student’s subjective theories.

Methodology

This study aimed to determine how the school culture influences the education student’s pedagogical knowledge sharing with the training teacher and how it affects the student’s professional career in the course of his/her pedagogical practice. Within the framework of the study, the following question will be explored:

How does school culture influence student pedagogical knowledge sharing with a training teacher?

Given the complexity of the concept, a qualitative approach was chosen. A case study was chosen as the research design, as it would allow us to fulfil our goal to capture the impact of the school culture on the pedagogical knowledge sharing of the education student and the training teacher. Pedagogical practical knowledge sharing is included in the apprenticeship model. Our research is based on the collaborative apprenticeship model proposed by Van Velzen et al. (2012), which focuses on practical pedagogical knowledge sharing in the context of the cooperation of a

training teacher with an education student. Our research was based on a modified version of this model. Our approach was based on three levels and was slightly modified for the context of the Czech educational system compared to that of Glazer and Hannafin (2006). First, the education student observes the training teacher that models classroom routines, and the student observes his/her actions. Second, the education student takes on the role of the classroom teacher; together, the student and teacher prepare and reflect on the lesson. Third, the education student takes on the role of the classroom teacher and prepares and reflects on the lesson. Initially, the student imitates the training teacher to a certain extent because the student does not know the background of the observed practice of the training teacher and has little pedagogical experience. The teacher helps the student reveal his/her subjective theories, and the teacher's reflection is based on the teacher's practical knowledge and is aimed at student subjective theories. Gradually, the student becomes more experienced. The student reflects on his/her experiences with the training teacher in the process of sharing and improving his/her pedagogical practical knowledge (in this way, he/she getting to understand the background of the practical knowledge of the training teacher). The education student does not copy the teacher's background but develops his/her own background based on his/her practical knowledge.

In the Czech Republic, university study is structured into the pre-graduate preparation of primary and secondary school teachers at the Faculty of Education of Masaryk University situated in Brno. The university is named after Thomas Garrigue Masaryk, who contributed to its establishment. Tomas Garrigue Masaryk was a professor of Charles University and later the first president of Czechoslovakia. In his scientific and political activities, he paid attention to the development of Czechoslovak universities, and since the 1880s, he emphasized the need for broad competition in scientific work. In this context, he pointed out that the only Czech university at that time needed a competitive institution for its development. The establishment of the second Czech university was one of his political priorities for many years, and he had the support of several professors, students, and the general public in this matter. The largest problem was the selection of a location for this university. Although it was generally believed that the university should be established in the provincial capital of Brno, the Germans in Brno, who were in complete political control of Brno and feared weakening their influence, were particularly opposed. The building of a second university was even a source of national conflicts. In 1960–1990, for political reasons, the university was named Jan Evangelista Purkyne University. The restoration of freedom after November 1989 allowed the university to further develop and return to its original name “Masaryk University”. Students who wish to become teachers in the future are educated in the bachelor's degree programmes Teacher Training in Foreign Languages and Pedagogical Assistant or in the master's degree programmes Teacher Training for Primary Schools, Teacher Training for Secondary Schools and Language Schools.

The research was conducted at a primary school in Brno. The education student was selected for the case study based on the student's voluntary decision to participate in the research and her subject of studies is mathematics. The research was conducted following ethical guidelines. Both the training teacher and the student were

acquainted with the course of the interviews¹ as well as with the research. Concerning anonymity, the student performed participated under the fictive name “Ivana”. The content of the research interviews was tied to the pedagogical practice² the student performed in her studies.

Data collection and analysis

The data for this case study were collected primarily through two in-depth interviews after the first semester of practice and retrospective interviews after she finished her practice. After the first semester of practice, the education student changed schools to complete the rest of her practice. The retrospective interview shows the benefit of changing schools and her progress in her professionalization.

The data were collected through the following methods:

- direct observation of the education student and the training teacher;
- in-depth interviews (R1 and R2 were completed after the first semester of practice, and R10 was a retrospective in-depth interview after the practice was completed);
- a reflective diary written by the education student during first semester of pedagogical practice.

The time sequence of the individual interviews aimed to first identify the student's subjective theories before she began her practice in R1 and R2, in them most of the data were collected. The last interview was retrospective and aimed to determine what the education student learned during practice. This last interview started with the following open question: What did you find different after the practice? The interviewer allowed the student talk freely after that researcher compared his response with previous research findings and make summary of topics in which student makes progress.

Most of the interviews were focused on first-person experience (Varela et al. 1993); the interviews were inductively guided by the researcher and were conducted based on the clean language method (Lawley and Tompkins 2000). This method of querying is based on: (1) the exact repetition of the interviewee's words and (verbal and non-verbal) language and (2) the use of so-called clean questions that do not contain any personal assumptions of the researcher. In this method, the questions are based on the research question. The researcher focuses on the process, i.e. where the attention is focused. The researcher facilitates the interview using two guides: (a) the exact content of the interview and the informant's language and actions, even non-verbal language, e.g. gestures, and (b) the research question that the researcher maintains in the back of his/her mind.

¹ In the presentation of the interviews, we refer to the individual participants, i.e. (R) (the researcher) and S (the education student). Comments from the researcher are given in brackets.

² Pedagogical practice at the Faculty of Education of Masaryk University in Brno in the follow-up Master's programme is divided into three semesters: in the first and second semester, practice is usually performed twice a week, and in the third semester, the practice lasts 4 weeks. However, the education study in this study taught only 3 lessons in her first practice and 10 lessons during the second practice. In the third practice, the student taught 20 h.

The interviews were video-recorded and then transcribed. Transcripts were analysed by an open-coded method with the use of Atlas.ti software; through the connection of the codes with the research question, key themes were identified. The themes were studied in context, even though they may have been present only in one interview or later in other interviews. The interviews and the identified key themes were constantly compared (Švaříček and Šedřová 2007). A hypothesis was not established at the beginning of the research. The data were collected and sorted, and common and different elements were identified. Classes of events with common elements were organized into key themes. Using these key themes, theories were built, and it was possible to determine a hypothesis that could be subjected to further investigation. Thus, the hypothesis did not direct the researcher from the beginning but was developed later based on the data (Gavora 2000).

Reliability and validity

To ensure the validity of the data acquisition, triangulation was used as a method of “finding and determining the position of the examined phenomenon through three (and more) different data sources, perspectives, measurements, attitudes, researchers, ways of interpretation, etc” (Čermák and Štěpaníková 1998). The triangulation of the data acquisition methods aimed to ensure that the main data collection methods chosen, i.e. direct observations, in-depth interviews, and a reflective diary, would yield high-quality data.

Research results

The analysis of the first two interviews, the results of which are reflected in the retrospective interview, generated interesting findings. After Ivana completed the first semester of teaching practice, she changed to a different training school. The retrospective interview shows the importance of this decision, not only for her professionalization but also for her decision to remain in the teaching profession.

Ivana chose her first training school from faculty offers she received. The school is a regular elementary school where some classes offer alternative education with elements of Montessori pedagogy, but Ivana chose to complete her teaching practice in normal classes.

The school is characterized as a school where pupils learn to communicate, collaborate, and solve problems and where pupils are also actively led to take on their responsibilities and autonomy. Ivana became acquainted with the school environment, the teachers, the director, and the class in which she would complete her practice. Her biography noted that before she started preparing for her future career, she had been engaged in leisure activities and educational work with children (preparing and conducting summer camps and gaining experience at a school with extended mathematics teaching) and that she enjoys working with children, which is why she decided to become a teacher.

Influence of the school culture on pedagogical knowledge sharing

In the following paragraph, we demonstrate the factors that affected pedagogical knowledge sharing. These factors played important roles in Ivana's decision about whether being a teacher was an appropriate profession for her.

Socialization

When Ivana began her practice, she started with the socialization phase, in which she interacted with the environment to fulfil her social needs. The overall culture of a school reflects not only the school philosophy but also the ability of the school to develop practices that allow new people to incorporate into the school culture. Unfortunately, Ivana had an unpleasant experience. During her introduction, one of her colleagues gave her an inappropriate note that made her uncertain about her upcoming pedagogical work. We assume that the colleague might have been sceptical about faculty preparation for the profession. This scepticism was reflected in the colleague's comments, which underlined the perception that the teaching profession is underestimated by the public and that learning to teach is viewed as easy.

S: In the beginning, one of the teachers welcomed me by stating that it is a shame that in the education programme, some students have not taught at all. It [this comment] was not directed at me, but I saw a connection with me; it was not like a "kind" welcome, and from that point on, I was afraid of what would happen. [R1]

From this passage, we can see that the teacher's approach to the student was not collegiate and supportive, which is important at the beginning phase. We assume that from this moment, the student became uncertain, which prevented her from sharing her doubts because the basic prerequisite for cooperation is mutual trust and respect.

In a reflective diary, Ivana mentioned another unpleasant experience when she was alone in the office correcting exercise books. One of her colleagues came into the office and said, "It is inadmissible". The student commented, "It was unpleasant for me." She also experienced a situation when a teacher would not even let her come into her lesson, even though she had been assigned to the lesson. Instead of observing the lesson, she had to reorganize the teacher's library at her command. Ivana did not protest, and she obeyed the teacher, and then she did not dare to ask and share her unanswered questions. She became part of the culture of non-interference. She adapted herself to the situation. As shown by Lacey (1977), this reaction is characteristic of novice teachers, who most frequently choose one of three basic management strategies: strategic subordination, internalized adaptation, and strategic redefinition. The student chose the first when she adapted the situation but did not internally accept it. The teacher was authoritative, which had an impact on Ivana and her training teacher relationships. This experience prevented her from sharing her knowledge. It was highly probable that a request for advice would be perceived as unprofessional and that an offer of assistance would be considered an expression of arrogance.

Hidden curriculum

Ivana started her practice at a school that did not meet her expectations because the school culture contradicted her subjective theories; moreover, she was not supported or encouraged and did not receive an explanation of the school principles. This tension resulted in a disagreement with the school culture.

S: It surprised me that when I first came to the school classroom, I was told that pupils should not go to the blackboard; they should not be tested there because it is a stressful situation for them. This stopped me because I was not used to it [this practice] when I went to elementary school, so I took it as natural that I went to the blackboard. Nobody cared about my stress. So, it was a different situation for me. I started to think about it. Teachers do not test the pupils at the board; on the other hand, they scream and are aggressive. And I think it is unnecessary. [R1]

Ivana compared her current experiences with her previous experienced and evaluated them through the lens of her subjective theories. The new information she received about school habits created tension between the school habits that were part of the school culture and her subjective theories through which she filtered new pedagogical practical experience. The phrase “pupils must not” recorded in Ivana’s reflection shows a rather directive tone. This regulation, however, was not presented in the official curriculum and was thus conveyed informally in the classroom in oral form without any explanation of the regulation (“making thinking visible”); we can see the negative impact of this hidden curriculum. Ivana could have mistakenly linked the impact of the hidden curriculum to the aggressive behaviour of some teachers, which raised doubts about the suitability of the teaching methods used at the school. We believe that this rather directive tone prevented her from sharing her doubts and unanswered questions.

Ivana negatively reflected the guidance of pupils’ exercise books. She noticed that students’ completion of homework was minimal.

S: This is also a bit of a shock for me because I think that the exercise book should give an example of solving the task, not just result. It does not make any sense to me when pupils want to revise their school work; they do not find any method on how to get to the result. So, it’s just a kind of help because as much as I can tell, they do not look at the math at home, so if they do not learn at school, they do not learn anything at all.

R: Are they working with some worksheets?

S: They have electronic worksheets and whoever wants to buy them can, but they do not work with them at all. The teacher will bring electronic worksheets, and with the data projector, the worksheets will be projected onto the interactive whiteboard.

R: Do they have a textbook?

S: I have not seen the textbook, just a collection of activities. The teacher uses a Power Point presentation to explain the curriculum, followed by a sample example.

R: Did you try to keep to the teacher's teaching, or did you try to bring something new to it?

S: Well, I was trying to keep to it, because this is something new to me, so I would rather adapt to the teacher. [R2]

This part of the interview illustrates the contradiction of the observed practice with Ivana's subjective theories; Ivana did not understand the purpose of using exercise books that she thought should be used for homework preparation and revision. Nobody explained the benefits to her. However, there was an option for voluntarily purchasing electronic worksheets. We can assume that in this way, the school could lead pupils to decide to invest in their education as part of a "hidden curriculum", but Ivana did not know about this possible benefit, so she maintained her preconception. She also did not try to contribute to a stable pattern of teacher lessons by gaining different experiences. Like most students, she tried to socialize into the stable patterns of the conservative school culture that she could not change.

S: I'm very influenced by the way I studied myself because I was in comprehensive school, and I think that there was a lot of emphasis on getting everyone to understand it [the material] and that the speed and curriculum were more demanding. Then, I had a practice at a mathematics college where it [the education] was very similar to what I experienced myself... at my school, it came to me; even if it [the coverage of the material] was going fast, no one had a problem with it. And now, it's such a new experience for me that it's like playing games in the lessons, helping pupils and a variety of ways that could support pupils, so I do not know what's good ... I am closer to what I have experienced than I am to making up different didactic games. [R1]

Ivana considered the education at the school to resemble a "school game", and according to her response, "the pupils [took] little from the school". She thought the lessons seemed easier compared to that in her own school experience. She suggested that learning the subject was not the primary interest; rather, "it's more about how to communicate, how to deal with the information, where to look for it than to be forced to remember a lot of information" [R1]. She thought critically and disagreed with the school's method because "every person should have some knowledge". Her disagreements were based on her previous experience as a student. As her previous and current experiences converged, she favoured what was in line with her subjective theories and did not understand and could not even think of any possible benefit of other approaches to teaching, for example, didactic games. However, she adapted to the requirements of the training teacher. Tension and doubt were present in her reflections. Perhaps if she had shared these doubts with experienced training teachers or other teachers and had received a sufficient explanation, she could have begun to think differently and see a positive result. The question remains why she did not; the reason she did not share her doubts could be the initial non-friendly behaviour of some teachers and her fear of a possible rejection of her doubts. Later, when Ivana had transitioned to the other school, she acknowledged the possible contribution of what she had criticized. She uses didactic games in her lessons [from the researcher's observation of the student]. We believe that Ivana's acknowledgement of what

she had previously criticized contributed to pedagogical knowledge sharing with a teacher whose approach to teaching reflected Ivana's subjective theories; furthermore, both Ivana and the teacher respected each other. Another benefit for her was the opportunity to observe the positive impact of teaching practice, such as functional cooperation among the pupils and the teacher based on good classroom management. The mutual observation of teaching, subsequent sharing of experience, explanation of doubts, respect, compliance with school philosophy, and the ability to see the positive results of these practices could be the first step to becoming open to changes and remaining in the teaching profession.

The researcher asked about good relationships in the last retrospective interview and the demonstration, and we can see progress in Ivana's thinking regarding the objectives of teaching and the mastery of class management.

R: I wonder about the importance of a good relationship between the pupils and the teacher and what is a good relationship for you.

S: I have had the opportunity to observe lots of teachers. I think it is in the way that pupils perceive teachers. If they simply perceived the teacher to be a cool and natural authority, they just worked, and it was not a problem [this observation was based on the lessons of her training teacher, whom she perceived as a natural authority]. This kind of teacher is the opposite of a teacher who is strict and authoritative. In their lessons, pupils had a block or little respect for them [such teachers]. So, they started to build an aversion to the subject, and they began deliberately disturbing class [this pattern was clear from the observation of the teaching of another teacher during the first semester of teaching]. [R10]

Ivana realized that authoritative teacher behaviour did not lead to the fulfilment of educational goals. We believe that the point that she had this realization, she started the process of learning and began to understand the importance of class management. Her negative experience was so emotional for her that she reflected on it several times in her diary, where she was more open (Ivana used descriptions such as "aggression," "pupils strike fear", and "the stressed atmosphere" and her question was "How to get rid of the fear of the lesson?"). We believe that observing a variety of teachers and comparing negative experiences to positive experiences enabled Ivana to learn the concepts of classroom management.

R: Here you write "How to get rid of the fear of the lesson?" Have you tried to answer this question yourself?

S: I am just thinking about eliminating marks. Children are afraid of marks because of their parents. What is the problem with the kids going to school to enjoy it so that there has to be something unpleasant, some necessary evil? Which, perhaps, when I talked to pupils—the eighth class, they said pupils generally did not want to go to school to be happy; school is seen as something to be against. [Eliminating marks would not reduce fear of the lessons].

R: What do you think of that statement? Do you think it came from them [the pupils]? Where did it come from?

S: That's the question. I think there may be different factors. It may be a parent; it may be that the pupil wants to have some success or does not want to be

successful. Pupils have some other ideas about what they want to do. Pupils have their experiences since childhood, which they recall when they see teachers [She is basically saying that the teacher's behaviour may provoke not only fear of teaching but also past pleasant memories]. [R1]

We note that Ivana was critical of the new approach to eliminating school marks, and the informal conversation with the pupils did not convince her of the need to remove fear of lessons. The aspects of the hidden curriculum that strongly influenced the pupils as well as the education student were resistant to change because they are deeply rooted in our culture. Nobody explained to Ivana the reason for eliminating marks so that she could try to reconstruct her previous experience.

Ivana thought of pupils as individuals with certain social and family backgrounds that must be taken into account and that have a major influence on the relationship between teachers and pupils. She believed the teacher–pupil relationship is an element that would help eliminate stress among pupils and that an individual pupil's background should be taken into account rather than the use of marks being eliminated. This consideration was informed by the culture in which she grew up.

Discussion

In the study, we tried to answer the following research question: *How does school culture influence student pedagogical knowledge sharing with a training teacher?*

In the following paragraph, we demonstrate factors that negatively affected pedagogical knowledge sharing. These factors play important roles at the beginning of students' careers and in their decisions about whether being a teacher is an appropriate profession for them.

Socialization

Ivana was not provided with sufficient collegiate support and lacked feedback. For her, the lack of feedback and forced isolation were particularly painful. She struggled to find an identity in the teaching community (Feiman-Nemser 2003). Moreover, she was a part of a culture of non-interference, in which non-interference is understood as a statement of respect and equivalence (Huberman 1993, p. 29), a request for advice is probably perceived as unprofessional, and an offer of assistance is considered an expression of arrogance. Thus, communication was narrowed only to the social level. Ivana decided to cope with the situation through strategic subordination. She adapted to the situation but did not internally accept it (Lacey 1977). The authoritative behaviour of Ivana's training teacher prevented cooperation between them because mutual trust and respect are important for cooperation. Knowledge is constructed through dialogue between a student and a training teacher; knowledge first exists in the social interaction (external environment) and later in the mind of the student (inner environment), and learning takes place through the shift from the social environment to the inner environment. This shift is included in the model of

collaborative apprenticeship (Glazer and Hannafin 2006), but in Ivana's situation, it could not occur.

The question is, if Ivana had not changed schools, would she have remained in the profession?

Hidden curriculum

Some teachers do not realize the real impact of the unofficial transformation of pedagogical practices as a "hidden curriculum". The question is why teachers transform school practices in this "directive" way. The reason could be that the school does not offer a healthy school culture; research (Deal and Peterson 1999) has shown that a healthy and strong school culture based on a shared vision and common goals is correlated with better teacher work and satisfaction. Such a culture helps teachers overcome the uncertainties of their profession. In school cultures that support collegial cooperation, a better climate is created for the social and professional exchange of experience and the strengthening and dissemination of new approaches to work. However, without adequate explanation of those pedagogical practices, an education student may negatively associate them with the overall school philosophy. The practical knowledge of experienced teachers, that is, teaching knowledge that is in use, is considered to be an important tool in supporting education students and their learning in school practice (Hagger and McIntyre 2006). The mentoring activities of these teachers can help education students practice, understand, and discuss teaching alongside experienced practitioners (Loughran 2006). For education students, learning pedagogical practical knowledge is helpful (Fox et al. 2010). Their participation in workplace activities and interactions must be intentionally structured and should be guided by experienced colleagues. In addition, education students should have opportunities to determine how they participate, to use learner-centred methods based on their developmental needs, to reflect and think differently, and to collaborate closely with colleagues. In addition, there should be an explicit focus on teacher learning as a dimension of normal working practice. Even though she had an opportunity to see the positive result of the school's approach, the negative experience affected her to the extent that she considered ending her pursuit of a teaching career, and this experience prevented her from sharing her learning needs. We believe that if Ivana had received more support from colleagues and an explanation of the "hidden" school practices, it would have opened up a space for her to share pedagogical experience and clarify the doubts she was facing. This suggestion is supported by research showing that the quality of the interaction between a new teacher and his/her experienced colleagues influences his/her decision about whether to remain in the profession (Pířšová 1999; Weiss 1999). To summarize the influence of the school culture on the decision to remain in the teaching profession, Ivana's words are sufficient:

S: It depends on the school you get. If one discovers that he/she likes working with children and wants to work with them but he/she comes to school and finds out that the school has a different vision, the result would be that the

school is not for her/him ... It must somehow connect. This practice plays an important role in recognizing it. [R1].

If Ivana had not sought other possibilities and had continued the practice at that school, we question how this would have affected her. The worst outcome might have been her ending her career. On the other hand, Ivana realized the importance of the accordance of the school culture with her own conception of teaching (Pířová 1999, pp. 38–45); as a result, this realization opened up a space for pedagogical knowledge sharing.

Conclusion

In this research, we examined student subjective theories, the socialization process, the hidden curriculum as part of school culture viewed through the lens of the student's subjective theories, and their influence on pedagogical practical knowledge sharing. Our research highlighted some aspects that may be interesting for teacher educators and even education students themselves. Even though the student was at the beginning of her training stage, the school culture played an important role in her professional career. The school culture was in contrast to the student's subjective theories, which led to her realization of the importance of the accordance of her own conception of teaching with the school culture to continue in the profession. She learned that this accordance is important.

When beginning practice through the socialization process, the student encountered a new approach to education. She compared her current experiences with her previous experiences, and she favoured her previous experiences because she did not receive a suitable explanation for the teaching practice or sufficient collegiate support; in addition, she experienced forced isolation, which was particularly painful (Pířová 1999, pp. 40–42). Her tendency to favour her previous experiences was also supported by her observation of a variety of teachers, whereby she observed uncooperative classes in which the results were not focused on the educational objectives of teaching and in which the extent and content of the subject matter seemed to be inadequate to develop pupils' final knowledge according to her subjective theories. The student also did not understand new approaches that were used in the school and without a suitable explanation (Van Velzen et al. 2012) of these new approaches, she mistakenly projected them onto the overall school culture, even though these new approaches may have been beneficial. Sufficient explanations should be provided to an education student by an experienced teacher (Van Velzen et al. 2012) to provide an opportunity for critical reflection that opens up a space for sharing. If the experienced teacher attunes herself/himself to the subjective theories of the education student and explains everything in a good atmosphere according to the needs of the education student, it might be possible to create a space for critical reflection; this approach can initiate the process of learning to teach because the basic prerequisite for cooperation is mutual trust and respect. The school culture helps students identify with the school. Research has confirmed that when an education student's disagreement with the school culture is the reason why nearly three-quarters of

respondents considered changing workplaces or even leave the school. Several factors influence professional development, including the environment, opportunities, and support for newer teachers (Pířová 2005, p. 56).

We are aware of the limitation of our research. The study was carried out with a single participant and included interviews, observation, and a reflective diary as the data collection method. However, in the initial interviews, we were able to capture the characteristics of the socialization phase which is important, especially at the beginning of a student's career, and the retrospective interview was analysed to determine the student's changes in thinking. Our research contributed to the topic of the influence of school culture on pedagogical practical knowledge sharing and on the future career of an education student. In addition, the article leads the reader to reflect on the relatively strong influence of students' subjective theories, which are often resistant to change, on student comes in practice and the role of these subjective theories in students' processes of filtering the influences of the external environment. However, we showed that resistance to change student subjective theory could be overcome by a suitable explanation by experienced teachers and the creation of a positive school environment where teachers and students want to be. Such an environment is characterized by mutual support and encouragement (Hansen and Childs 1998). If such an environment can be created during the student's introduction phase, unnecessary inconvenience or termination of the student's career could be avoided.

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Data availability The dataset generated and analysed during the current study is available from the corresponding author on reasonable request.

Declarations

Conflict of interest The authors declared that they have no conflicts of interest.

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