Z f Bildungsforsch (2022) 12:235–253
https://doi.org/10.1007/s35834-022-00354-6

zbf ZEITSCHRIFT FÜR BILDUNGSFORSCHUNG

EMPIRISCHER ORIGINALBEITRAG

"Cooperation with a peer in practicum is nice but teaching alone makes me feel I am teaching for real." How pre-primary and primary student teachers experience single and paired field placements

Tina Hascher · Minh-Ly Do · Lea de Zordo

Received: 31 January 2022 / Revised: 22 July 2022 / Accepted: 28 July 2022 / Published online: 24 August 2022

Abstract As part of the reform of teacher education, field placements for student teachers have been expanded and new forms such as paired field placements implemented into standard programmes. For many years, the single field placement has been the standard model for student teachers, but various forms of paired internships have been introduced. However, little is known about the processes of cooperative learning during field placements and how student teachers benefit from different forms of field placement, such as single versus paired field placements.

This qualitative study aims at a deeper understanding of student teachers' learning in single and paired field placements from student teachers' perspective. Theoretically, our study is based on the offer-and-use model in field experiences combined with the autonomy-parity pattern. Student teachers ($N = 20$) from the University of Teacher Education in Bern, Switzerland, were interviewed in depth about their learning gains after completing four paired field placements and one single field placement. Results showed that although student teachers appreciate the work and exchange with a peer, the majority of student teachers prefer single field placements. The desire for autonomy and the ability to work flexibly in single field placements seemed to outweigh the advantages of paired field placements. The majority of students considered single field placements to be closer to reality. The results en-

Tina Hascher · Minh-Ly Do (✉)
Institute of Educational Science, Dept. of Research in School and Instruction, University of Bern, Fabrikstraße 8, 3012 Bern, Switzerland
E-Mail: minh-ly.do@students.unibe.ch

Tina Hascher
E-Mail: tina.hascher@edu.unibe.ch

Lea de Zordo
Institute of Pre- and Primary Education, University of Teacher Education Bern, Fabrikstraße 8, 3012 Bern, Switzerland
E-Mail: lea.dezordo@phbern.ch

courage future discussion and research about student teachers' attitudes towards field placements and the teaching profession.

Keywords Single field placement · Paired field placement · Cooperation · Learning opportunities · Autonomy-parity-pattern

1 Introduction

Although teacher education might vary worldwide and across traditional and alternative programmes, programmes include practical training in field placements (Darling-Hammond and Lieberman 2012). Since the start of the century, the expansion of field placements for teacher students has become a core part of teacher education reform (Bullough et al. 2003). Field placements aim to foster student teachers' development by enabling practical experience in authentic school contexts. They are widely recognized as one of the most important and influential components of teacher preparation programmes (e.g., Beck and Kosnik 2002; National Council for the Accreditation of Teacher Education 2010; Ronfeldt and Reininger 2012; Ronfeldt et al. 2015). A variety of forms of field placement exists, such a single, paired and group placements, and little is known about the differences between those forms regarding learning opportunities and challenges.

The single field placement (SFP) has been preferred for many years as the standard model of student teaching (Nokes et al. 2008). It is based on the idea that an individual student teacher will be socialized into the profession through a close relationship with and mentoring by an experienced teacher (Nguyen 2013). Individual mentoring is expected to help student teachers develop skills for teaching in the classroom (Clarke et al. 2014).

During the last decade, paired field placements (PFP) have been increasingly implemented in teacher education programmes. Usually, two student teachers are paired for practical training at the same placement site and mentored by the same mentor teacher(s). PFP are expected to add value through mutual peer support and feedback, as well as fostering student teachers' cooperation skills.

Regarding learning outcomes it can be assumed that no field placement model is by definition superior to another, but the different models can be expected to offer different learning opportunities and include different challenges for student teachers and mentors (Anderson and Stillman 2011). Although the importance of both SFP and PFP has been recognized in prior studies (see Gardiner and Robinson 2011), only a few studies have sought to compare student teachers' learning in SFP and PFP (see Bullough et al. 2002, 2003). Evidence-based knowledge is needed about how field placements shape student teachers' opportunities to learn and about what, and how student teachers actually learn from placements (Anderson and Stillman 2011). Regarding field placements in particular, research focused on students' perspective on the value of different placement forms is missing. Therefore, the aims of our study are twofold. Firstly, we aim to contribute to an understanding of the role of the placement context by comparing SFP and PFP. Secondly, by comparing individual learning experiences through the lens of student teachers engaged in both SFP and

PFP, we aim to gain a deeper understanding of learning opportunities. The results of our study could inspire future research and contribute to evidence-based policy and practice regarding field placements in teacher education programmes.

2 Theoretical frameworks for student teachers' learning

2.1 A model of learning opportunities in field placements

Teacher education is assumed to provide student teachers with "meaningful opportunities" to learn (Anderson and Stillman 2011, p. 452). Field placements are an opportunity for student teachers to transfer theory, knowledge and skills into school-based practice (Dang 2013). According to Hascher and Kittinger (2014), field placements provide a set of learning opportunities, and the individual's use of these opportunities in turn supports learning outcomes. Hascher and Kittinger (2014) proposed an "offer-and-use" model for field experiences, which can serve as a frame to explain student teachers' learning in field placements (see Fig. 1). The distinction between the offer/opportunity and use of the offer/opportunity takes into account that learning opportunities can be perceived and used differently by learners. The model proposes that the diversity of learning offers/opportunities might depend on cultural, economic and educational factors. The model also assumes that the efficiency of the use of learning opportunities is related to personal prerequisites and competencies, as well as subjective beliefs.

This model also aims to illustrate the various factors that influence the quality of student teachers' learning process and outcomes (Hascher and Hagenauer 2016, p. 17): structural (e.g., SFP vs. PFP), social (e.g., relationships with colleagues or

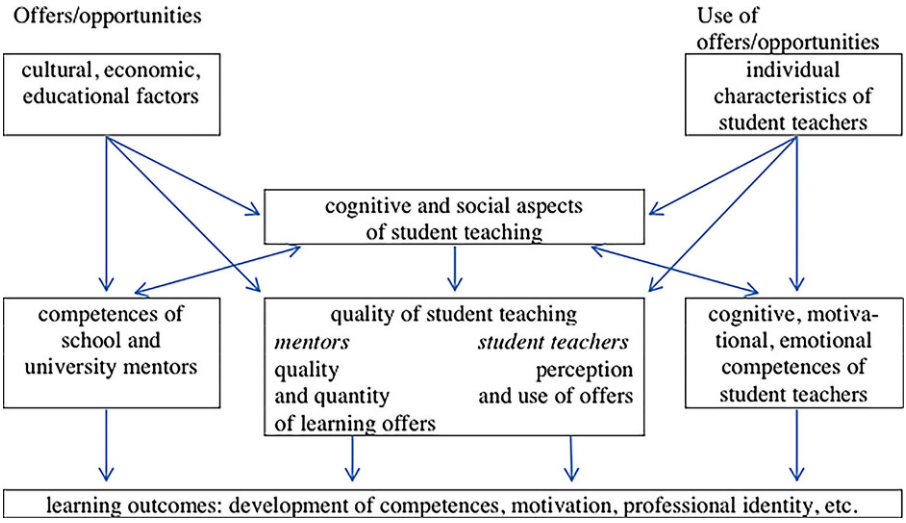

Fig. 1 Offer-and-use model of practical training in teacher education. (Source: Hascher and Kittinger (2014, p. 223))

peers), individual (e.g., self-efficacy, goal orientation) and organizational aspects (e.g., allocation of schools and practice support offers by mentor teachers). It also acknowledges that characteristics of teacher education programmes such as length of field placements, the relationship between the university and the district, and the school's climate and acceptance of the student teacher can differ and have an effect on learning process and success. The model also illustrates the active role of preservice teachers in professional development, because learning processes and outcomes also depend on how student teachers capitalize on their potential (Hascher and Kittinger 2014). In our exploratory study, we follow the ideas of this model and aim at understanding the offer (learning opportunities) in both SFP and PFP.

2.2 From an autonomy-equality pattern to an autonomy-parity-cooperation pattern

Based on the sociological study of school teachers' work conditions during the 1970s, Lortie (1964, 1975) identified a professional orientation of teachers, which he described as the "autonomy-equality pattern" (Lortie 1964, p. 274). His study was the first to highlight the isolation of teachers as a major barrier to improvement in American schools. He observed that the organization of the working conditions, primarily isolated in their classrooms, encourages the emergence of certain patterns of behaviour among teachers in a school. This behaviour can be described as encouraging high levels of independence and authority in the course of professional practice compared to other organizations. Lortie (1969, p. 9) noted that there is a lack of comprehensive opportunities for cooperation among teachers in school due to "self-contained classrooms". Teachers are socialized into the structure of the self-contained classroom from the very beginning of the teaching profession. The "autonomy-equality pattern" is the result of "endemic uncertainty" (Lortie 1975, p. 135) in the teaching profession due to unclear goals, doubts about the effectiveness of methods, and limited opportunities (Altrichter and Eder 2004; Eder et al. 2011).

The origin and cause of the autonomy-equality pattern was based on three assumptions: "(1) the teachers should be free from the interference of other adults while teaching, (2) teachers should be considered and treated as equals, and (3) teachers should act in a non-intervening but friendly manner towards one another" (Lortie 1964, p. 274). Lortie's theory provided a framework for understanding the culture of schools that may explain a lack of cooperation in school practice and the teaching profession. During the 1970s, the autonomy-equality pattern served primarily as a sociological description of the professional situation of teachers with little empirical evidence. It was assumed that the autonomy-equality pattern developed historically in response to an inherent endemic uncertainty in the teaching profession (Altrichter and Eder 2004). Intensive discussion about its implications had evolved by the end of the 1990s. Research interest has specifically increased in German-speaking countries, and Lortie's theory was renamed and translated into the "autonomy-parity pattern" by Austrian scholars (Messner and Altrichter 1998). In contrast to Lortie (1975), Altrichter and Eder (2004) argued that the autonomy-parity pattern may occur for a variety of reasons that are not solely related to the structure of schools and that personal factors must also be considered.

Empirical research on the autonomy-parity pattern is still limited (Rothland et al. 2018). Regarding field experiences, two insights are worthy of consideration when comparing SFP and PFP. First, Eder et al. (2011) investigated the occurrence of the autonomy-parity pattern by examining characteristics of personality and the performance of student teachers. They found that the autonomy-parity pattern might not only develop during professional socialization but can already manifest as pre-professional socialization (Eder et al. 2011, p. 203). For instance, when school students observe their predominantly solely teachers, they might perceive the teaching profession as characterized by autonomy and parity. Second, Eder et al. (2011) also observed that professional collaboration during field experiences does not necessarily imply a loss of autonomy. Thus, they extended the autonomy-parity pattern into the autonomy-parity-cooperation pattern.

3 Forms of field placement

3.1 Single field placements (SPF)

SFP pairs one student teacher with an experienced teacher, who is frequently called a mentor teacher or cooperating teacher (Bullough et al. 2003; Cohen et al. 2013; Gardiner and Robinson 2009; Goodnough et al. 2009). Over time, teacher education programmes adopted this one-to-one model for student teaching as the preferred or exclusive form (Nokes et al. 2008). As part of teacher education programmes, SFP are framed by preparation and accompanying campus courses (e.g., practical courses in small groups of student teachers to discuss teaching experiences or seek professional advice), and field experiences might be located in some type of partnership between the school and the university (e.g., in continuing education schools or partner schools). Although university teachers can serve as supervisors, it was found that mentor teachers often take the main responsibility for student teachers (Leatham and Peterson 2010).

Field experiences can include observing teachers in classrooms, tutoring individual and groups of school students, and providing assistance to small groups or teaching (parts of) lessons (Capraro et al. 2010). Frequently, after a first phase of predominantly observing their mentor teachers in the classrooms, student teachers increasingly gain the responsibility to teach the class temporarily (Bacharach et al. 2010). Furthermore, it has been found that student teachers in SFP might be left alone with the students or even asked to take on full responsibility (Bacharach et al. 2008). This can provide them with the opportunity to discover how it feels to be in charge in a classroom (Feiman-Nemser and Buchmann 1987) and to develop their own professional identity (Zeichner 2009). By working independently, the traditional SFP can also support student teachers in developing teaching competencies (Darling-Hammond 2006) and facing the demands of teaching practice. This might ultimately result in increased levels of self-confidence and self-efficacy (Knoblauch and Woolfolk Hoy 2008). However, student teachers might also be overwhelmed and feel stressed by the demands of this high responsibility (Lindqvist et al. 2020).

3.2 Paired field placements (PFP)

PFP couples two student teachers who are mentored, usually as a team, by one or more experienced teachers. In PFP, a variety of team-teaching forms can be practised, such as sequential teaching and co-teaching (e.g., Baeten and Simons 2014). Over the last years, PFP have been increasingly implemented in teacher education programmes across the globe—for example in North America (Bullough et al. 2002), the UK (Sorensen 2004), Australia (Walsh and Elmslie 2005), Vietnam (Dang 2013), Belgium (Baeten and Simons 2014) and Switzerland (De Zordo et al. 2019).

Student teacher pairing can serve two different purposes, that can also correspond. Firstly, it might be rooted in a shortage of mentor teachers and placement sites. Thus, pairing is less based on educational reasoning but originates in organizational issues, with the implicit notion that SFP would be the preferred form, even if pairing is highly appreciated. Secondly, student teacher pairing can aim at improving the quality of field placements due to the growing complexity and new demands of teaching, such as educating students with diverse learning needs (Bullough et al. 2002; Darling-Hammond and Hyler 2020; Goodnough et al. 2009). Such paired settings aim to prepare student teachers for professional cooperation before entering the workforce.

PFP enables student teachers to practise cooperation not only with a mentor teacher, but also with a peer (Baeten and Simons 2014). The experiences that student teachers gather are expected to shape their view of teaching as a collaborative profession (Korthagen et al. 2006). Therefore, it is important that teacher education provides quality field placement opportunities that support preservice teachers in gaining knowledge and developing a professional identity (Ulvik and Smith 2011). This can be enabled by aligning PFP with preparation and accompanying campus courses. When student teachers partner during field placements, they can imitate, transfer and modify each other's methods (Stairs et al. 2009). Thus, PFP offers additional learning opportunities through the exchange with and support of peers.

3.3 Similarities and differences of single versus paired field placements

Despite their different forms, several similarities between SFP and PFP can be identified. Both SFP and PFP are based on the idea that field placements support student teachers' practical skills. Both can vary in respect of institutional guidelines, scope of field experience or length, and institutional integration into schools and universities (Cohen et al. 2013; Lawson et al. 2015). Also common is the underlying the notion that student teachers work with one or more experienced teacher(s) to improve professional competencies through classroom practice (Sorensen 2014), as student teachers can benefit from mentoring by experienced teachers (Baeten and Simons 2016) and improve their professional skills through experiences in practice.

When comparing the results from research on SFP and research on PFP, however, remarkable differences between SFP and PFP can be identified. Firstly, in SFP, student teachers are provided with one-to-one mentoring from an experienced teacher. Mentor teachers' activities aim at providing support and feedback in order to help

the individual student teacher improve professionally and assimilate into the specific school culture (Clarke et al. 2014; Cohen et al. 2013). A one-to-one mentoring ratio in an SFP may lead to a more intense relationship with the mentor teacher than in a PFP. As regards the autonomy-parity-cooperation pattern, SFP models a stand-alone teacher that mentors an emerging stand-alone teacher. Thus, SFP are likely to solidify student teachers' perception of the classroom as self-contained and the teaching profession as weak in cooperation. PFP, instead, mirrors cooperation and collaboration as useful, at least for teacher learning settings.

Secondly, the two forms of field placement can have differing impacts on professional identity building. In contrast to the PFP, the SFP can instil the concept of teaching as a solitary profession (Ammentorp and Madden 2014) and confirm the pre-professional concept of teaching as mirrored in the autonomy-parity-cooperation pattern. In SFP, a student teacher might act relatively independently under the guidance of a mentor teacher, and real cooperation with the mentor teacher might be scarce (Cohen et al. 2013). Student teachers can be left with more flexibility in terms of how to prepare and instruct lessons since they must only coordinate with the mentor teacher (Anderson et al. 2006). In addition, student teachers are provided with more teaching time because they do not have to divide or share teaching lessons with a partner (Lawson et al. 2015). Accordingly, paired student teachers mention that they miss out on gaining real-world teaching and school experience (Gardiner and Robinson 2011; Nokes et al. 2008). Student teachers criticize that PFP provides less individual teaching opportunities and prevents them from taking on full responsibility (Stairs et al. 2009).

Thirdly, SFP and PFP can differ regarding the development of cooperative skills. Studies have shown that student teachers receive more help and support from peers than from mentor teachers during PFP (e.g., Dee 2012; Smith 2002; Stairs et al. 2009). Moreover, it has been found that paired student teachers are more engaged in intensive discussions, which built a more intensive relationship with their mentor teachers (Baker and Milner 2006; Goodnough et al. 2009). Thus, in PFP, teacher students can benefit from two forms of cooperation: cooperation with an expert teacher (Smith 2002) and cooperation with an equal status partner (Gardiner 2010), which will enhance their collaborative skills (Baker and Milner 2006; Gardiner and Robinson 2009; Kamens 2007). PFP, in contrast to SFP, may offer more opportunities to exchange collective experiences (Bowen and Roth 2002) through sharing of ideas regarding efficient planning (Baker and Milner 2006) or different teaching strategies (Stairs et al. 2009). Thus, PFP may temper development of the autonomy-parity pattern.

Fourthly, field placements can differ regarding the burden experienced. SFP can lead to student teachers feeling isolated due to lack of support (Klassen and Durksen 2014) and huge amounts of responsibility. Receiving full responsibility to take over a class individually might encourage teacher students but also results in stress (Bacharach et al. 2010). The experienced pressure to perform with a class as a single teacher, in turn, might manifest in the autonomy-parity-cooperation pattern. Being overloaded with individual teaching time can also result in a focus on survival-oriented learning patterns (Hascher and Hagenauer 2016; Nokes et al. 2008). In PFP, instead, a better school student-student teacher ratio can support self-efficacy beliefs

(Bacharach et al. 2010). However, PFP can also cause additional burden due to the need for compromise or incompatibility of student teachers (Goodnough et al. 2009; Nokes et al. 2008; Stairs et al. 2009), as well as unclear roles during instruction (Kamens 2007). Generally, negative experiences of peer cooperation can increase autonomy orientation and prompt the development of the autonomy-parity pattern.

So far, only a few studies have focused on explicitly comparing SFP with PFP. Bullough and colleagues (2002, 2003) conducted two comparative studies examining student teaching in elementary schools. Through interviews with student teachers and mentor teachers, both SPF and PFP were analysed. When student teachers were placed in pairs, they reported that having a partner in the classroom encouraged them to feel safe enough to take risks and make mistakes and to create a more varied and richer learning setting for children. PFP were specifically valued for the emotional and professional peer support they offered (Bullough et al. 2002, 2003). Baker and Milner (2006) compared five secondary school student teachers placed alone with four pairs of candidates in order to understand how they learned from their mentor teachers. From field observations and interviews with and questionnaires completed by student teachers and mentor teachers, the authors found that paired student teachers spent more time on effective planning, resulting in more efficient classroom management. Paired student teachers were also more engaged in intensive discussions, which built a more intensive relationship with their mentor teachers. Baker and Milner (2006) concluded that paired student teachers learned more from their mentor teacher than did student teachers in SFP. Given the scarcity of research, SFP and PFP are worthy of being investigated more closely as regards learning opportunities and the autonomy-parity-cooperation pattern.

4 Aim of the study and research questions

This study attempts to contribute to the ongoing discussion on the quality of field placements. We aim at contributing to an understanding of the characteristics and functions of two placement contexts, namely SFP and PFP, and gaining a deeper understanding of professional learning opportunities in both placements from student teachers' perspectives. This study aims to answer the following research questions (RQs):

- RQ1: How do student teachers experience single versus paired field placements and what differences do they perceive in terms of learning opportunities?
- RQ2: Which patterns regarding autonomy, parity and cooperation can be found among student teachers?

5 Method and design

5.1 The context: pre-primary and primary teacher education in Switzerland

Switzerland is made up of 26 cantons, each with its own government, legislature, constitution and judicial system. The canton (or state) is the Swiss form of an

administrative area with its own constitution. In Switzerland, education policy is based on the principle of federalism and gives responsibility for teacher education to the cantons. Federalized education in Switzerland ensured the rise of many small teacher education institutions (Criblez 2016). Predominantly, teacher education universities are responsible for pre-primary and primary teacher education. In Switzerland, a three-year study programme leads to a Bachelor of Arts (B.A.) in pre-primary and/or primary education (180 ECTS credits) for kindergarten and primary school teachers. After graduation as a teacher, graduate teachers start to work as fully responsible teachers. Graduates can enter the teaching profession directly without any restrictions. This teacher qualification enables graduates to teach all, or the majority of, school subjects in the relevant school grades (Criblez 2016). Primary teacher education in Switzerland is organized as a single phase training—i.e. theory and practice phases are completed simultaneously. In comparison, teacher training in other German-speaking countries, such as Germany, takes place in a two-phase model, where significant parts of the practical training are acquired after more theoretically based training. All Swiss teacher education programmes implement several field experience modules of varying lengths.

At the University of Teacher Education in Bern, Switzerland, students of pre-primary and primary education complete five field experiences, each lasting from two to six weeks (a total of 17 weeks plus eight half-days). Practicums 1–5 are structured into three teaching practice modules (TPM). TPM1 is carried out at the beginning of studies and includes an orientation practicum at the beginning of the second semester (practicum 1), and practicum 2, which takes place at the end of the second semester. Both practicums focus on learning the basics of teaching. Professional suitability should be clarified through critical examination of career goals. TPM2 includes practicums 3 and 4, which take place during the second academic year and last three and four weeks, respectively. Both practicums focus on learning and teaching. TPM3 includes the final six-week practicum in the third year (practicum 5) and is characterized by individual goalsetting to improve student teachers' work as a fully responsible teacher. For organizational reasons and due to didactic considerations (e.g., co-planning, peer learning through dialogue or peer feedback), all except the final internship are set up as paired placements of usually two student teachers. The instructions for PFP predominantly address the goals of developing skills in working with children as well as subject-specific teaching, whereas in the SFP student teachers are encouraged to work on their individual strengths and weaknesses as future teachers.

5.2 Sample

This study was conducted as part of a larger mixed-method study called "Cooperation in field experiences" (2014–2017) that aimed to understand which forms of cooperation are realized in PFP and how cooperation skills develop among student teachers (e.g., De Zordo and Hascher 2017). Nearly 200 pre-primary and primary student teachers participated in the study. In order to gain a deeper understanding of learning experiences in field placements, we also conducted a qualitative longitudinal study and randomly invited 70 student teachers from the full sample to

participate in two semi-structured interviews following completion of the four paired field placements (t1: TPM1–2) and after the single field placement (t2). A total of 37 student teachers volunteered to participate; five student teachers had to be excluded for personal or organizational reasons, and two dropped out before t1. In total, the sample consisted of 30 student teachers at the first measurement point (t1). A total of 20 agreed to be interviewed again at the second measurement point (t2). In this group, 10 student teachers focused on pre-primary and lower primary education (K-2) and 10 student teachers focused on upper primary education (3–6). At the time of the second data collection (t2), student teachers were, on average, 22.3 years old (SD = 1.80; range 20–27).

5.3 Data collection

We conducted a qualitative study applying in-depth, semi-structured interviews. All interviews were collected during the 2016/2017 academic year at the University of Teacher Education in Bern. For this sub-study, we used the data that were collected in April 2017 (t2) by the second author. Student teachers were first asked to describe their experiences in the last field placement, which was conducted as a six-week SFP. They were then asked to compare these experiences with their experiences in the preceding PFPs. The questions addressed a detailed description and comparison of their subjective experiences in SFP versus PFP, a comparison of the strengths and weaknesses of both forms of field experience, and individual preferences based on a comparison of learning opportunities from student teachers' perspective. The interview guide was pretested with two students, and minor modifications were made (e.g., question order was adapted). Interviews lasted approximately 30 to 70 min, took place in a confidential room at the university campus, and were audio recorded and transcribed verbatim. Informed consent was obtained from all participants before the interviews and participants could resign from the interview any time without any issues. All data were anonymized with pseudonyms for further data analysis.

5.4 Data analysis

The interviews with 20 student teachers (t1 and t2) were analysed using structuring qualitative content analysis (Mayring 2010). As a first step, the interview material was categorized using a deductive-inductive coding scheme to structure the content. In order to answer our research questions, a deductive coding scheme was developed for each question. As main units of analysis, we selected autonomy and parity, according to Altrichter and Eder (2004), and cooperation, according to Eder et al. (2011).

A coding scheme was developed with definitions, anchor examples, and coding rules for the main categories and subcategories (Mayring 2010). Anchor examples were extracted from the interviews for each category (Appendix). Additional subcategories were developed and inductively added when student teachers reported experiences which were not mentioned in the previously discussed literature.

The smallest component of a coding unit consists of one word. The data analysis software MAXQDA 18 was used for the coding process. All interviews were coded

by the first author. Two independent co-raters each coded half of the interviews. Accordingly, intercoder reliability was tested by comparing the results of all ratings by the first author with those by one of the two co-raters. The corrected Cohen's kappa coefficients (Brennan and Prediger 1981) of 0.81 and 0.83 indicate high agreement.

6 Results

6.1 How do student teachers experience single versus paired field placements and what differences do they perceive in terms of learning opportunities?

We explored how student teachers experienced the SFP compared to the PFP and how they perceived the differences regarding learning opportunities. The individual descriptions of the two forms of field placement (Question Q1: 44 codes) and the reported differences between SFP and PFP (Question Q2: 60 codes) were very similar and were integrated.

Student teachers highlighted the autonomy they experienced in SFP, represented by full responsibility (Q1: 20.45%; Q2: 20.00%) and more flexibility regarding work organization and instruction (Q1: 18.18%; Q2: 6.67%): "I enjoyed being the head of the class without always worrying about what I was teaching" (Stud 19). Conversely, in PFP, student teachers reported to receive more support and back-up (Q1: 13.64%; Q2: 11.67%) and experience more mutual exchange of ideas (Q1: 11.36%; Q2: 14.81%) that, in turn, called for more agreement (Q1: 11.36%; Q2: 13.33%): "You can just change things spontaneously. But you can't do that when there are two of you. It's like a fixed agreement. On Monday, music, I do it. On Tuesday, German, you will teach" (Stud 2).

Differences could also be classified into the category of parity. Student teachers reported being treated as a real teacher by school students (Q1: 2.27%; Q2: 1.67%) during the SFP: "School students realize that I'm only there for six weeks. But I felt I was being noticed and respected as a teacher. And during the PFP I felt less accepted" (Stud 16). Also, they mentioned completely equivalent tasks to a real teacher (Q1: 2.27%; Q2: 6.67%): "I really felt like a full-time teacher during the SFP, because even the parents came to me with their problems" (Stud 1).

It is worth noting that in Question 1, SFP was considered to correspond better to the school reality (14.29%): "It's more in line with the everyday working routine. There are certainly situations in which you teach in pairs, but mostly you are alone" (Stud 18). In answering Question 2, student teachers also mentioned that they had more contact with the mentor teacher (6.67%) during the SFP: "A certain difference was the cooperation with the mentor teacher ... this was more of a one-on-one cooperation with me" (Stud 4). Also, student teachers described the agreement required (11.67%) and the higher demands in terms of time (13.33%) as more specific to PFP. In sum, the individual (SFP) versus collaborative format (PFP) seems to predetermine the learning opportunities in field placements. In SFP, student teachers aim to capitalize on their role as teachers' peers: "I can simply confirm that freedom is the key! You can decide for yourself how and what content you want to

Table 1 Student teacher preferences based on different learning opportunities

Case	Preference	Example
B8 Kate	Single field placement ($n = 12$)	"I prefer the single placements, for sure! Because that's what you end up doing. Simply because it comes closest to the real work. And finally, field placements should prepare students for something they will do later." "In paired placements, it's always the case that a problem shared is a problem halved. A joy shared is a joy doubled. You just don't have that when you're alone. That's a pity from that point of view, actually a great pity, but basically that will be the case sooner or later anyway, so you'd better get used to it right now."
B4 Emma	Paired field placement ($n = 1$)	"In single placement, it's like having one perspective less. You can't exchange experiences during the planning, either. Well, you can get that from the mentor teacher. But during the paired placement, it's more natural." "Cooperation is an essential part of my future professional work, and after graduation—in other words, throughout life. I think it is even more fundamental when working as a teacher to promote cooperation. And I've seen that during the paired placement with the team partner."
B5 Grace	No preference ($n = 7$)	"I can't really commit to one. Because I think there are advantages and disadvantages for both. And I think it's actually good that there are both. It is difficult to choose between one type of field placement. Because I also like to work in a team. But now when you're teaching, it's exciting, too, when you're alone." "Less time is needed during the single placement because you do not need to agree on anything. But you also have fewer ideas."

teach" (Stud 17). In PFP, student teachers aim to benefit from mutual exchange with other student teachers as peers: "We can focus on communication and exchange to try out more ideas together in class" (Stud 11).

6.2 Which patterns regarding autonomy, parity and cooperation can be found among student teachers?

Based on the interview question "What type of field placement, single or paired field placement, would you want to complete if you had to do another one? Please explain", we identified three types of preference: a preference for SFP, a preference for PFP and no preference. Three students, Kate, Emma and Grace (Table 1), were selected to illustrate the different preferences.

6.2.1 Preference for SFP

Kate represents twelve student teachers that expressed a clear preference for SFP. Due to her perception that individual teaching reflects the reality of the teaching profession in school, she prefers the SFP. She considers that field placements should offer learning opportunities by practising under "reality" conditions and that student teachers are prepared for this reality. The experiences of autonomy and parity are of high importance for her learning progress. She also emphasizes that cooperation is rarely easy and requires work (e.g., time commitment or agreement), although she acknowledges the value of cooperation for field experiences. She prefers working alone while partly disregarding the benefits and learning opportunities of PFP.

6.2.2 Preference for PFP

Emma is the only student teacher that predominantly recognized working with peers as being beneficial in a number of ways, including the exchange or handing over of unpopular tasks. It seems that mainly positive experiences during PFP have led to her preference and valuing the benefits of cooperation. From her perspective, PFP offers very good learning opportunities through mutual exchange with a peer. Cooperation is recognized by Emma as an important and essential skill that is not only supportive in PFP but also crucial for a teacher's professional career in school. Furthermore, she capitalized on the given learning opportunities in PFP to improve her cooperation skills. Autonomy seems less important, and she appreciates parity with her paired field placement partner.

6.2.3 No preference

Grace represents seven students who acknowledge benefits and weaknesses of both placement forms, leading to an ambivalent or indifferent conclusion. She tends not to prioritize one field placement form over the other as she values the broader use of various learning opportunities given by a combination of SFP and PFP. Based on her experience, she fully understands why cooperation matters, but equally enjoys the learning opportunities that came with sole responsibility, such as the opportunity to gain self-confidence, and the autonomy that is given in SFP. Advantages and disadvantages are weighed, but her attitude towards both forms of field placements remains balanced.

7 Discussion and conclusion

This study aimed at a better understanding of the specific characteristics of two field placement forms by comparing single (SFP) and paired (PFP) field placements. Based on semi-structured interviews with 20 pre-primary and primary school student teachers who had completed both one SFP and several PFP, we sought to gain a deeper understanding of professional learning opportunities in both placement forms through student teachers' perceptions of the offer and use of such learning opportunities (Hascher and Kittinger 2014).

The first research question drew attention to how student teachers experience SFP versus PFP and what differences they perceive. Aligned with the rather independent fields of research on SFP and PFP, we classified possible differences in learning opportunities regarding professional identity building, development of cooperation skills, experiences of burden, and mentoring. The results indicated differences in student teachers' individual perceptions of the two field placement forms, with SFP characterized by teacher autonomy and responsibility for the children and PFP characterized by student teacher peer support and mutual exchange that is time consuming.

Interestingly, and contrary to the idea of the offer-and-use model (Hascher and Kittinger 2014) that the social differences of SFP and PFP lead to different settings,

dissimilarities in mentoring were barely mentioned. As prior research has found that one-to-one mentoring is highly valued by student teachers (Clarke et al. 2014; Cohen et al. 2013) and that mentoring of paired teacher students is more challenging and intense (Baker and Milner 2006), it would be noteworthy for future research to ask more specifically how student teachers experience the quality of mentoring in SFP versus PFP.

As regards professional identity, SFP seemed to trigger the idea of the teaching profession as a solitary profession (Ammentorp and Madden 2014) while supporting student teachers' feeling of individual self-efficacy as a learning outcome (Hascher and Hagenauer 2016; Hascher and Kittinger 2014). Student teachers highlighted the autonomy they had and the flexibility that was given in the SFP which made them feel they were teaching "for real". At the same time, student teachers valued paired field experiences due to helpful peer support and the opportunity to enhance cooperation skills (Ammentorp and Madden 2014; Gardiner and Robinson 2009), which points to the role of social aspects in field placements. It can be assumed that different placements have a different effect on student teachers' identity development, and future research would be helpful to identify the specific effects.

Experiences of burden, such as feeling isolated in SFP (Klassen and Durksen 2014), were not explicitly reported. Instead, student teachers more frequently evaluated PFP as time consuming, which could result in feelings of stress (Loewen et al. 2009). Contrary to the findings of Bullough et al. (2002, 2003), however, student teachers neither reported more challenges when teaching alone nor specifically appreciated emotional support or the opportunity to make mistakes in PFP. Also, the opportunity to develop cooperative skills in PFP was only marginally valued.

Regarding the offer-and-use model, student teachers' answers about characteristics and differences between SFP and PFP showed a tendency to define the two field placement forms as two rather opposite learning opportunities that are represented through either autonomy or dependency, individuality or cooperation, and being a peer of a teacher or student teacher (parity). Student teacher responses confirmed earlier studies that showed the most advantages of SPF in terms of autonomy (Cohen et al. 2013). Student teachers highly valued the autonomy they experienced as SPF offers many opportunities to teach individually, with high responsibility for children's learning. Future research might illuminate different aspects of autonomy (for instance in preparation, teaching, reflection) enabling a deeper insight into the range of learning opportunities within a field placement setting (Hascher and Kittinger 2014). Moreover, the strongly expressed need for autonomy during field placements could be discussed with respect to the Self-Determination Theory (Deci and Ryan 1985; Evelein et al. 2008) and it would be interesting to investigate how feelings of autonomy, competence, and social relatedness are experienced and intertwined in SFP and PFP. Future theoretical work on field placements may also align the autonomy-parity-cooperation pattern as introduced by Lortie (1964) and further developed by Eder et al. (2011) with Self-Determination Theory of Deci and Ryan (1985).

In asking the student teachers about their personal preference for a possible future field placement, we aimed at gaining a closer look at the prevalence of the autonomy-parity-cooperation pattern (Eder et al. 2011). We found that the majority

of the student teachers would prefer an SFP (12 out of 20 teacher students). As a key reason for this preference, they argued that SFP are proximal to the reality of the teaching profession, with the implicit notion that PFP are less realistic. These student teachers reported experiences of high autonomy that seem to support the autonomy-parity pattern described first by Lortie (1964) and later by Altrichter and Eder (2004). Although they valued the opportunities to learn with a peer and to benefit from peer support and exchange, their idea of teaching as a solitary profession and the role of field experience as preparation for this solitariness and complete responsibility seemed to be manifest during teacher education. Lortie's early observation (Lortie 1964) that teachers seek for intra-professional independence and low interference from other teachers seems still valid for today's teacher education despite a turn of the profession towards more collaborative culture (Goodwin 2020). Thus, future research could shed more light on factors such as personal experiences as a school student, role models in teacher education, socialization processes during field experiences or the specific features of field placements that might contribute to this representation. Also, the role of parity during field placements needs more attention. In a direct comparison of SFP and PFP, student teachers seem to devalue parity with a student peer in comparison to parity with a teacher.

About one third of the participants did not express a preference for one of the two field placement forms. Rather, they showed an understanding of the complementary benefits of SFP and PFP. Although this could be interpreted as an indicator of the autonomy-parity-*and* cooperation pattern, as identified by Eder et al. (2011) for Austrian preservice teachers, it must be mentioned that these student teachers did not relate autonomy, parity, and cooperation as equally possible and integrated within a PFP. Rather, they differentiated between the benefits of the two placement forms that could be combined to support their professional development. Thus, we suggest that the autonomy-parity-cooperation pattern might not be fully advanced in this group of student teachers unless they acknowledge the opportunities for autonomy within cooperative settings such as PFP and vice versa. As our study is one of the first aiming to explore this pattern in student teachers, our preliminary results need further examination in future research, and the prevalence of the patterns deserves more attention (e.g., Köker 2013; Rothland et al. 2018).

7.1 Limitations

Notwithstanding the findings, this study has some limitations. Firstly, because of the relatively small number of participants ($N = 20$), it is not possible to generalize the results to a broader population of student teachers in other education contexts. In Switzerland, teacher education in general and field placements in particular vary both across and within states, which limits the validity of the results. Comparison of different forms of field placements are difficult due to the high heterogeneity of their exact implementation and the range of individual as well as contextual factors that influence field experiences. Secondly, due to the qualitative nature of this study, the methodological approach for the study was primarily exploratory and employed a selective sample and contextually biased research setting. For example, the students' responses are based on their experiences of two introductory PFP, followed by

two subject-focused PFP, followed by a more general SFP. Also, PFP were implemented due to organisational rather than professional reasons. It must be recognized that this specific setting has influenced student teachers' answers. However, as the field experiences represent features of the general culture of (pre-)primary teacher education in Switzerland, such as an introductory phase that includes an aptitude self-check, a specific focus on subject didactics, and preparation for fully responsible teaching towards the end of the studies, the results might inform other teacher education sites. Thirdly, the student teachers were not interviewed during the course of the field placements, but at the end of the respective field placements. Therefore, retrospective bias may exist. In future research, more longitudinal research is needed.

7.2 Conclusion and implications for teacher education

Teacher education programmes offer field experiences for student teachers to learn "to practice in practice" (Darling-Hammond 2010, p. 40). Field experiences can help to integrate theory and practice and equip student teachers with the knowledge and skills they need to meet the demands of the teaching profession (Capraro et al. 2010; Zeichner 2009). Our exploratory study is among the first to compare student teachers' experiences of SFP and PFPs. From our qualitative results, it can be concluded that student teachers value SFP primarily for their rich experience of fully responsible teaching similar to teacher reality, whereas they value PFP predominantly as peer-supported learning opportunities. However, the need for cooperation in everyday school life (e.g., Ronfeldt et al. 2015) seems not yet to be fully recognized by the student teachers despite many learning opportunities. This might lead to student teachers' tendency to manifest earlier developed patterns of autonomy-parity that impede the establishment of a cooperative culture in the teaching profession.

We do not doubt that both forms of learning opportunity, SFP and PFP, are relevant for teacher education. However, their possible differential effects in respect of professional attitudes must be considered and reflected together with school mentors, who are key persons for student teachers learning during field placements. Also, more detailed knowledge about different learning opportunities in different forms of field placements might help inform teacher education and promote powerful learning settings in schools. We also encourage to acknowledge that offer and use in field placements might both be influenced by the general and specific culture of teacher education and school as well as socialization into the profession. A more vivid discussion about expected learning outcomes in different field placements might support teacher education better capitalize on the richness of these diverse learning opportunities.

Funding Open access funding provided by University of Bern

References

Altrichter, H., & Eder, F. (2004). Das "Autonomie-Paritäts-Muster" als Innovationsbarriere? In H. G. Holtappels (Ed.), *Schulprogramme – Instrumente der Schulentwicklung. Konzeptionen, Forschungsergebnisse, Praxisempfehlungen* (pp. 195–221). Juventa.

Ammentorp, L., & Madden, L. (2014). Partnered placement: creating and supporting successful collaboration among preservice teachers. *Journal of Early Childhood Teacher Education*, *35*(2), 135–149. https://doi.org/10.1080/10901027.2014.905805.

Anderson, L., & Stillman, J. (2011). Student teaching for a specialized view of professional practice? Opportunities to learn in and for urban, high-needs schools. *Journal of Teacher Education*, *62*(5), 446–464. https://doi.org/10.1177/0022487111412052.

Anderson, D., Lawson, B., & Mayer-Smith, J. (2006). Investigating the impact of a practicum experience in an aquarium on pre-service teachers. *Teaching Education*, *17*(4), 341–353. https://doi.org/10.1080/10476210601017527.

Bacharach, N. L., Heck, T. W., & Dahlberg, K. R. (2008). What makes co-teaching work? Identifying the essential elements. *College Teaching Methods & Styles Journal*, *4*(3), 43–48. https://doi.org/10.19030/ctms.v4i3.5534.

Bacharach, N. L., Heck, T. W., & Dahlberg, K. (2010). Changing the face of student teaching through co-teaching. *Action in Teacher Education*. https://doi.org/10.1080/01626620.2010.10463538.

Baeten, M., & Simons, M. (2014). Student teachers' team teaching: models, effects, and conditions for implementation. *Teaching and Teacher Education*, *41*, 92–110. https://doi.org/10.1016/j.tate.2014.03.010.

Baeten, M., & Simons, M. (2016). Innovative field experiences in teacher education: student-teachers and mentors as partners in teaching. *International Journal of Teaching and Learning in Higher Education*, *28*(1), 38–51.

Baker, R. S., & Milner, J. O. (2006). Complexities of collaboration: intensity of mentors' responses to paired and single student teachers. *Action in Teacher Education*, *28*(3), 61–72. https://doi.org/10.1080/01626620.2006.10463420.

Beck, C., & Kosnik, C. (2002). Components of a good practicum placement pre-service teacher perceptions. *Teacher Education Quarterly*, *29*(2), 81–98.

Bowen, G. M., & Roth, W. M. (2002). Student teachers' perceptions of their paired practicum placement experiences. *Journal of Teaching and Learning*, *2*(1), 21–37.

Brennan, R. L., & Prediger, D. J. (1981). Coefficient: some uses, misuses, and alternatives. *Educational and Psychological Measurement*, *41*(3), 687–699.

Bullough, R. V., Young, J., Erickson, L., Birrell, J. R., Clark, D. C., Egan, M. W., Berrie, C. F., Hales, V., & Smith, G. (2002). Rethinking field experiences: partnership teaching versus single-placement teaching. *Journal of Teacher Education*, *53*(1), 68–80. https://doi.org/10.1177/0022487102053001007.

Bullough, R. V., Young, J., Erickson, L., Birrell, J. R., Clark, D. C., & Egan, M. W. (2003). Teaching with a peer: a comparison of two models of student teaching. *Teaching and Teacher Education*, *19*(1), 57–73. https://doi.org/10.1016/S0742-051X(02)00094-X.

Capraro, M., Capraro, R. M., & Helfeldt, J. (2010). Do differing types of field experiences make a difference in teacher candidates' perceived level of competence? *Teacher Education Quarterly*, *37*(1), 131–154.

Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: a review of the literature. *Review of Educational Research*, *84*(2), 163–202. https://doi.org/10.3102/0034654313499618.

Cohen, E., Hoz, R., & Kaplan, H. (2013). The practicum in preservice teacher education: a review of empirical studies. *Teaching Education*, *24*(4), 345–380. https://doi.org/10.1080/10476210.2012.711815.

Criblez, L. (2016). Switzerland: teacher education. In T. Sprague (Ed.), *Education in non-EU countries in western and southern Europe* (pp. 99–121). Bloomsbury Academic.

Dang, T. K. A. (2013). Identity in activity: examining teacher professional identity formation in the paired-placement of student teachers. *Teaching and Teacher Education*, *30*, 47–59. https://doi.org/10.1016/j.tate.2012.10.006.

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, *57*(3), 300–314. https://doi.org/10.1177/0022487105285962.
Darling-Hammond, L. (2010). Teacher education and the american future. *Journal of Teacher Education*, *61*(1–2), 35–47. https://doi.org/10.1177/0022487109348024.
Darling-Hammond, L., & Hyler, M. (2020). Preparing educators for the time of COVID ... and beyond. *European Journal of Teacher Education*, *43*(4), 457–465. https://doi.org/10.1080/02619768.2020.1816961.
Darling-Hammond, L., & Lieberman, A. (2012). *Teacher education around the world: changing policies and practices, teacher quality and school development*. Routledge.
De Zordo, L., & Hascher, T. (2017). Kooperation lernen im Teampraktikum ? *Journal für Lehrer-Innenbildung*, *17*(1), 20–25.
De Zordo, L., Hagenauer, G., & Hascher, T. (2019). Student teachers' emotions in anticipation of their first team practicum. *Studies in Higher Education*, *44*(10), 1758–1767. https://doi.org/10.1080/03075079.2019.1665321.
Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
Dee, A. L. (2012). Collaborative clinical practice: an alternate field experience. *Issues in Teacher Education*, *21*(2), 147–163.
Eder, F., Dämon, K., & Hörl, G. (2011). Das "Autonomie-Paritäts-Muster": Vorberufliche erlerntes Stereotyp, Bewältigungsstrategie oder Ergebnis der beruflichen Sozialisation? *Zeitschrift für Bildungsforschung*, *1*, 199–217.
Evelein, F., Korthagen, F., & Brekelmans, M. (2008). Fulfilment of the basic psychological needs of student teachers during their first teaching experiences. *Teaching and Teacher Education*, *24*(5), 1137–1148.
Feiman-Nemser, S., & Buchmann, M. (1987). When is student teaching teacher education? *Teaching and Teacher Education*, *3*(4), 255–273. https://doi.org/10.1016/0742-051X(87)90019-9.
Gardiner, W. (2010). Mentoring two student teachers: mentors' perceptions of peer placements. *Teaching Education*, *21*(3), 233–246. https://doi.org/10.1080/10476210903342102.
Gardiner, W., & Robinson, K. (2009). Paired field placements: a means for collaboration. *The New Educator*, *5*(1), 81–94. https://doi.org/10.1080/1547688X.2009.10399565.
Gardiner, W., & Robinson, K. S. (2011). Peer field placements with preservice teachers: negotiating the challenges of professional collaboration. *Professional Educator*, *35*(2), 1–11.
Goodnough, K., Osmond, P., Dibbon, D., Glassman, M., & Stevens, K. (2009). Exploring a triad model of student teaching: pre-service teacher and cooperating teacher perceptions. *Teaching and Teacher Education*, *25*(2), 285–296. https://doi.org/10.1016/j.tate.2008.10.003.
Goodwin, A. L. (2020). Teaching standards, globalisation, and conceptions of teacher professionalism. *European Journal of Teacher Education*, *44*(1), 5–19. https://doi.org/10.1080/02619768.2020.1833855.
Hascher, T., & Hagenauer, G. (2016). Openness to theory and its importance for pre-service teachers' self-efficacy, emotions, and classroom behaviour in the teaching practicum. *International Journal of Educational Research*, *77*, 15–25. https://doi.org/10.1016/j.ijer.2016.02.003.
Hascher, T., & Kittinger, C. (2014). Learning processes in internships—analyses from a study using learning diaries. In K.-H. Arnold, A. Gröschner & T. Hascher (Eds.), *pedagogical field experiences in teacher education* (pp. 221–235). Waxmann.
Kamens, M. W. (2007). Learning about co-teaching: a collaborative student teaching experience for preservice teachers. *Teacher Education and Special Education*, *30*(3), 155–166. https://doi.org/10.1177/088840640703000304.
Klassen, R. M., & Durksen, T. L. (2014). Weekly self-efficacy and work stress of pre-service teachers during the final teaching practicum: a mixed methods study. *Learning and Instruction*, *33*, 158–169. https://doi.org/10.1016/j.learninstruc.2014.05.003.
Knoblauch, D., & Hoy, W. A. (2008). "Maybe I can teach those kids." The influence of contextual factors on student teachers' efficacy beliefs. *Teaching and Teacher Education*, *24*(1), 166–179. https://doi.org/10.1016/j.tate.2007.05.005.
Köker, A. (2013). Das Autonomiebedürfnis von Lehrer/innen als Kooperationshindernis – ein Mythos? In M. Keller-Schneider, S. Albisser & J. Wissinger (Eds.), *Professionalität und Kooperation in Schulen. Beiträge zur Diskussion über Schulqualität* (pp. 152–166). Klinkhardt.
Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, *22*(8), 1020–1041. https://doi.org/10.1016/j.tate.2006.04.022.

Lawson, T., Çakmak, M., Gündüz, M., & Busher, H. (2015). Research on teaching practicum—a systematic review. *European Journal of Teacher Education*, *38*(3), 392–407. https://doi.org/10.1080/02619768.2014.994060.

Leatham, K.R., & Peterson, B.E. (2010). Secondary mathematics mentor teachers' perceptions of the purpose of student teaching. *Journal of Mathematics Teacher Education*, *13*(2), 99–119.

Lindqvist, H., Weurlander, M., Wernerson, A., & Thornberg, R. (2020). Conflicts viewed through the micro-political lens: beginning teachers' coping strategies for emotionally challenging situations. *Research Papers in Education*, *35*(6), 746–765. https://doi.org/10.1080/02671522.2019.1633559.

Loewen, C., Gunn, T.M., Dyck, M., & & Platt, S. (2009). The paired placements project: a summary report of a field experiences initiative. *Northwest Journal of Teacher Education*. https://doi.org/10.15760/nwjte.2009.7.1.6.

Lortie, D.C. (1964). The teacher and team teaching: suggestions for long-range research. In J.T. Shaplin & H.F. Olds (Eds.), *team teaching* (pp. 270–305). Harper & Row.

Lortie, D.C. (1969). The balance of control and autonomy in elementary school teaching. In A. Etzioni (Ed.), *The semi-professions and their organization* (pp. 1–53). Free Press.

Lortie, D.C. (1975). *Schoolteacher: a sociological study*. University of Chicago Press.

Mayring, P. (2010). *Qualitative Inhaltsanalyse. Grundlagen und Techniken* (11th edn.). Beltz.

Messner, E., & Altrichter, H. (1998). Steuergruppen auf der Suche nach der Schulleitung: Steuerungssituationen in der Praxis. *Journal für Schulentwicklung*, *4*, 50–61.

National Council for the Accreditation of Teacher Education (NCATE) (2010). *Transforming teacher education through clinical practice: a national strategy to prepare effective teachers. Report of the blue ribbon panel on clinical preparation and partnerships for improved student learning*. NCATE.

Nguyen, H.T. (2013). Peer mentoring: a way forward for supporting preservice efl teachers psychosocially during the practicum. *Australian Journal of Teacher Education*. https://doi.org/10.14221/ajte.2013v38n7.3.

Nokes, J.D., Bullough, R.V., Egan, W.M., Birrell, J.R., & Hansen, J.M. (2008). The paired-placement of student teachers: an alternative to traditional placements in secondary schools. *Teaching and Teacher Education*, *24*(8), 2168–2177. https://doi.org/10.1016/j.tate.2008.05.001.

Ronfeldt, M., & Reininger, M. (2012). More or better student teaching? *Teaching and Teacher Education*, *28*(8), 1091–1106. https://doi.org/10.1016/j.tate.2012.06.003.

Ronfeldt, M., Farmer, S.O., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, *52*(3), 475–514. https://doi.org/10.3102/0002831215585562.

Rothland, M., Biederbeck, I., Grabosch, A., & Heiligtag, N. (2018). Autonomiestreben, Paritätsdenken und die Ablehnung von Kooperation bei Lehramtsstudierenden. *Zeitschrift für Erziehungswisseschaft*, *21*, 589–610. https://doi.org/10.1007/s11618-017-0786-7.

Smith, J.D.N. (2002). The development of tandem teaching placements. *Mentoring & Tutoring: Partnerships in Learning*, *10*(3), 253–274. https://doi.org/10.1080/1361126022000022507.

Sorensen, P. (2004). Learning to teach collaboratively: the use of subject pairs in the school practicum. *Canadian Journal of Educational Administration and Policy*, *32*, 1–24.

Sorensen, P. (2014). Collaboration, dialogue and expansive learning: the use of paired and multiple placements in the school practicum. *Teaching and Teacher Education*, *44*, 128–137. https://doi.org/10.1016/j.tate.2014.08.010.

Stairs, A.J., Corrieri, C., Fryer, L., Genovese, E., Panaro, R., & Sohn, C. (2009). Inquiry into partnered student teaching in an urban school-university partnership. *School-University Partnerships*, *3*(1), 75–89.

Ulvik, M., & Smith, K. (2011). What characterises a good practicum in teacher education? *Education Inquiry*, *2*(3), 517–536. https://doi.org/10.3402/edui.v2i3.21997.

Walsh, K., & Elmslie, L. (2005). Practicum pairs: an alternative for first field experience in early childhood teacher education. *Asia-Pacific Journal of Teacher Education*, *33*(1), 5–21. https://doi.org/10.1080/1359866052000341098.

Zeichner, K.M. (2009). *Teacher education and the struggle for social justice*. Routledge. https://doi.org/10.4324/9780203878767.