

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

**Types of online scaffolds provided by a
teacher educator in a communal blog for
supporting pre-service teachers'
reflective practice: A case study**

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Abstract

Pre-service teachers' reflection is a common professional practice in the context of teacher education. The integration of blogs as reflective journals in teacher education may contribute to bridging practical field know-how with the academic knowledge base. In particular, the blog may serve as a virtual space for a community of practice where all partners equally develop professionally. The current study focused on the role of the teacher educator in promoting reflective practice by providing online scaffolds in a communal blog. In a qualitative research design that is based on a case study approach, two hundred and four teacher educators' blog comments were collected throughout an academic year and were analyzed. Five major types of online scaffolds within the teacher educator comments were identified: (1) positive feedback; (2) expressing emotions; (3) peer teaching; (4) meta-cognition; and (5) developing a professional language. It can be concluded that shifting from a traditional platform of individual feedback to a more communal online platform is not automatically linked to a model of a community of practice. As long as the hierarchical positioning of teacher educators compared to pre-service teachers is preserved by codes of academic status and grades the teacher educator's scaffolds would continue to reflect a traditional model rather than the construction of a genuine academic community of practice.

Keywords

Blogs, reflective journal, reflection, zone of proximal development, online-scaffolds, teacher educator, community of practice.

Introduction

According to Zeichner (2010) teacher training is performed in two parallel realms - the academia and the field. This state of the art preserves a traditional hierarchy between the theoretical knowledge (provided in academia by lecturers) and the practical knowledge (constructed in the field by practitioners). Pre-service teachers (hereafter, PSTs) are expected to act in these two distinct realms while integrating the knowledge obtained in both. This traditional structure of teacher training is rooted in the heart of professional development of teachers and in the culture of teacher training. However, PSTs find the integration of knowledge from the two distinct realms a challenging and complex endeavor. Thus, a call for change is needed.

The teacher educator (hereafter, TE) is a key figure who can contribute to bridge the gap between the two realms. The TE should therefore construct a new space where both the theoretical knowledge and the practical-reflective knowledge co-exist and then create egalitarian-dialectic links between the major stakeholders who act in the two spaces of teacher education (i.e., the TEs, school-based mentors, staff members in schools, and the PSTs themselves). The new space is the third space where the above-mentioned stakeholders share

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**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
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REFLECTIVE PRACTICE: A CASE STUDY**

knowledge4NZ4\, where bonds are established, and where the sense of safety and togetherness is created through a community (Zeichner, 2010). Within a third space deep pedagogical knowledge may serve as the basis for a solid professional identity.

Adopting the idea of the third space might shake the traditional hierarchical structure mentioned above that differentiates between the academic staff and the field staff, and between them and PSTs. This may bring about change in how knowledge is created, to the status of academic and practical knowledge, as well as changes in the roles of TEs and school staff (Beck, 2016; Darling-Hammond, 2010). A third space may exist within a cognitive aspect as well as physical or virtual space where technological platforms are used. In this regard, a blog was suggested as a suitable technological platform as an effective third space in which teacher education may be designed (Soja, 1996). The aim of using a blog rather than a traditional format of learning (e.g., paper journal) is to gain advantages that are less accessible in traditional learning formats. In this regard, the blog expands the possibilities for learning more and from more people, because the content and participants may increase with time. The blog is not limited by time and space, and therefore promotes the possibility to post anytime anywhere. The blog enables visibility, since all participants may see the contribution of other participants. It also enables documentation, so no information is lost and can be viewed repeatedly. The feature of documentation may reflect progression over time (Biberman-Shalev, 2021). Moreover, the blog facilitates collaborative knowledge construction by writing comments, which contributes to a creation of a learning community. According to Liaw (2017), the teaching experience that includes a platform on which PSTs can reflect on their teaching practices is likely to strengthen their sense of self-efficacy.

This study is theoretically anchored on Vygotsky's (1978) concept of the zone of proximal development (ZPD) which he defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Vygotsky referred to this kind of guidance and collaboration as "scaffolds". Therefore, scaffolds that are introduced and positioned by teachers, peer-colleagues or experts like TEs can be viewed as a useful tool to help construct knowledge.

Leaning on this theoretical framework, empirical research in the context of teacher education indicated that various computer technologies- including blogs- may act as a third space in which numerous scaffolds are provided by TEs to support PSTs' ZPD regarding professional reflective practice (Lai and Calandra, 2007; McLoughlin and Alam, 2014; San Martín, 2018). In this regard, TE's comments on PSTs' blog posts could be viewed as online scaffolds that they provided for the PSTs in the blog (Cochrane and Bateman, 2011; Schwartz et al., 2018). Therefore, the purpose of the current study was to explore the ways in which the TE used the comments feature in the blog in order to promote PSTs in constructing professional knowledge by using reflective blogs at their initial education level in higher education.

Literature Review

Blogs as a Third Space in Teacher Education

A blog is an Internet website to which people upload posts regarding their experiences, news-related items, and articles on various topics. Internet users can read these posts and post talkbacks responding to the blog writer or to comments made by other readers. Blog owners are referred to as *bloggers* and the community of bloggers is called the blogosphere. The use of blogs became more common towards the end of the previous century, facilitated by large-scale websites, e.g., WordPress.com and Blogger.com, which began hosting various bloggers

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TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

and providing user-friendly technologies for managing, writing and posting blogs without the need for specialized software-related knowledge (Biberman-Shalev, 2018).

Apparently, despite the availability and the user-friendly accessibility of the blog, its integration into teacher education is relatively limited (Fisher and Kim, 2013). Furthermore, there is only a limited understanding of how its implementation affects PSTs' training. Evidence from empirical studies conducted around the world reveals that when TEs integrate blogs into their course requirements, it exerts a positive effect on PSTs' learning process, especially in improving their reading skills, writing skills, and reflection skills (Tang and Lam, 2014). Other studies point to the blog's contribution to critical thinking and social interaction (Deng and Yuen, 2011).

Some studies have suggested that blogs contribute to flexibility of time and space in the learning processes while increasing the satisfaction derived from learning, academic achievement, a deeper understanding of the material studied, and sharing ideas and practical experience with faculty members and peers (Kirkwood and Price, 2014). When a blog accompanied the practical work at school, it could provide a platform for supporting the cognitive, social, and emotional dimension of learning, and could encourage the creation of a community that had an impact on the student teachers' professional identity (Chu, Chan and Tiwari, 2012). In contrast, there are a few studies that indicate the relatively small contribution of blogging to the advancement of PSTs' professional development as concerns enhanced higher-order reflection (Jones and Ryan, 2017).

There are two main ways to use blogs in teacher education. The first way is by means of a personal blog (a kind of personal journal) in which the PST posts reflections about her practical work at school or in other contexts. One of the main characteristics of a personal blog is that posts are revealed to the course instructor but not to the other course participants. The second way to use blogs in teacher education is by means of a communal blog in which all PSTs participating in the course publish their posts in one blog space with the result that both the course instructor and all the course participants can read the posts and add comments (Biberman-Shalev, 2018).

The blog may serve as a space in which participants equally design resources that are based on experience, skills, competencies and interactions (Mewburn and Thomson, 2013). The blog, therefore, makes it possible for PSTs to construct professional knowledge by using a collaborative model based on constructivist theory in career development (Peavy, 1992), and on social cognitive theory (Bandura, 1977) that makes it possible to professionalize through observation, interactions, and collaborations. Reflective practice and critical discussions may foster professional development (Murtagh, 2021; Wenger, 2010). Moreover, previous research indicates positive perceptions of TEs towards collaborative learning for the purpose of constructing professional knowledge of PSTs (Aderibigbe et al., 2014), yet little is known on the pragmatic aspect of operating collaborative learning environments by TEs, and the ways in which they contribute to constructing knowledge.

The blog may serve as a space for constructing a sense of collaborative community of practice for PSTs and TEs (Tang and Lam, 2014). The blogs illustrated that PSTs felt they were receiving practical advice as well as emotional support from the peers and TEs. The PSTs perceived themselves as an integral part of a community of teachers where they could develop their professional identities. It was therefore concluded that the blog may enhance the formation of a collaborative learning community when there is active participation of the members of

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

the community, when discussions and interactions that revolve on learning take place, when participants receive ongoing support and feedback from other participants, and when accessibility transcends time and place. When the above-mentioned conditions are met, they express Wenger's (2010) idea of a collaborative community of practice, as well as Zeichner's (2010) idea of the third space.

Nevertheless, the collaboration between various stakeholders such as PSTs, schoolteachers, researchers, TEs and school management teams is challenging. In teacher training colleges that are hierarchical and traditional it would be hard to adopt characteristics such as autonomy, practical orientation, informality and crossing borders that are essential for the enhancement of a collaborative learning community (Biberman-Shalev et al., 2020).

Providing Scaffolds in Blogs

Scaffolds may be referred to as a kind of mediation provided by an expert or a more experienced peer to a learner in order to bridge between the present level of competence of a learner to the level of competence that could be achieved with mediation (Vygotsky, 1978). A TE and peers may provide appropriate scaffolds (San Martin, 2018). Among scaffolds that are frequently used in teacher training one may find posing questions, the use of verbal cues, reinforcement, prediction, paraphrasing and orientation (Johnson and Kuerten Dellagnelo, 2013). It was found that PSTs in online learning environments where scaffolds were provided were more active and held more meaningful discussions than PSTs in online environments where no scaffolds such as comments and feedback from a TE were provided (Massing, 2018).

Scaffolds that are used in online learning environments may be categorized into the following types (Dabbagh, 2003): conceptual scaffolding that include clues that guide the learner towards the solution; coaching comments that are strategies or heuristics in a certain context; feedback; reflection that encourages the learner to perform self – monitoring; and modeling, where the teacher educator presents an example for similar situations. In a follow up study, it was found that scaffolds that were provided in blogs advanced the learning process (McLoughlin and Alam, 2014).

Another typology of providing scaffolds in online learning environments divided them into four major styles: procedural, conceptual, strategic and meta-cognitive (Jumaat and Tasir, 2015). Procedural scaffolds aid learners use technology tools, conceptual tools aid learners decide what to take into consideration in the process of learning, strategic scaffolds offer learners alternative ways to cope with problems in the learning process (Tiantong and Teemuangsai, 2013), and meta-cognitive scaffolds lead the learners to think about their learning process (Zhang and Quintana, 2012).

It appears that most studies that dealt with providing scaffolds focused mainly on meta-cognitive scaffolds (Jumaat and Tasir, 2015). Such scaffolds were related to fostering higher thinking skills and to reflective learning that advanced a collaborative learning community that shared a common task (Senges et al., 2008). It appears that meta-cognitive scaffolds were widely studied since they were found to be most effective in virtual learning environments. Despite the significance of looking into the effect of various types of scaffolds on the professionalization of PSTs (Engin, 2011), little is known about the ways TEs provide various types of scaffolds to PSTs in online environments for the purpose of constructing professional pedagogical knowledge, and whether the conditions for a third space are met.

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

Hence the research question in this study is:

To what extent is an communal blog used as a third space in teacher education and what are the characteristics of the third space? More particularly, we wish to explore the types of online scaffolds that the teacher educator provides in a communal blog, and to what extent they support the construction of professional pedagogical knowledge of the participants in the blog.

Materials and Methods

Research Context and Participants

This qualitative study relied on the case-study approach (Creswell, 2005) to study the comments posted by a TE to posts of PSTs in a communal blog. A variety of orientations and philosophical approaches were offered to define a case-study (Harrison, et al., 2017). The current study adopted Yin's (2014) definition of the case study approach as empirical research which focuses on a recent phenomenon or trend taking place in a limited or well-defined space. We applied an intrinsic case study approach in order to learn about a unique phenomenon (Crowe et al., 2011). The goals of the following case study research were to explore and deeply clarify the main factors, process and relationship that occurred in the defined space within the natural context in order to obtain an in-depth understanding of the case as an integrated whole (Crowe et al., 2011).

In this regard, the defined space in the current study as the communal blog where a TE's comment is added each week to the 14 PSTs' reflective posts. The PSTs were in their first year of teacher training for the certificate of elementary school teachers. Their average age was 23.5. The PSTs specialized in teaching the following school subjects: five PSTs specialized in teaching the sciences, three in mathematics, three in literature and three in religious studies, yet the emphasis in pedagogy was on refining language skills rather than on teaching a school subject. All PSTs were familiar with blogs, yet not familiar with the reflective process as a professional tool. Moreover, the TE was experienced with online tools for the purpose of reflection and used blogs as reflective journals on a regular basis.

The TE met the PSTs face to face in the elementary school where they practiced teaching once a week for a period of two semesters (a total of 24 days). The topic in school meetings with PSTs revolved on curriculum planning, and on professional and personal challenges. In addition, the TE observed lessons taught by the PSTs and held meetings where the dyad or triad (with the school-based mentor) was joined by the school management team and peers (PSTs). PSTs were required by the TE to post a reflective log in the communal blog platform on Moodle that would include 24 posts (a post per week). In the reflection PSTs were asked to relate to their experiences in planning and executing one on one conferencing sessions with pupils. In this regard, the main goal of the communal blog was to act as a space where the PSTs can reflect on their practical experience at school, read each other's reflections and learn from each other while providing practical knowledge and receiving constructive comments for their practices from the TE and peers. In other words, the communal blog acted as a space to share ideas and to learn from each other how to deal with challenges that arose in the practicum. For example, one PST posted a reflection on her disappointment from her teaching experience. She shared her lesson planning and reflected on the way her pupil responded to the lesson. The other participants in the communal blog (the TE and the PSTs) commented on her reflection. Some by asking questions about her lesson planning, others by offering creative ways to redesign her lesson, while others just encouraged her emotionally.

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

Instructions to the PSTs were flexible and included free writing on topics such as the experience in practicum, insights following a meeting with stakeholders in school or with peers, and insights following observations of the school-based teacher's lessons. The TE posted weekly comments to all posts in the communal blog. All PSTs could see and read all posts in the communal blog and respond to what their peers wrote and to the comments of their TE.

Data Collection and Analysis

Based on previous empirical research (Lai and Calandra, 2007; McLoughlin and Alam, 2014), the current study analyzed the TE's comments, which were posted in a communal blog, as online scaffolds provided to the PSTs in the online learning environment. The corpus of posts in the blog included two hundred and four comments that the TE posted in the communal blog following twenty-four times in which the fourteen PSTs uploaded posts. Since one of the researchers in this study was also the TE, credibility was maintained by analyzing data with external researchers who were not involved in the data collection and did not know the participants (Tracy, 2010).

Data analysis included two main phases: Phase 1: First, an identification of the types of online scaffolds that the TE provided in the communal blog was carried out through a deductive process in which categories were not pre-determined but arose in the process of data analysis. In this process the 204 comments were copied to a Word file. Then, each of the three researchers read and analyzed all comments by using a thematic content analysis (Braun and Clarke, 2006). This analysis relied on emphasizing words and phrases that repeated themselves and referred to the research question.

Following their individual analysis, the researchers met for the purpose of inter-rater reliability and presented the categories that were identified by each one. Common categories pointed to an agreement and to a high inter-rater reliability. Unique categories were discussed by presenting the rationale for the essence of the category and by anchoring it in raw data. The researchers performed an additional reading of the comments together and sorted quotes that supported each category and then categories were named. The categories that eventually appear in the findings section were those that reached a total agreement of the researchers, since they proved to be essential and centrally linked to the research question. Phase 2: Categorizing the scaffolds that the TE provided in the communal blog through an inductive-emic process. The categories were then attributed to scaffolds that were theoretically and empirically associated with promoting the process of constructing professional pedagogical knowledge. These scaffolds are presented in the following findings section.

Ethics

Maintaining ethics was a major factor in the current study. The PSTs sent their approval to take part in the study in writing and agreed to include their posts in the communal blog in the corpus. Their approval was sent after they ended their practical teaching period and received grades, so there was no longer any connection between them and the TE. Additionally, participants were notified that the finding would be published. Thus, the PSTs' posts were included only once informed consent had been gained, with anonymity being guaranteed. The research was designed and carried out following the ethics policies of the colleges for teacher education in Israel. The study also received the approval of the academic institution's research ethics committee (no. 2017051502).

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

Findings

The findings are organized in a manner where the online scaffold that has been identified is presented first. Its presentation is followed by an explanation of its linkage to constructing professional pedagogical knowledge and then to the creation of a community of practice.

Scaffold 1: Positive Feedback

Positive feedback was frequent in the TEs' comments to the PSTs' posts in the blog. This feedback included praise, encouragement or compliment, for instance: "I was impressed by the post you had written." In previous research it was also found the percentage of positive comments in feedback that TEs provided to students doubled the percentage of comments of suggestions. TEs often use positive feedback in order to support PSTs and help them gain confidence (Schwartz et al., 2018).

On the one hand, the positive feedback aspect may be linked to the process of empowerment that the TE was initiating since it is recommended in the literature for raising motivation and participation of PSTs (Kirk et al., 2016). On the other hand, the multitude of positive comments could be perceived as echoing behavioristic approaches, namely as providing positive reinforcement to desired behaviors of the PSTs (Skinner, 1953). From an alternative view it could be that the large number of positive comments could be linked to the desire of the TE to avoid conflicts. The act of intensely providing positive reinforcement might lead to PSTs' unrealistic perceptions of their competence (Schwartz et al., 2018).

The positive reinforcement comments were general in the most part, for instance: "good luck", "immensely proud of you", "excellent work!", and partially specific, as: "progress in writing the observation can be traced", and "in the observation you carried out you pointed well to the distinction between documentation and interpretation". It is noteworthy to state that professional terminology was embedded by the TE in the specific comments, and it related to specific practices, whereas the general feedback was somehow blurred and decontextualized. As documented in previous studies specific feedback is most beneficial in advancing PSTs (Scheeler et al., 2004). Furthermore, there were examples in the data in this study for an integration between positive feedback and corrective feedback (Schwartz et al., 2018) that pointed to issues that required amendment and provided pragmatic suggestions, such as: " You pointed to classroom regulations and their benefits in a scholarly manner. I suggest you pay attention to the hierarchical order in which the regulations are presented".

The scaffold of general and corrective comments could have brought about a process of empowering the PSTs on the one hand. On the other hand, this scaffold preserved the hierarchical positioning of the stakeholder in the communal blog. In other words, by providing positive and corrective feedback the TE positioned herself in the communal blog as the authoritative figure who assessed the posts and their authors. It is therefore evident that this scaffold bears potential in empowering the PSTs, yet there is uncertainty regarding its contribution to the growth of their professional pedagogical knowledge since it is not clear whether the feedback is authentic. If we look at the scaffold in the context of the communal blog and its opportunities for collaborative learning (Aderibigbe et al., 2014; Tang and Lam, 2014) it appears that no attempt had been made to use the tools embedded in the online environment in order to create such opportunities.

Scaffold 2: Expressing Emotions

The TE's comments in the communal blog illustrate two major facets of expressing emotions. The first is emotions that were expressed by the TE towards the PSTs, and which referred to

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

the practices of the PSTs within the framework of practicum in school and the reflections that related to the practicum. The following comment of the TE: "I'm overwhelmed by the rich reflection you had written, its phrasing and advanced insightful remarks!" is in congruence with the role perception of the TE as the one who should provide emotional support to PSTs (Burns et al., 2016). From one perspective this scaffold may challenge the hierarchical positioning of the TE due to the emotional closeness that brings all parties together. From another perspective it could be inferred that the act of expressing emotions could deepen the positioning of the TE in relation to the PSTs who upload posts in the blog to meet her expectations and win her emotional approval.

The second facet of relating to emotions was expressed in emotions that were stirred among PSTs following the process of practicum in school and were acknowledged in the TE's comments: "Your enthusiasm in regard to practicum and the professional choice to become a teacher is evident in your writing. No doubt this 'spirit' and energy is most contagious", and: "there is no doubt that the visit had left its mark". In previous studies based on interviews with PSTs it was found that they expressed strong emotions, positive and negative when relating to their pedagogical experiences in practicum. Researchers therefore concluded that since emotions play a major part in professional development it would be best if TEs assisted PSTs in analyzing and comprehending their emotions for the purpose of developing self-monitoring ability (Timoštšuk and Ugaste, 2012). In this study there was evidence for mirroring PSTs' emotions, which assigned legitimacy to the discussion over emotions (Chu, Chan and Tiwari, 2012), yet at the same time-sharing emotions was directly linked to the TE's expectations of the PSTs' writing in the blog. It is therefore not clear whether this scaffold contributed to the development of professional pedagogical knowledge, or to the collaboration among PSTs in the communal blog.

Scaffold 3: Peer Teaching

The comments of the TE in the blog revealed aspects of enhancing collaborative learning among PSTs with the emphasis on peer teaching within the framework of the communal blog or elsewhere. The comments by and large related to the collaboration among peers in planning teaching, executing teaching and in expressing gratitude for the collaboration. For instance, "see additional feedback in the blog of peer X", "I suggest you look at the second plan that your peer carried out", "thank you for the response you keep providing to your peers. I'm sure that all of them make the most of it", "I highly appreciate the integrity and appreciation you provided to your peer!", "this is a team spirit in a unified school", "I suggest you invite peers to observe you teach and then provide feedback". The examples above for using the scaffold of peer teaching reflect one of the major roles of the TE - tightening collaborations and forming communities of practice (Wenger, 2010).

One may conclude that the use of the peer teaching scaffold may encourage the practice of collaborative learning in the blog (Aderibigbe et al., 2014; Tang and Lam, 2014), yet to a limited extent, since additional partners in teacher training, such as school-based teachers, were not invited to participate. Its contribution to the expansion of professional pedagogical knowledge of the PSTs is unclear since the comments of the PSTs in the blog were scarce and related to technicalities rather than to content. Whereas the TE posted two hundred and four comments, the PSTs posted three comments in average in response to the TE, and six comments in average to peers. Most comments of PSTs to the TE were instrumental, such as: "I will correct the plan as required", whereas the comments to peers were mostly compliments: "what a great plan you made!".

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

The TEs' comments also related to collaboration among peers that was not related to the blog, yet such comments were minor, for instance: " I had fun seeing how the three of you made the interview together. Your collaboration is acute in fostering your practicum", it felt great to read in the communal blog how you collaborated and assisted one another". This scaffold may enhance social and learning interactions among PSTs who are active in the blog as well as increase a sense of belonging to the community of practice in the blog. Moreover, the peer collaboration not only functions as a pedagogical scaffold, but also as modeling an organizational social network in teacher training that prepares PSTs to their professional lives beyond the blog in schools. Though the social network highlighted values such as partnership, openness, transparency and mutual assistance the TEs' comments represented an instrumental perception of collaboration and less room for critical companionship and for creating knowledge collaboratively.

It is worth noting that PSTs who are a heterogeneous group of learners might experience inappropriate scaffolds in the blog, such as schemas that do not match their personal zone of development or misconceptions (Massing, 2018). Moreover, using scaffolds in a communal blog might hamper individual needs. For example, there could be a case where the TE drew attention to a post of a PST for the purpose of broadening the professional pedagogical knowledge of all by complimenting her for her contribution, yet the PST might experience personal and social inconvenience. It is recommended that each participant in the blog should take into account the inner experience of other members in the community of practice and try to minimize the possibility for a feeling of stress and uneasiness (Korem, 2016).

Scaffold 4: Meta-Cognition

Some of the TE's comments included directions towards meta-cognitive processes (thinking on thinking), which led the PSTs to think about contents and rationale for choosing strategies of teaching. For instance: "try to think which factors led to the success of the interaction with pupils?", "what exactly will be learnt in the interaction in terms of language?", "which concepts and ideas would you like to advance and nurture in the interaction with pupils?", "think again about the plan and relate to the language issue more thoroughly", "try to reread the reflection and think what in the interaction and modeling caused the pupil to answer 'rabbit'". In addition to the meta-cognitive aspect in comments to individuals there were comments initiated by the TE that led to peer discussions, such as: "Have you read A's comment? How would you respond to it ad-hoc?" It appears, as was stated in the literature (Burns et al., 2016; Hall et al., 2008) that a significant role of the TE is to enhance meta-cognitive and critical thinking of PSTs by diving into a self-reflective study.

The comments posted by the TE may serve as an example to intervention questions (San Martin, 2018) that enable her to collect data on the zone of proximal development of the PSTs in order to decide which scaffolds she should provide. The comments and questions are invaluable since they let the PSTs be accountable for their own learning process (San Martin, 2018). Yet even at times when such meta cognitive scaffolds were provided by the TE she left them to their own devices to cope with the reflective and meta cognitive processes rather than suggesting the advantages of the community of practice for that matter. Sharing such questions with school-based teachers, peers and lecturers could assist PSTs to reach a more holistic and profound understanding of the discourse that took place in practicum in a way that would express the characteristics of a community of practice aimed at constructing professional pedagogical knowledge.

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

Scaffold 5: Developing a Professional Language

The language used by professionals that contains terms, theoretical concepts and theories allows PSTs to analyze educational scenes, implement the principles that guide them and explain the operative aspects. This is the rationale for administering the scaffold of the professional language. The TE used it by "translating" parts of posts that were published by PSTs into the language used by professional teachers and theorists in education. She did so by demonstrating theories and terms that were learnt at the academic institution and were relevant to the post, for instance: "in the plan you put to practice you exemplified the approach of John Dewey, a constructivist who claimed that education was no preparation for life, but life itself", "make sure you engage in teacher's content knowledge in order to carry out interactions of high quality with pupils that foster higher order thinking skills", "it is apparent that you were using the language of professionals when you referred to mediating according to the Zone of Proximal Development, and by pointing to the necessity to find out the above mentioned zone by talking to the pupil".

The scaffold of the professional language made it possible for the TE to present and implement abstract and theoretical terminology in the posts that PSTs wrote for the purpose of modeling professional pedagogical knowledge. The use of professional language may indicate the formation of a community of practice and encourage the PSTs to continue using the elevated language in the process of their professional acculturation. From another perspective, the use of the professional language by the TE may position her in the role of expert in the blog and emphasize her professional and educational assets in comparison with the less professional assets of other participants in the blog – namely the PSTs. This indicator of status might slow down the formation of a collaborative community of practice.

Discussion

The Covid-19 pandemic may emphasize more clearly the place and necessity of online technological platforms in teacher training since the transition to online teaching requires implementing them in practicum. The TE, in that respect, could model how to operate online learning environments by providing scaffolds aimed at expanding professional pedagogical knowledge and by fostering vibrant communities of practice where collaboration results in constructing knowledge. To that end a TE opened a blog for PSTs in their first year of teacher training where she asked them to upload reflective posts. In her comments to their posts the TE used scaffolds that would help them construct knowledge. Data analysis yielded five types of scaffolding comments: positive feedback, sharing emotions, peer teaching, meta-cognition and professional language. It could be that the TE chose the above scaffolds since they illustrate facets that the TE finds crucial in teacher training. Another interpretation could be that the technological platform of the blog may have an impact on designing the types of scaffolds in the blog. The unique context of feedback to PSTs in their first year of practicum might also be linked to the scaffolds used by the TE.

The scaffolds of positive feedback and fostering meta cognitive analysis have already been proved beneficial in previous studies (Jumaat and Tasir, 2014). They are generic scaffolds that could be administered in any context by various TEs pertaining to a range of pedagogical perceptions. Yet additional scaffolds were identified in this study including peer teaching, sharing emotions and developing a professional language. Peer teaching is most appropriate for the communal blog, yet the beliefs of the TE in regard to peer teaching may shape the course peer teaching would take in the blog (Biberman-Shalev, 2018). The scaffold of using professional language is unique and may be tightly linked to a discipline and to the TE's mentoring approach, beliefs and goals.

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

The findings of the study can be mapped in relation to the three aspects that were looked at: the types of scaffolds, their contribution to the construction of professional pedagogical knowledge, and their contribution to the formation of a community of practice. One could learn from Table 1 that most scaffolds that were posted in the blog had only partially enhanced the construction of professional pedagogical knowledge, and that turning the blog into a community of practice in which the participants are active members who collaborate remains a challenge.

Looking at the results as presented in Table 1 the first question one would ask could be: how could the scaffolds of sharing emotions and peer teaching be used more productively for constructing knowledge? The answer lies in the activation of participants in the blog to develop from sharing emotions to pointing to factors that made them enthusiastic and asking their peers to be involved in the same practice. Peer teaching could be operated in a way that would engage participants in sharing what they learned, concluded and found beneficial to peers as well. The second question should relate to the collaborative online environment that failed to host a vibrant active community of practice. How could all scaffolds support more interactions and collaborative learning? The answer could lie in the beliefs and practices of the TE.

Table 1: Types of Scaffolds and their Contribution to Knowledge Construction and Collaborative Learning in the Communal Blog.

Type of Scaffold	Constructing Knowledge	Collaborative learning
Positive feedback	+/-	-
Sharing emotions	-	-
Peer teaching	-	+
Meta cognition	+	-
Professional language	+	-

+/- The contribution of the scaffold is uncertain; + there is evidence for contribution;
- no contribution is identified

As long as the communal blog remains within the framework of the TE and PSTs it will maintain traditional hierarchies of lecturer and students that may shift to a new advanced collaborative online environment, yet learning will not transform in nature. Opening the blog to additional stakeholders such as school-based teachers and other staff members may assist in dissolving traditional hierarchical relationships, thus turning them to equal partners and creating a third space by bridging the academia and the field. This partnership may enable broadening professional knowledge of all partners in tandem with the development of their professional identities.

The change in the perception of time and space due to the experience in new learning spaces during the Covid-19 pandemic may contribute to the formation of learning communities for PSTs, TEs and school-based teachers that are not dependent on time (school hours) and space (school building). Nevertheless, the probability for a collaborative community of practice taking place in virtual environments depends on the TEs' perceptions and actions. If the TE adopts a partnership model where all participants take part equally and collaboratively the blog could function as a non-hierarchical scholarly tool that is accessible and beneficial to members in a community of practice. In order to create a collaborative culture certain codes of practice should be adopted. Among them are informal discourse that encourages self-

**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

expression and sharing thoughts, openness, reinforcement of comments, and assigning different roles and a more equal share of responsibilities than the existing one.

A pragmatic ramification of the study could be raising the awareness of TEs to the impact of their individual perceptions of learning on the scaffolds they choose to use. A community of TEs would allow the analysis of their comments in a communal blog in a similar manner to the one applied in this study. This practice could better expose the scaffolds TEs use and enable them to conceptualize their practices and the perceptions that they present to PSTs. This realization could act as a source of support and collaborative growth for TEs (Bullough and Draper, 2004).

There were limitations in this study that had to do with the issue of scaffolds, the limited scope of one TE, and the specific context and characteristics of the participants. Posing scaffolds leans on an interactive-dialogic process between the TE and the PSTs, and in the context of the present study the TE was the only participant who posed scaffolds. It is recommended to look at scaffolds that PSTs use in interactions with their peers, as well as additional participants in the blog in order to find out which blogs may enhance the activation of a well-functioning community of practice. Moreover, in the present study scaffolds were used in a specific perceptual and cultural context, as the findings depend on the way the TE perceived her role. Follow up studies should therefore look at generic and specific scaffolds that additional TEs use, and in those in use in various academic institutions (Schwartz et al., 2018). It would be interesting to find out which cultural, demographic or other factors may design unique scaffolds that assist in the formation of a third space (Biberman-Shalev et al., 2020).

Dissolving hierarchies might cause uneasiness among TEs whose perceptions are traditional as well among TEs whose perceptions are more flexible. The current study may suggest that shifting from a traditional platform to a more technologically advanced one is not necessarily linked to a model of a community of practice that operates in a third space. As long as the hierarchical culture is preserved by codes of an academic status, grades and evaluative feedback the scaffolds would serve a traditional model rather than mediate the construction of a genuine academic community of practice.

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**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

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**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

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**BIBERMAN-SHALEV, KOREM & RAM: TYPES OF ONLINE SCAFFOLDS PROVIDED BY A
TEACHER EDUCATOR IN A COMMUNAL BLOG FOR SUPPORTING PRE-SERVICE TEACHERS'
REFLECTIVE PRACTICE: A CASE STUDY**

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