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Integrating Blogs in Student teachers' Practical Work

SUMMARY
A variety of technological platforms can help advance teacher education. The current review focuses on the contributions of blogs and blogging in teacher education. The introduction will begin with an explanation of the blog platform, a description of its generic characteristics, and a review of the variety of blog functions. This will be followed by a review of research from various parts of the world that examined the practical uses and the benefits of the blog in the context of teacher education. The final section will present a summary of the benefits of blogging in teacher education and some implications for teacher educators.

KEYWORDS: Blogs, blogging approaches, teacher education, teacher educators

Introduction

The use of blogs as part of the teacher education process has been one of the foci of recent empiric studies which seek to improve the training process and adapt it to 21st century requirements. The purpose of the present review is to introduce the inputs, outputs, and contributions of blogging in teacher education with the dual intentions of furnishing a technological infrastructure that advances student teachers' training process and professional development.

A blog is an Internet website to which people upload posts regarding their experiences, news-related items, and articles on various topics. Surfers of the Internet can read these posts and post talkbacks responding to the blog writer or to comments made by other readers. Hence, the blog is considered a platform for mass communication. Blog owners are referred to as bloggers and the community of bloggers is called the *blogosphere* (Biberman-Shalev, 2018).

The term *weblog*, which is the origin of the more popular term blog, was first used in 1997 by Jorn Barger on a website titled Robot Wisdom. Barger entered an online log of websites, which he referred to as "blogging the web," i.e., creating links to information posted on other websites and noting his opinions regarding these news items. The shortened term, blog, was first used

in 1999 by a web surfer named Peter Merholz, and the term took hold and was used repeatedly by Internet surfers. The use of blogs became more common facilitating by large-scale websites, e.g., WixBlog.com, WordPress.com and Blogger.com, which began hosting various bloggers and providing user-friendly technologies for managing, writing and posting blogs without the need for specialized software-related knowledge (Lin & Yunan, 2006).

It is common to categorize blogs according to four types: individual–personal blogs, namely, a personal online journal managed by a single author; personal–public blogs, whereby a group of bloggers uses the platform to discuss personal matters; individual–topic-based blogs, which present posts on a variety of topics, written and uploaded by a single author; and public–topic-based blogs, i.e., communal blogs that address local and global issues pertaining to social topics. The shared characteristics by all blog types are as follows: (A) personal ownership, i.e., the blogger is responsible for everything: from the design of the blog to the editing and publication of information, as well as for determining readers' privileges; (B) the ability to post links to online information outside the blog; (C) posts are presented in reverse chronology, i.e., the newest entry is at the top of the blog page; (D) there is an accessible archive of posts that were published on the blog in the past, which enables readers to search topics categorized by tags and labels (Krishnamurthy, 2002).

Blogs in Teacher Education
In a broad review of empirical studies regarding the use of blogs in higher education, it was found that blogs are employed primarily in the field of education (Biberman-Shalev, 2020). In this regard, with the desire to incorporate synchronous and asynchronous technologies into teaching and teacher education (OECD, 2019), researchers began to suggest integrating blogs in various manner. The majority of the researches that examined the value of blogging in the teacher education process referred, mainly, to conducting a blog during the teaching practicum, recording and posting one's reflections after a particular experience in the field, blogging as a component of a course on peer learning, or for the purpose of encouraging reading and writing academic contents (Nambiar & Thang, 2016)

Studies on the integration of blogs into teacher education found that the use of blogs may have the potential to contribute to the student-teachers' learning process (Tang & Lam, 2014). Nevertheless, our understanding of this contribution remains rather vague. On the one hand, studies have indicated that integrating blogs can improve reading and writing skills of student-

teachers, contribute to their reflecting on their practical experience, promote critical thinking, and increase social interaction (Stoszkowski & Collins, 2017). On the other hand, there are indications that using blogs in teacher education does little to advance the training process, especially in terms of promoting higher order reflective thinking (Jones & Ryan, 2014).

A few studies have found that the integration of blogs in teacher education facilitates the completion of the assignment, due to the flexibility of time and space afforded by the digital platform; increases the level of satisfaction from learning; improves academic achievements; leads to a deeper understanding of the material studied; enables student-teachers to share their experiences with peers and lecturers; and improves student-teachers' writing skills (Kirkwood & Price, 2014).

There is also an empiric evidence that integrating the blog during the first year of the program may provide a platform that helps establish a basis for practicing and improving both reflective practices and writing skills, which in turn leads student-teachers to understand the importance of reflection as an essential tool. Studies conducted in Australia (Jackling et al. 2015), Britain, Finland (Groom & Maunonen-Eskelinen, 2006), Spain (Tur & Urbina, 2014), the United States (Parks, Dredger & Hicks, 2013), and Israel (Biberman-Shalev, 2018), found that student-teachers who maintained blogs across their training program perceived the reflective practice as an important professional component for conscientiously and systematically reviewing their classroom performance and experiences.

The blog may also serve as a mechanism which, when observed retrospectively, enables student-teachers to follow the arc of their professional development over time (Garza & Smith, 2015). Moreover, it was found that the use of the blog may serve as a platform that supports the strengthening of student-teachers' self-efficacy in teaching, especially when considered in retrospect (Biberman-Shalev, in press). For example, a study conducted in Switzerland found that student-teachers who kept a blog focusing on problem solving in the course of their practicum indicated a higher degree of self-efficacy compared to their peers who reported on their experience only at the end of the practicum. Researchers' explanation for this finding was that by documenting their ideas for solving problems, student-teachers felt they had more control over the practicum experience (Petko, Egger, & Cantieni, 2017).

Some studies found that reflective blogs may hold a potential for supporting teacher professional identity development (Kajee, 2018). This is because a blog may mirror the values, perspectives, and thinking of the person who owns it. Student-teachers' awareness to their professional identity growth was

also related to the chronological structure of the blog, which enabled them to return to their earlier posts and thus to follow the arc of their professional development and to gain a sense of satisfaction and pride at having undergone this process (Biberman-Shalev, in press).

In a study conducted in Taiwan (Yang, 2009), student-teachers were required to conduct an online reflective journal about their learning process and to examine the way blog use influenced their professional development. Findings demonstrated that student-teachers used the blog platform to discuss theories about learning and teaching and express their opinions regarding the practical implementation of these theories. They also tended to view the blog as a useful platform for conducting reflections and communicating with other students.

Advantages and Disadvantages of Using Blogs in Practical Work

It is worth noting that using blogs in teacher education may hold advantages and disadvantages when comparing this platform to traditional ones (i.e. paper journal). Using blogs as a reflective journal could be considered a disadvantage due to the generic challenge of integrating technology in education. This challenge is often associated with issues of inequality that are related to the economic gap and the accessibility of students to technology devices, if at all. Another disadvantage is related to the characteristics of the blogs platform, especially in communal blogs when one's reflective posts are visible to everyone on the net, thus focusing attention on ethical issues. The visibility of the blog's posts may also influence the content which is shared. The ramification of this could be more emphasis on how the post presents her identity as a teacher than on writing a genuine reflection.

Nonetheless, keeping a reflective blog compared to a traditional paper journal was found to have some advantages. For example, a study conducted in a teacher-education program in Switzerland examined the sense of self-efficacy of student teachers who kept a blog throughout the practicum module, as compared to the sense of self-efficacy of student teachers who wrote a final reflection paper only at the end of the practicum instead of blogging. Findings demonstrated that student teachers who used the blog to consider their difficulties expressed a higher level of self-efficacy compared to their counterparts. The explanation provided by the researchers for this finding was that the continuous writing of posts dealing with solving problems improved their sense of control of the activities experienced throughout the practicum (Petko, Egger, & Cantieni, 2017).

Moreover, studies point to differences in cognitive activity that occur in the writing process, and that are related to the characteristics of the platform through which this activity is performed (Park & Baron, 2018). For example, blogging compared to writing a paper diary is faster and allows tracking spelling errors, reading and editing the text in a flexible manner while promoting rhizomatic hyper texting that incorporates connectivity to more information across the web (Cormier, 2008). Compared to writing in paper diaries, which is characterized as inconsistent but relaxed, blogging is characterized as spontaneous and improvised and yet consistent (Gleaves, Walker & Gray, 2008). It has also been found that blogging aids in the writing processes of students with diverse learning disabilities (Wollscheid, Sjaastad, & Tømte, 2016).

An additional advantage of blogging is allowing student teachers to continue reading the reflections and use them in the experience process without having to wait for the diary taken for review or feedback (Muncy, 2014). Moreover, reflections introduced in the blogs platforms are considered reliable as they may be based on authentic photos and videos taken during the experience and attached to the reflective post (Milman, 2005). Blogs may also strengthen peer learning by reading reflective posts and adding comments (Xie, Ke, & Sharma, 2008).

A study in which reflective blogging during practical work was compared to writing a reflection on paper at the end of the semester yielded that the quality of the reflections which were posted in the blogs was higher than the quality of those presented on paper (Harland & Wondra, 2011). In another study it was found that students who kept a digital reflective diary expressed greater responsiveness to writing than those who wrote paper diaries (Gleaves, Walker, & Gray, 2008). It is worth noting, however, that there are also indications that manual writing on paper is more significant to the writer, as it requires higher concentration and sharpens the memory regarding what is written (Park & Baron, 2018).

Approaches to Integrate Blogs in Teacher Education
Studies of blogging in teacher education point to two main ways to use blogs in this context (Fisher & Kim, 2013). The first way is by means of a personal blog in which the student-teacher posts reflections mainly about her practical work at school. 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 student-teachers participating in the course publish their

posts in one shared blog with the result that both the course instructor and all the course participants can read the posts and add comments.

One study had explored the perceptions of Israeli student-teachers regarding the contribution of personal blogs *vs.* communal blogs to their professional development (Biberman-Shalev, 2018). The findings of this study revealed that most of the student-teachers who used a personal blog perceived it as an instrumental platform that facilitated their studies and reflected their personal learning progress. These student-teachers experienced a sense of ownership of the blog (Tur & Urbina, 2014) and described it as a space that permitted honest and profound exposure, genuine reflective writing, and self-exploration. The personal blog may thus be considered a platform to learning and technology- a view that corresponds with the cognitive-constructivist approach (Piaget, 1968) since the focus is on the construction of knowledge from self-experience expressed in the form of personal entries. The student-teachers who used the personal blog underscored the role of reflective thinking and its perception as part of the teaching practices.

Conversely, most student-teachers who used the communal blog perceived it as a public space in which they positioned their status on the basis of comparing posts. It was also perceived as a platform for sharing ideas and experiences in order to help all of the student-teachers who participated in the communal blog. The communal blog may therefore be seen as a platform that corresponds with the social-constructivist approach (Vygotsky, 1986) to learning and technology.

Among the communal blog users, the importance of sharing and peer learning was perceived as part of the teaching practices. The findings revealed that the manner in which the student-teachers perceived their intention to utilize blogs as part of their arsenal of teaching methods reflected their personal experience of using the platform. In other words, personal blog users described instrumental implementation, personal-emotional support, and pedagogical implementation with the emphasis on the application of technology. Conversely, communal blog users described promoting socio-emotional support and pedagogical aspects such as peer learning.

Implications for Teacher Educators

Teacher educators who act as role models for the integration of technology are essential to teacher education (Lunenberg, Korthagen, & Swennen, 2007). Moreover, evidence from empirical studies conducted around the world reveals that when teacher educators integrate blogs into their course requirements, it exerts a significant effect on their students' learning process (Tang & Lam, 2014).

As the first stage of blog's integration, it is crucial for teacher educators to discover how their students perceive the contribution of the blog to the development of their professional practices. This will enable them to grasp the implications of using this technology for their student-teachers' professional development as well as for advancing and improving teacher education (Tondeur et al., 2012). Next, teacher educators who integrate blogs during the first year of the teacher education program may provide a platform that helps establish a basis for practicing and improving both reflective practices and writing skills, which in turn leads student-teachers to understand the importance of reflection as an essential tool, practice their academic writing skills, and internalize the significance of peer learning and sharing (Biberman-Shalev, 2018).

During the teacher education program and on its advanced stage, teacher educators may opt to use the blog to strengthen their student-teachers' sense of self-efficacy in teaching and writing. From the vantage point of retrospect, rereading the blog posts may shed light on important crossroads in student-teachers' professional identity. This type of practice is significant, because the ability to conceptualize professional identity enables student-teachers to assess the quality of their teaching and explain their motivation for teaching. Moreover, the practice enables student-teachers to assess their commitment, flexibility, resilience, and decision-making (Hong, Greene & Lowery 2017).

Teacher educators should also consider the socio-cultural context of their learners and adapt their instructional design for online learning to their cultures, as has already been suggested by Biberman-Shalev, Tur, and Buchem (2020). Specifically, in their courses, teacher-educators should continue to place emphasis on the concept of multicultural education and the multicultural competences needed to understand the effect of culture on students' learning in face to face settings as well as in virtual learning platforms.

Finally, Teacher educators who wish to achieve a greater impact on students' learning process, may design their learning activities in a way in which students will be able to better identify with their learning outcomes. Teacher educators who are interested in capitalizing the potential of blogging may find it beneficial to increasing self-efficacy, writing skills, and awareness of professional development among student-teachers. The following table summarizes the advantages of integrating blogs in teacher education.

Table 1. A Summary of the Advantages of Integrating Blogs in Teacher Education

Advantages classification	Evidence
Emotional--motivational	Personal-emotional support; Ventilation of emotions; Self-efficacy; Monitoring professional development and identity (retrospectively); Responsiveness for tasks; Completion of assignments; Satisfaction from learning
Cognitional--pedagogical	Reflection; Critical thinking; mirroring values, perspectives, and thinking; Writing skills; Tracking spelling errors; Constructivist pedagogy; Peer learning; Quick feedback; Reliability; Hypertexting; Rhizomatic thinking; Improving academic achievements; Deepening material understanding; Improving academic achievement; Highlighting the relation between theories and practices
Social	Peer interactions and sharing
Technological	Technological skills; Flexibility of time and space

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