

The effect of the use of information and communication technology and blogging on the pre-service teacher and student training process

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Bioprofile

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Abstract

Blogs are considered to be a useful online tool for learning, teaching, training and education. Students and teachers can share their thoughts and ideas, and can express their feelings and opinions in an online environment (Deng & Yuen, 2011). No special technological skills are needed in order to post a blog entry. Blogging promotes creativity, critical thinking, reflection, collaboration, interaction and active participation. Blogs can help people to gain and share knowledge, as well as to increase the digital literacy of both students and teachers, and to change their attitudes towards information and communication technology (ICT; Goktas & Demirel, 2012). This study investigated the role of blogging in the development of the cognitive, social and self-directed learning skills of students, who were future EFL teachers, during a teaching methodology and teaching practicum course. The participants were 40 university students (third and fourth year). Their ages ranged from 18 to 25 years, their L1 was Cypriot Greek and they all resided in Cyprus. The students were asked to write online blog entries after each of their sessions. The analysis of the data, blog entries and questionnaires, showed that, overall, the students had positive attitudes towards blogging. They believed that blogs facilitated their development as teachers and practitioners via creating an online community in a user-friendly way. The students had the opportunity to interact more with their peers and the tutor, express their views, exchange

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ideas, gain new knowledge and experience, and increase the level of their digital competence, particularly considering the current COVID situation (Halic et al., 2010).

Keywords: Blogging, collaborative, autonomous learning, knowledge construction, teacher training, continuous professional development

Introduction

The outbreak of the coronavirus (COVID-19) has affected the higher education sector. During the present crisis, e-learning has been playing a significant role. Digital technologies in higher education facilitate the learning/teaching process, thus creating a student-centred environment (Johnson et al., 2016). According to Alexander et al. (2017), teachers need to develop digital literacy, as e-learning cannot take place without e-teaching. Both teachers and students should have relevant training and support in order to use new technologies in efficient and effective ways (Gradinarova, 2015). Prensky (2001) proposed the new terms “digital natives” and “digital immigrants” to describe users who were digitally literate and those who were not (Maclean & Elwood, 2009; Spiro, 2013). The younger generation of students can be characterised as “millennial students” or “Homo Zappiens” (Ubachs et al., 2017); as a consequence, they can easily be trained to use digital tools at university. Students can be autonomous learners, but educational institutions can help them to construct knowledge via the guidance and assistance of the teachers and experts (Andrade, 2015).

With the development of ICT communicative practices have become more interactive, immediate and effective in terms of effective collaboration among internet users worldwide (Huang et al., 2009; Marcelo-García et al., 2015; Kuo et al., 2017). Blogs, being a web-based communication tool, play a key role in this type of communication and collaboration as they allow internet users to publish regular information and share news and hyperlinks to other websites (Richardson, 2010; Yang et al., 2016). The entries are added in a reverse chronological order with the most recent posts appearing at the top. In this way the most current information is highlighted and attracts the readers’ attention. As suggested by Paquet (2003), blogs are characterised by personal editorship and a hyperlinked post structure. They allow frequent updates, free public access to the content online and archived postings (Campillo-Ferrer et al., 2021). The users need to follow certain steps in order to create a blog: to choose a suitable blog platform, to create an account, to name the blog, choose a theme and a template and write and post first blog entries. With this, they become a part of the blogosphere, being interconnected with other users and communities around the globe (Kramer & Kusurkar, 2017).

Blogs are considered to be a useful online tool for learning, teaching, training and education, especially in the current pandemic situation. Both students and teachers can share their thoughts and ideas, and can express their feelings and opinions in an online environment (Deng & Yuen, 2011). No special technological skills are needed in order to post a blog entry. Blogging promotes creativity, critical thinking, reflection, collaboration, interaction and active participation. Blogs can help people to gain and share knowledge, as well as to increase digital literacy of both students and teachers, and to change their attitudes towards ICT (Goktas & Demirel, 2012). Furthermore, blogs are motivational tools as they enhance users' engagement in collaborative online tasks. Liao et al. (2013) identified three types of motivation related to blogging, in particular: utilitarian or perceived effectiveness, hedonic or perceived enjoyment and social identity or group distinctiveness (Campillo-Ferrer et al., 2021). This study investigated the role of blogging in the development of the cognitive, social and self-directed learning skills of students, their critical digital literacy and professional development, who were future EFL teachers, during a teaching methodology and teaching practicum course.

Blogs as an effective educational tool

Blogs, being both an ICT tool and a social learning network are widely used in education, thus promoting e-learning and teaching (Chawinga, 2017), especially during the COVID-19 time and due to the digital turn in education. They help in facilitation of the knowledge transfer, its discussion and feedback provision (Poore, 2013) and development of multimedia assisted teaching and learning processes (Álvaro-Tordesillas et al., 2020). Students can have an easy access to learning content and materials, which can lead to a better understanding and success of learning outcomes (Davis et al., 2019). There are different types of edublogs depending on various factors such as authorship, content, level of education, addressees and academic purpose (Urbano and Villanueva, 2012; Conde-Caballero et al., 2019).

The implementation of blogs in education has multiple benefits such as development of digital, social and language skills. Previous research by Moore-Russo et al. (2015) focused on asynchronous online discussions, revealed that interaction and autonomy of pre-service and in-service teachers were fostered by blogging and web-based resources. According to DeWitt et al. (2013), students' skills in social interaction are enhanced by blogging as well as user-generated content development. The educational value of blogs is also proved by the recent study by González-Hernando et al. (2020), especially regarding improved digital skills and creativity, knowledge organisation and information sharing skills. García-Sabater et al. (2011) confirmed that blogging can promote collaborative learning, socialization and enhance students'

skills to share, organise, store and retrieve information, which is in line with the study by Cabero-Almenara and Marín-Díaz (2014). Alharbi (2015) found that computer-mediated communication via blogs has a positive impact on students' integrated reading and writing skills.

According to Rourke and Coleman (2010), blogs have changed our learning/teaching culture and our language learning strategies (Murray & Hourigan, 2008; Spiro, 2013), and promote self-expression. Blogs are electronic tools that adopt and adapt new materials and strategies (Oxford, 2011). In the process of writing, bloggers “become part of a discourse community in a complex multimodal setting” (Raith, 2009, p. 276). Learners engage in cooperative learning, as they negotiate and construct meaning via their blog entries and comments (Richardson, 2006), which promotes the development of L2 writing skills, reflection and analysis (Spiro, 2013). Richardson (2006) and Spiro (2013) identified the following blogging stages: concrete experience (doing), reflective observation, abstract conceptualisation (thinking) and active experimentation (planning). Furthermore, a recent study by Campillo-Ferrer et al. (2021) showed that blogs can improve self-reported motivation and learning in a higher education context. As reported by Bond et al. (2020), students' engagement is affected by motivation. Blogs can enhance motivation as students are able to express and exchange their opinions on current issues and provoke a reaction from the peers (Gill et al., 2009). In this way, communication and reflection among students is promoted (Halic et al., 2010). High levels of students' active participation in discussion forums, networking practices and online communication via blogging is a reflection of their motivation and involvement in the learning process. Various researchers are interested in students' perceived usefulness of blogs with the focus on utilitarian motivation, construction of new knowledge via acquiring, analysing, producing and sharing novel information (Liao et al., 2013), development of communicative skills (Pérez-Nevado et al., 2012), new learning opportunities based on shared resources and information useful for professional development (Pardo-Baldoví et al., 2020), autonomous learning associated with the link between educational content and personal experiences (Montilla and Montilla-Coronado, 2016). Furthermore, blogs have been found to be efficient in development of social and civic competences. These web-based communication tools are essential in enhancement of students' social learning through working together in virtual learning communities based on the effective use of social technologies, peer collaboration and social development (Hamid et al., 2015). According to Úbeda-Colomer and Molina (2016), blogs are an ideal forum to write about controversial social issues and topics, to discuss them with peers, to broaden the horizon and enhance social and civic competencies, based on

democratic values and tolerance, human rights education, citizenship, without cultural and social barriers, freedom of speech, and personal initiative, analysis and communication skills (Bardwell, 2011; Canan, 2013; Marín et al., 2020). Motivational and social dimensions of blogs need more attention in research (Deng and Yuen, 2012; Ge et al., 2019).

Bloggng: Collaborative and autonomous learning, knowledge construction

According to Kaçar (2020), blogs are a learning tool that helps to improve and transform teaching (Ellison & Wu, 2008). Blogs allow for the creation of online communities, as each blog entry is linked to the others in an interactive way (Alm, 2009; Mutum & Wang, 2010; Sim & Hew, 2010). The users have the opportunity to add comments in synchronous and asynchronous ways, to be socially connected, and to express their views on various topics (Burgess, 2006). Blogging facilitates the development of digital literacy (Hung, 2010). Web and digital literacy are integral to being a professional in the modern world. Information communication technology (ICT) has been integrated into classrooms, thus creating a learner-facilitated pedagogical environment and developing multiple literacies or intermediality (Warschauer & Shetzer, 2000).

In the area of ESL/EFL, blogs are considered to be educational tools that trigger meaningful learning (Meinecke et al., 2013; Aydın, 2014). Learners can construct new knowledge, new worlds and new identities in a collaborative way (Penrod, 2007). Blogging creates an autonomous, constructivist and blended learning environment, and is considered to be effective in the training pre-service teachers for their continuous professional development (Aydın, 2014). Blogging promotes contextualised learning (Noel, 2015) that presupposes an authentic learning environment, active learner engagement (Kern, 2006; Sun, 2010) and the promotion of higher-order thinking skills (O'Donnell, 2006; Ferdig, 2007; Wang & Hsua, 2008; Halic et al., 2010; Sun, 2010). Blogging on online platforms is perceived by both learners and teachers as a learning resource. They can exchange opinions, have access to information, gain experience, develop social skills and collaborate (de Almeida Soares, 2008; Ellison & Wu, 2008; Churchill, 2009).

Bloggng is viewed positively within a sociocultural theoretical framework and the constructivist approach to EFL teaching because it facilitates independent knowledge construction (Ferdig, 2007; Kaçar, 2020), promotes peer learning and collaboration (Robertson, 2011; de Andrés Martínez, 2012; Meinecke et al., 2013) and enhances students' confidence and creativity, willingness and motivation to participate in class, which leads to more successful language and digital/critical literacy development (Miceli et al., 2010; Warschauer

& Liaw, 2011; de Andrés Martínez, 2012). Blogging experience combines both personal and social dimensions (Gaudeul & Peroni, 2010), allowing the users to develop multiple perspectives and to implement multiple modes of representation (Kaçar, 2020). Blog usage is efficient when the proper scaffolding is provided by teachers, together with appropriate authentic contexts and instructional strategies (Ellison & Wu, 2008; Top et al., 2010; Kaçar, 2020).

From the perspective of cognitive constructivism, blogging can affect constructivist learning in a negative way (Noel, 2015), as blogging might not assist learners to create conceptual associations amongst concepts due to difficulties with the processing of too much information (Robertson, 2011). The lack of comprehension can lead to a decrease in interaction, the quantity and quality of comments provided by the users, and implementation of critical thinking skills, analysis, synthesis and evaluation (Biggs, 1996; Halic et al., 2010; Deng & Yuen, 2011). In order to avoid this negative impact and to increase students' engagement and the quality of their blog entries, teachers should attempt to balance content difficulty, time and workload in line with their learners' abilities and their level of proficiency (Robertson, 2011). According to Biggs (1996), blogging can scaffold cognitive development via the restructuring of knowledge, which depends on the learner's quality of reflection. Previous research has shown that not all students contribute to blogs in a reflective way (Kerwalla et al., 2009; Deng & Yuen, 2011).

Blogging is related to autonomous learning, "a capacity for detachment," "critical reflection," "decision-making" and "independent action" (Bhattacharya & Chauhan, 2010, pp. 1-2). Learner autonomy is based on interdependence (Ryan, 1991; Little, 1994), responsibility and the ability to choose, decide and act (Campbell, 2005) based on the implementation of learning strategies (Comas-Quinn et al., 2009) and self-evaluation (Bhattacharya & Chauhan, 2010; Kaçar, 2020). Blogging promotes autonomous learning because learners are encouraged to make decisions in order to have control over their learning (Comas-Quinn et al., 2009; Aydın, 2014), to enhance their communicative skills, self-evaluation and self-expression (Sykes et al., 2008; Trajtemberg & Yiakoumetti, 2011) and to monitor their language progress and professional development (Yang, 2009; Hung, 2010), although students' individual differences should be taken into consideration (Koad & Waluyo, 2021).

Blogs provide an additional learning space for students, in which there is an emphasis on the individual as member of a community, interaction, negotiation and collaboration, as well as on their interests, perceptions, autonomy and creativity (Farmer, 2006; Comas-Quinn et al., 2009; Andrés Martínez, 2012). Collaborative learning, reflection and group discussions can

benefit EFL teachers' professional development (Eickhoff & De Costa, 2018; Zohdijalal & Mohammadi, 2021).

To shed more light on these issues, the present study aims to investigate the perceptions and attitudes of CG students, who were future EFL teachers, towards the value of blogs as learning/teaching/reflective tools for professional development in a digital environment that has been affected by the current pandemic.

Research questions

The following research questions were addressed in this study:

1. What are the perceptions of the future EFL teachers, who were Cypriot Greek university students, regarding their use of ICT, online teaching and learning, and blogging experiences and their relevance to knowledge construction and their collaborative/autonomous learning and professional development?
2. What are the perceptions of the students regarding the role of the ICT, online mode of teaching and learning and blogging in the development of their digital literacy, critical thinking, reflection and self-perceived motivation, cognitive, social and self-directed learning skills?

The study

Participants

This study investigated the role of blogging in the development of cognitive, social and self-directed learning skills of students, who were future EFL teachers, during a teaching methodology and teaching practicum course. The participants were 40 university students (third and fourth year, 32 female and eight male). Their ages ranged from 18 to 25 years (Mean=21.13, Min=18, Max=24), their L1 was Cypriot Greek and they all resided in Cyprus. The students also knew and used other L3/Ln languages, such as Italian (14/35%), Russian (5/12.5%), Tagalog (1/2.5%), German (5/12.5%), Turkish (3/7.55), French (4/10%) and Spanish (9/22.5%).

The participants in this study were students who were participating in a Teaching Practicum (TP) EFL methodology course at a public university in Cyprus; see Figure 1. They were required to prepare lesson plans, and to teach and to observe their peers. In addition, they were asked to keep reflective journals and to complete classroom/peer-observation and self-evaluation forms (after they had taught a lesson). They also had the opportunity to express their views, thoughts and reflections via blogs, and had opportunities to discuss various issues in

class; they were also provided with feedback on their teaching practices by their tutors and peers; thus, a community of practice was created.

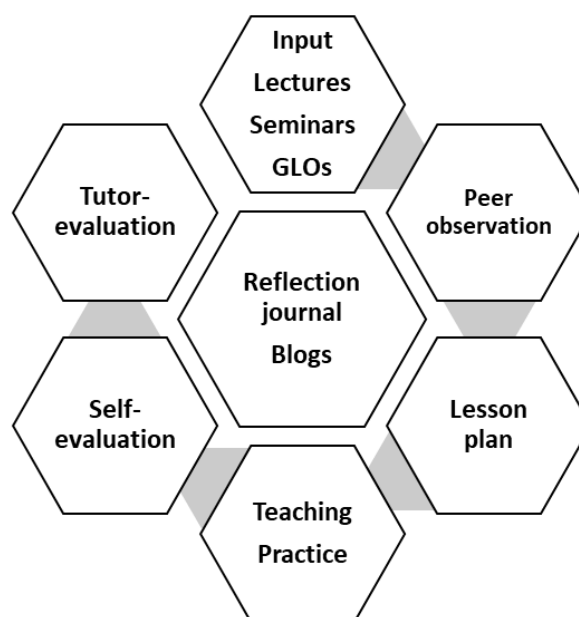


Figure 1. Course Design

The structure of and the procedures in the course emphasised the importance of practitioner inquiry and reflective practice. Blogs were part of the portfolio and formative assessments. The students were able to ask questions about their teaching practice, and to share their experiences and concerns with their tutors and peers in class or via blogging. The focus was on the students' voices and agency. Reflection is important for teachers' professional development because it helps them to increase their awareness of teaching and to take responsibility for their actions in the classroom (Farrell, 2008; Richieri, 2017).

Materials and procedure

The aim of this study was to investigate the effects of academic blogging on students' development of cognitive, social and self-directed learning skills, digital literacy, critical thinking, reflection and self-perceived motivation. In order to achieve this general aim, the researcher had to collect information about the opinions and perceptions of the students regarding blogging, e-learning and e-teaching during the pandemic, their digital skills and ICT competence they have acquired through blogging, their self-reported motivation when blogging, development of critical thinking, cognitive, social and self-directed learning skills,

reflection and knowledge construction associated with their collaborative/autonomous learning and professional development.

A qualitative methodology was used in this study. The researcher used a questionnaire in order to investigate the attitudes of the students towards blogging and their perception of its value in terms of the learning/teaching process, the development of their digital literacy, critical thinking, reflection and analysis skills, and continuous professional development. The questionnaire consisted of forty Likert-scale questions, 5 multiple-choice and 5 open-ended questions about their digital literacy, blogs and blogging experience (see Appendix).

The questionnaire helped the researcher to collect information in a systematic and structured way, taking the research questions and relevant dimensions and variables into consideration. As mentioned by Williamson (2013) and Bee and Murdoch-Eaton (2016), questionnaires have certain advantages in terms of data collection as they allow the researcher to collect a large amount information on a wide range of topics, they are easy in terms of administration and are cost-effective. The data obtained via questionnaires is instant and anonymous and can be analysed in an effective way. However, questionnaires have some disadvantages such as a low response rate, lack of specific information and certain issues with the interpretation of the results (Bird, 2009; Gómez-Carrasco et al., 2019).

Qualitative research presupposes the analysis, interpretation, explanation of data, as well as the construction of meaning while paying attention to complexity, depth and breadth, context and multiple dimensions (Mason, 2002; Merriam, 2009). We implemented a narrative analysis (Riessman, 2005) of the students' blog entries in order to gain insight into their learning/teaching experiences, identities and professional development. According to Creswell (2007), qualitative research is the investigation of a social or human problem via an inquiry process of understanding, reflection, description, analysis and interpretation. Phenomenology is one of the approaches in qualitative research that addresses the experiences, feelings and thoughts of the participants in particular contexts that are relevant to a particular phenomenon to provide a better and deeper understanding.

The students were asked to write online blog entries (via Blackboard) after their sessions, once per week (10 blog entries in total for each student and relevant comments for their peers). The length of blog entries ranged from approximately 100 words through to 500 words. There was no limitation on the number of words. The students had the possibility of viewing their peers' blogs and of commenting on them. The tutor provided comments and feedback for each of their blog entries. Blogging was part of formative assessment, assessment for learning. The topics of the blogs were based on the materials covered and the discussions

that had taken place in class. The students were asked to reflect, speculate, analyse and express their views regarding *teaching methods and methodologies, affective domains and the role of culture in teaching and learning, lesson planning, lesson aims, objectives, stages, lesson delivery, teaching practicum, problem anticipation and possible solutions, the role of a teacher in class, error correction, explicit and implicit teaching, the use of technology, blogging experience, classroom management* and other *learner/teacher and classroom-related issues*.

The researcher implemented a spiral content analysis (Creswell, 2007); this means that the researcher read the written data of blog entries several times, made notes and identified the topics, themes, categories, patterns that emerged from the data. The data were then coded according to *theories of teaching and learning, lesson planning and delivery, self-evaluation, classroom management, teaching, affective and psychological dimensions*, and other. The text units were coded into themes, and a list of themes with relevant examples/excerpts of proof was then prepared. An iterative analysis was implemented in order to identify and refine the categories and themes and to interpret them.

The aim of blogging was to improve students' knowledge and pedagogical skills in EFL teaching via promoting academic excellence and professional skills. The main objective was to provide a space for reflection, collaboration and online participation from a constructivist perspective (Campillo-Ferrer et al., 2021). The researcher monitored the students' participation in blogging throughout the term, checked their entries and comments regularly and provided feedback on their blog posts and comments through asynchronous communication or via discussion in class. Their participation in blogging was part of their digital portfolios, which contributed to collaborative e-learning/teaching/assessment, a new perspective on the subject and a better understanding of the material covered in class (Tang and Lam, 2014).

Results

The analysis of the data, which consisted of blog entries and questionnaires, showed that, overall, the students had positive attitudes towards blogging. They believed that blogs facilitated their development as teachers and practitioners by creating an online community in a user-friendly way. The students had the opportunity to interact more with their peers and the tutor, to express their views, exchange ideas, gain new knowledge and experience, and to increase the level of their digital competence, particularly considering the current COVID situation (Halic et al., 2010).

The following excerpts from the blog entries show that blogging enhanced students' learning and teaching experience, helped them to develop their critical thinking, increase their

self-confidence and motivation, to remember and revise the material covered in class, combine autonomous and collaboration learning and facilitate their professional development. It is important to note that students seem to be willing to implement blogging in their future teaching, see excerpts (1) and (2):

- (1) I think that blogging for this course was very useful. As I mentioned in a previous blog some students are shy or do not want to talk in class and in this way every single student can express their thoughts on topics we discussed in class. Also, it is a very fun way to read again the material. Blogging is an interesting and powerful way the teacher can keep track of the class's progress and it is a great way for the students to revise what they have learned. I think that I would consider implementing blogs in my future teaching because I will give the opportunity to some students to express their thoughts and to keep track of my students to see what they have learned. (S1)

- (2) My blogging experience in this course was the most entertaining assignment that I had through the semester. I believe that it is a way to check the students' participation without stressing them. Almost all of the blogs were based on our personal experiences. In addition, I insist on believing that it is a good way to make the students participate more. I believe that I would use this type of exercises in my classes, because I think my students would have the same opinion as I do. Of course, the type of the questions in this course's blogs were easy to respond, and were based on our critical thinking and experience which motivate us to respond on time. (S12)

These findings are in line with the recent study by Campillo-Ferrer et al. (2021) as students have a high level of motivation and engagement in the course due to their blogging experience, which enhanced their skills and competencies throughout the semester and have clear implications for the future teaching career. Blogs tend to be pedagogically effective ICT tools, both from an academic and a practitioner points of view as they improve students' digital and social and civic competencies as well as self-perceived motivation for learning and teaching (Tekinarslan, 2008; Zhang et al., 2014; Davis et al., 2019).

Online learning/teaching: Digital tools

With respect to the first research question, the students were asked about the tools that were used for learning/teaching at the university. Their answers to the questionnaire showed that the most popular platform for online teaching was Microsoft Teams (34/85%) followed by Zoom (26/40%), Blackboard (26/65%) and Skype (2/5%); see Table 1. It would appear that they preferred the written mode of communication in comparison to the oral one, as most of the students tended to use chat (28/70%) to ask and answer questions during online sessions. They

liked the option of having their online sessions recorded (25/62.5%) so that they could watch the video after the class, revise the material and be prepared for the next session. Most of them actually reviewed the recordings and not only just liked the idea of having this option. Moreover, some of the students found it a convenient way to catch up with the lectures if they had missed some of them. Half of the students favoured Turn-it-in (20/50%) because they could submit their assignments in an asynchronous way. Many of the learners mentioned that they found the use of videos to be an efficient learning tool in online classes (15/37.5%). Blogs also appeared to be quite popular among the participants (14/35%), as well as group work via channels or break-out rooms (11/27.5%), which provides a further evidence in support of the previous studies by Al-Hebaishi (2012) and Fathi et al. (2019) on the positive effect of the use of network resources, such as blogs, on students' improved communication practices and learning experiences; see Table 1.

Table 1. Online platforms, tools and participation in online sessions

Online Tools	N/%	Platforms	N/%
Chat	28/70%	Microsoft Teams	34/85%
Channels/Break-out rooms/Group work	11/27.50%	Zoom	26/40%
Camera	4/10%	Blackboard	26/65%
Recording of the sessions	25/62.50%	Skype	2/5%
Social networks	6/15%	Participation in online sessions	N/%
Wikis	3/7.50%	Oral (audio)	13/32.50%
Blogs	14/35%	Oral (video)	3/7.50%
Turn-it-in	20/50%	Written (chat)	31/77.50%
Videos	15/37.50%	Written (blogs)	16/40%
Facebook	8/20%	Public blogs	6/15%
Twitter	1/2.50%	Private blogs	6/15%
Kahoot	1/2.50%	Written + Oral	8/20%
No tool	0%	No participation	1/2.50%

With respect to the first research question and the students' perception of online teaching and learning experience, the analysis of the data (questionnaires, blogs and focus group/classroom discussions) revealed that most of the students preferred face-to-face classes (23/57.50%), the others online (7/17.50%) or blended (8/20%) classes, while two students were not entirely sure (2/5%). However, they did understand that online teaching was the only option given the pandemic situation, see the following excerpt (3) from a blog entry:

- (3) I feel like it was the best that it could have gotten as everyone showed a lot of patience and came onto it with a positive spirit. Nonetheless, it of course couldn't and it never could match up to physical, face to face teaching. Things were already as hard as they were and the faceless, motionless and dull characteristics of online teaching were not helping. It was un-motivating and tiring. The students were not comfortable having their cameras on which was a huge problem for not only the teachers who repeatedly demanded it but for the students themselves. The classes that were for the most part student-centred were automatically switched to teacher-centred as nobody was motivated enough to participate. Also, a huge factor was how both students and teachers (and many other professions) had to connect their place of comfort and relaxation with working, studying and stressing out. Many students did not want to participate because they were in bed with their pajamas on, but who can blame us, we were put in the position to take a class from the comfort of our own bed. Constantly being in the same environment and not having to separate home from university was confusing and uncomfortable. The teachers did try their best to motivate and were very compassionate during that period, but the truth is that the mentality we were all carrying at that point could not be subdued by online education. However, it is important to mention how it was after all, necessary and thankfully, our technology granted us the opportunity to keep education present in our lives, so even if it was not our favourite, it was vital and as effective as it could have been. (S25)

The reasons that the students preferred face-to-face teaching was that they could feel a connection to their professors, and it was easier for them to learn, to observe, to interact in class, to ask questions and to participate and there were no so many problems with technology and internet connections in comparison to the online mode of teaching and learning. The learners could have visual contact with each other and the tutors, which kept them interested and motivated, and helped them to concentrate on the course material, as shown in the following excerpts (4)-(5) from their blog entries:

- (4) I strongly believe that both the teaching and learning experience can never be full and equally benefiting to teachers, but mainly to students, when the lessons are conducted online. While online teaching/learning may have some advantages, I believe that the disadvantages are way more numerous. Providing my own opinion from the position of a student, I believe that for their main part, online lessons are much less engaging compared to face-to-face lessons, and thus generally invite less interest and participation. (S11)
- (5) Though I think it is justified and fair that we have to be taught online due to the current pandemic situation, I still prefer face-to-face lectures because they offer a space where it is easy to concentrate and not get distracted. I also find that I am personally much more comfortable participating in face-to-face classes since online lectures feel cold and distant in comparison. (S36)

Some of the students supported the idea of online or blended teaching because they found this option more convenient, and they did not feel shy in the online environment because they were not being observed by their peers, unlike in a real classroom setting. They felt more

confident during their interactions with their classmates and instructors. In addition, they understood that, due to the current COVID situation, the best solution was for them to remain at home and protect themselves, and did not need to spend extra time travelling to and from the university; please see the following excerpts (6)-(7):

- (6) I like face-to-face teaching and nothing can replace this kind of interaction between the teacher and the student. However, online teaching is very convenient and in situations like the pandemics, it is a very good option for everyone. It is definitely not the same with the face-to-face learning but since we have technology, I believe we should use it as much as we can. I like both ways of learning, sometimes the one more than the other but in general, both of them have their advantages and disadvantages. (S8)
- (7) As far as I am concerned, I prefer the online learning for a lot of reasons. First of all, by staying home I save time as I am not using the buses to go to university and as a result, I have time for things that under other conditions I would be not able to do. Furthermore, due to the fact that I was working until now, I didn't participate in the lessons because I was too tired to go to university to attend the lectures, but now even if I am tired, I just press a button and attend the lecture via Microsoft Teams and as a result I can see, I can stick to a specific programme. Also, by online sessions, we have the recordings of the sessions, so if we miss an important point of a lecture, we don't ask someone else to give us his/her notes but instead we listen to the lecture by ourselves. The above point I think is the most important because a great number of professors tend to speak very fast and we can't comprehend what they are saying because on the one hand we should write down what he/she says but also, we should be able to understand what we are writing. (S13)

Students' views regarding their blogging experiences

The students were asked to express their opinions regarding their digital literacy and their blogging experiences. Overall, the students considered themselves to be digitally literate, but would still like to improve their digital competence. Most of them considered blogging to be a useful pedagogical and educational tool that enhanced their creativity and developed their reflective skills because they could write a blog entry and add comments to their peers' blog entries. This finding is in agreement with the previous research by Bardwell (2011) and Kirkwood and Price (2014) who found that such digital platforms as blogs can improve students' ability to understand and interpret different points of view, to increase their social and civic competences based on new forms of interactive participation, please see the following excerpt (8) from a blog entry:

- (8) This was my first time blogging for a lesson, and I must admit that I found it extremely interesting and helpful. I did not expect it to be this useful, as it really helped me keep up with materials, even when I did not have time to study much after each class. The questions included critical thinking as well which was great for

future teachers, as it put us all to thinking of what a good teacher should be like. I will definitely implement blogging in my future teaching job, since I found it very useful for students, because as I said, it helped me keep up with materials whether I wanted it or not. Plus, it is an interesting way of viewing student's ideas and thoughts on the material and how they understand it. (S23)

The participants liked the idea that their co-students could read their blogs and leave comments, and that they could share ideas with their peers via a blog. The participants agreed that blogs helped them to understand the course material better and that blogging was a type of assessment. They stated that they had the freedom to express their views and ideas via a blog, and they found the comments provided by their tutor to be useful. The majority of the students thought that blogging was a useful skill because blogs could motivate them to read more about the relevant topic and help them to become reflective teachers. The students were able to discuss social issues that go beyond their personal interest (Marín et al., 2020), to analyse them, make the right decision and find solutions based on their needs and interests (Campillo-Ferrer et al., 2020). Blogging appeared to facilitate teacher-student communication, and to have more advantages than disadvantages, please see the following excerpt (9) from a blog entry:

(9) Blogging was a nice experience. All students had the chance to write and express themselves, share our concerns and our perspectives on the topics discussed in class. It is a fun and pleasant way to interact with our classmates online and at the same time, learn from one another. I would implement blogging in my teaching especially for older students that could be a way to develop their writing skills and use their critical thinking. It is also convenient for us, because we are a generation that learned to use computers and technology from our early teenage years and we are still using them for our education in university, to write assignments, emails, journals. Therefore, blogging is an easy and exciting way to participate in class. (S17)

Nonetheless, the participants' answers suggested that not all of the students were actively involved in providing feedback or comments on each other's blogs, and that more synchronous and asynchronous interaction was necessary. Some of the students believed that writing a blog was an extremely time-consuming task; they also stated that they did not like to share their ideas with other students and that blogs should be private, only accessible to the tutor and for assessment/homework purposes only. Some of the participants felt that blogging tasks were boring, difficult, challenging, irrelevant or routine. A few of the participants expressed difficulty writing blogs due to the topic or personal characteristics, and thought that writing blogs should be voluntary; see Table 2 and an excerpt from a blog entry (10):

- (10) For me blogging has not been of much help or interest. As a person, I reflect on what I do constantly, but this happens in my mind, and not on paper or on the keyboard. I find active reflection to be much more difficult and meaningful as opposed to sitting down and writing it. Taking notes and keeping a sort of "diary" of your progress and your thoughts is a good thing, but I cannot say that it is something that has worked for me or is something that I would employ in a possible future teaching career. Personally, my reflection on a topic does not end once I write it down, but on the contrary, it is a constant and continuous process that I carry daily. Reflection is never over, and for that reason I do not think writing it down would work well for other individuals that approach the matter in a similar way. (S29)

Table 2. Students' views regarding their blogging experience

Statements/ Scores (1 low/ 5 high)			
I am digitally literate.	4.05	I do not find blogging tasks to be useful.	1.51
I want to improve my digital competence.	3.51	Blogging helps me to comprehend the material better.	3.45
Blogging is a useful pedagogical and educational tool.	3.6	I will use blogging in my future teaching.	2.83
Writing a blog is a creative activity.	3.75	Blog entries and comments should on a voluntary basis only.	3.02
Blogging is time consuming and tiring.	2.72	I have freedom to express my views and ideas in a blog.	4.32
Writing a blog helps to develop reflective skills.	3.89	I am affected by the answers of my peers.	2.16
I like that the others can read my blog and leave a comment.	3.4	Tutor comments are useful.	4.18
It is great to share my ideas with my peers in a blog.	3.51	My peers/co-students comment on my blog entries.	1.64
The blogs should be private, only the teacher can read them.	2.08	Blogging has more advantages than disadvantages.	3.78
Blogging is a type of assessment.	3.35	Blogging has more disadvantages than advantages.	1.81
I do not like blog entries, they are a waste of time.	1.81	Blogging is a useful skill.	3.54
I read my peers blog entries before I write my own entry.	2.4	Blogs stimulate me to read more about the relevant topics.	3.45
I do not like to share my feelings and experience with the others.	2.08	Blogs have helped me to increase my interaction with peers.	2.45
Blogging gives me the sense of belonging to a community.	3.21	Blogs have helped me to overcome the anonymity of a large class.	2.59
Blogging is just our homework.	2.4	I add comments to the blog entries of my peers.	1.51
I am tired of blogging; it has become a routine.	2.16	Blogs can help me to become a reflective teacher.	3.54
I find blogging tasks boring.	2.08	Blogging facilitates teacher-student communication.	3.32
I find blogging tasks difficult.	1.78	I do not know what to write in a blog.	1.62

Statements/ Scores (1 low/ 5 high)			
I find blogging tasks challenging.	2.48	I feel insecure when I write blog entries.	1.51
I find blogging tasks irrelevant.	1.51	I do not have the necessary skills to write blogs.	1.35
Blogging helps me to comprehend the material better.	3.45	I am not comfortable with blogging due to my personality.	1.56

The students, who were future EFL teachers, stated that they would like to discuss various topics such as the teaching profession, teachers' behaviour in class; effective ways of teaching that increase students' motivation, suitable and efficient tasks in classrooms, critical thinking, creativity, teaching experiences and feelings, teaching goals, problems, challenges and current achievements, as well as teaching materials, syllabus and curriculum design, ethics, autonomy and responsibility, student-teacher interaction, teaching approaches, methods and techniques, multilingualism, intercultural communication, students' psychology and the teaching of students with special needs and specific learning difficulties; see the following excerpts (11)-(12):

- (11) In blog entries we have the freedom to expand our discussions to a certain extent, but I think it would be interesting to include more scenarios of things that can occur in real life in a classroom and try to provide a suggestion of ways to approach those situations. (S25)
- (12) It is very beneficial for us to write about topics that require critical thinking. I would also like something that is creative that will make us think in a more creative way. In addition, it would be even better if topics allow us to share our experience and feelings more. For example, topics that give us the chance to speak about our dreams, current achievements, goals and everyday life problems. (S7)

The purpose of blogging

The analysis of the data suggested that the students had different views regarding the purpose of blogging. Most of the participants stated that blogs were efficient for communication, learning and education, the development of reflective skills, critical thinking, creativity and innovation. Blogging allows students to engage in self-directed learning, and to share their thoughts, feelings and ideas. Some students claimed that blogs were used for discussion, assessment, interaction, psychological support, teaching and learning in an online environment, particularly during the COVID pandemic. Some of the learners found blogs to be useful in terms of collaboration, cooperative learning, the development of digital literacy, problem-solving and decision-making skills, the enhancement of motivation, intelligence, and opportunities for access to and the use of information; see Table 3.

Table 3. Students' views: What is the purpose of blogging?

What is the purpose of blogging? (N/%)			
Communication	23/57.50%	Collaboration	8/20%
Education/learning	30/75%	Cooperative learning	7/17.50%
Teaching	8/20%	Motivation	12/30%
Psychological support	8/20%	Digital literacy	8/20%
Reflection	28/70%	Problem solving	7/17.50%
Assessment	23/27.50%	Decision making	10/25%
Interaction (comments)	23/27.50%	Intellectual development	14/35%
Creativity and innovation	21/52.50%	Access of information	10/25%
Critical thinking development	28/70%	Use of information	14/35%
Discussion	19/47.505	Online learning community	16/40%
Sharing thoughts, feelings, ideas	31/77.50%	Self-directed learning	20/50%
Creation of online environment during the COVID pandemic			19/47.50%

The perception of the students regarding blogging experience in the current study is in line with previous research conducted by Hamid et al. (2015) and Úbeda- Colomer and Molina (2016), who confirmed that blogging has a positive impact on the participants' social and collaborative skills as blogs create a user-friendly environment for regular peer interactions, instant messaging and communicative tasks, see an excerpt from a blog entry (13):

(13) Blogging was something that I came upon for the first time in my academic career, but it was definitely an interesting procedure and activity. It has helped me significantly to further engage with the material, and the things we discussed in class, while at the same time I believe that it has also helped me develop my critical thinking skills, and overall reflective and analytical thinking. I also found it to be not much of a burden, since the questions and topics we were asked to expand on and elaborate were directly related and linked with the material that we were discussing in class, which also promoted my deeper and more intense engagement with the slides and notes. Overall, it was a great experience, and I believe that in case I become a teacher in the future, I am willing to implement blog entries in my teaching. (S21)

The students were also asked to describe their blogging experiences. They stated that blogging helped them to revise their material, to supplement their classroom learning (Bardwell, 2011), to obtain feedback from their peers and the tutor, and to express and share their thoughts and opinions. Some of them noted that, though blogging was time consuming and challenging, it had improved their confidence and, their ability to write in a critical and reflective way. Blogging also increased their interaction with peers, their interest in the subject as well as their interdisciplinary learning based on the efficient use of the new instructional media by their tutors, which in line with the previous research on blogging by Canan (2013) and Marcelo et al. (2015); see the following excerpts (14)-(16):

- (14) I found blogging the perfect place to share my thoughts and views related to our course and the topics that are being addressed during the COVID-19 conditions. It also encouraged me to think in ways that I would not think before. It provides me with feedback on the things I have said and I may find others that are thinking like me. It develops skills for blog writing and knowledge concerning the topics discussed in class. (S3)
- (15) So far, I feel I am doing well regarding my blog entries; I give my best to answer the questions and show what I have learned in class, my critical thinking and my own ideas. I have learned to pay more attention in class since most of the topics are included in the blog, so I should listen carefully in order to understand what I am supposed to do. It helps me a lot to remember more things and it is another way of studying and revising the material. The feedback I get is really crucial for me. I need to know whether what I write is good and what I can improve. Sometimes it is challenging, but I definitely like it as I practise my critical thinking, my memory and my writing. I feel this is a chance to speak and overcome shyness and insecurities. It is good that we have the opportunity to read to our peers' blog entries and be able to exchange ideas and see whether we agree or not. I have not done it before in university, but I got used to it and it makes me feel more confident that I have understood, I have practised the material and I do my assignments. (S40)
- (16) Although I am struggling to find time in order to write a blog entry, overall, it has been a positive experience so far. When writing a blog entry, you basically pause and revise what you've learned so far. Not only this, but you are also obliged to express your thoughts and ideas which, as a result, improves your critical thinking skills. Sometimes it feels as if you are writing an entry in your personal diary, which is in a sense a therapeutic procedure. (S19)

The students were also asked whether they had any ideas regarding how to improve their blogging experience. They suggested that they should propose their own topics that would help them to express their own thoughts, views and ideas, that they needed to do more research about the topics that they intended write about, and that they should be more engaged with their peers' blogs in terms of reading them, leaving comments, interacting in synchronous and asynchronous ways, comparing them, and implementing self-criticism and self-evaluation. Some learners would prefer to have had more creative tasks; for example, tasks based on videos or on group assignments and activities, such as group blog entries or discussion boards, while others said they considered more real-life topics and reflections on the routines to be more suitable for blog entries; see the following excerpts (17)-(18):

- (17) I am satisfied with how blogging entered our classroom programme, because we address some topics in class and then we have the opportunity to express further our thoughts in blog, but we can also use more creative means in blogging; for example, we can watch a video and then share our perspectives on it, or propose our own topics and expect from others to express their views. (S24)

(18) One way to improve my blogging experience is maybe to include group assignments or activities as well but overall, so far, I am pleased with my blogging experience. I think it would be nice if other students would comment more on others' blogging entries to see their opinions and views. This way we would get feedback not only from our teacher but from our peers as well. Interactions amongst peers would be nice. (S31)

In addition, the students were encouraged to think about other online activities that could enhance their learning experience. Amongst the students' suggestions were group discussions, quick assessments, multiple-choice questions at the end of lectures, watching some educational videos, quizzes, games, films about cultural differences, videos about teaching experiences and Ted Talks about the teaching environment by experienced teachers, see excerpts (19)-(20):

(19) Personally, I am very satisfied with the way things are turning out online, I have no problem with online lessons, but I believe that one other online activity that can enhance our learning experience is by watching some educational videos. By watching video material, it will be easier to learn since visual concepts are not easy to forget. (S37)

(20) Reading relevant to the subject of discussion articles helps to gain a wider perspective on it, as well as working in smaller groups contributes to exchange of ideas and knowledge. Moreover, completing various quizzes at the end of a lesson without the fear of being marked helps students and teachers to understand whether the information and materials provided during the lecture are acquired correctly and to detect possible difficulties. (S4)

Although, the use of blogs might be considered as a time-consuming resource among the students, it is obvious that it is an innovative technological, methodological and educational tool that supports social networking, interactive environment, higher levels of engagement and communication among teachers and learners, knowledge sharing, digital transformation in learning and teaching processes (Vaughan, 2010; Wolf, 2010; Yang et al., 2016; Hou et al., 2020).

Content analysis of blogs: Professional development

The content analysis of the blogs, which is relevant to both research questions focusing in the perceptions of the students regarding their use of ICT, online teaching and learning, and blogging experiences and their relevance to knowledge construction and their collaborative/autonomous learning and professional development and their role in the development of their digital literacy, critical thinking, reflection and self-perceived motivation,

cognitive, social and self-directed learning skills, indicated that the students, who were future EFL teachers, were mainly concerned about the use of proper teaching materials, visual aids and technology, time management, classroom management and student engagement. Overall, the analysis showed that the teachers achieved their teaching practicum (TP) aims, albeit to varying extents, see Table 4. With regard to their personal aims, the feeling of confidence was quite important, as was the ability to follow a lesson plan, see excerpts (21)-(23):

- (21) The personal aims I had for this activity were to be able to be confident enough to teach in front of a crowd, plan and be able to execute my plan during the specific time frame given. (S5)
- (22) I felt confident during teaching and afterwards I had no regrets about any major mistakes that could have affected the productivity of the class. (S9)
- (23) Honestly, I believe that more or less I have achieved the aims that I have set both on paper (in my lesson plan) and mentally (the way I had imagined my teaching practice would turn out). Of course, I want to emphasise the 'more or less' part as there is always room for improvement and I myself immediately upon finishing my TP had in my mind certain aspects that did not go as planned or did not turn out the way that I wanted them to. (S37)

Time management in order to be able to implement what had been planned for the lesson was a concern for the novice teachers, see excerpts (24)-(27):

- (24) Because of the simplicity of the lesson I tried and managed to finish most of my exercises on time, although some may have required more time than what I had planned and some indeed took more time because the students took a little more time to think about them. (S11)
- (25) My teaching practice went really well, I did not exceed the time limit, and I was also able to provide feedback on their performance. (S24)
- (26) Although I ran out of time, I was happy that I had enough material and that I did not run out of material to fill the lesson period. (S32)
- (27) I finished earlier than I expected, however I managed to fill my time by giving them some more exercises to solve. (S40)

Student involvement, engagement, the ability to increase the students' interest and to keep them participating actively during the lesson were aspects that the future EFL teachers strove to accomplish, see excerpts (28)-(29):

- (28) In order to motivate students and increase student engagement, I, firstly, tried to establish a good rapport with the students by creating a friendly atmosphere in class and lowering the affective filter. (S32)
- (29) The learners seemed interested and were participating during the lesson. Students were as involved as I was during class, which is what I aimed for. I wanted the class to work through discussion rather than just providing the learners with information. I wanted them to work on their own but also with their partners. Something that they achieved to do well. (S18)

Table 4. Content analysis of blogs

Lesson aim fully achieved	21
Lesson aim partially achieved	8
Use of materials, visual aids, technology	40
Time management	39
Voice, eye-contact and body language	40
Students' engagement/participation	38
Classroom atmosphere/rapport	38
Comprehension checking/questions	37
Students' motivation/interest	24
Lesson plan implementation	23
Group/pair work	20
Monitoring/encouragement	19
Critical thinking development	18
Students' shyness/stress	18
Teachers' smile/politeness	17
Clear instructions/guidance	14
Teachers' confidence	11
Peer interaction/discussion	10
Students' confidence	9
Games/competitions/fun	9
Teachers' stress/anxiety	8
Movement around the class	8
Individual work	8
Topic/culture/authentic input	7
Teaching methods/techniques	7
Link to the previous lesson	5
Mistake correction	3
Teachers' role in class	3
Seating arrangement	3
Repetition/revision	2

The classroom atmosphere is very important, and should be student-friendly; some teachers tried to smile, to provide positive feedback, and to be helpers and facilitators, while others aimed to control the class, to guide the students and to monitor their work. Body language, gestures and voice characteristics were considered to be important factors in classroom management, see excerpts (30)-(31):

(30) I have tried to create a warm environment in my class and involve the students as much as possible. However, after I had finished my lesson, I thought that I could involve them more in the lesson. (S14)

(31) There was a positive atmosphere in the classroom, and I felt confident when teaching. I got positive feedback from the students throughout the lesson and after the lesson had ended. It was reassuring to see the students enjoy the lesson and to see them all smiling and laughing. (S20)

Teaching for the first time can be quite stressful for teachers, and may lead to stress and anxiety. Some of the teachers felt nervous about teaching due to not having any previous experience, although some of them were able to overcome the negative feelings that affected their teaching process, see excerpts (32)-(34):

(32) At the beginning of the session I was very anxious and stressed and my voice maybe was trembling. In the future I must be more confident when teaching and speak louder. (S12)

(33) My aims for the presentation were to overcome my anxiety and shyness, to understand the concept of each class so as to be able to present in class with confidence, in order to discover the extent of my limitations. (S33)

(34) I was focusing on the time management for each activity, which made me anxious. My anxiety made me rush the first exercise without asking if they had any questions. I might have seemed stressed and this probably made the students feel awkward about asking the questions they had, if they had any. (S10)

The teachers needed to be able to control their feelings in order to keep the pace of the lesson even, see excerpt (35):

(35) I will say that I have achieved the main goals of the session, though there are some points that I could work with. Though, I could embrace my feelings and be more relaxed in my teaching. This would help me to have a steady pace in the session and not to speed up. (S2)

Some of the participants emphasised the importance of encouraging and praising the students, of providing feedback, and of the development of critical thinking and creativity, see excerpts (36)-(37):

(36) I think that I did encourage the students, as well as praise them when they were giving an answer. (S3)

(37) The aim of the lesson was to improve the students' vocabulary and critical thinking. That was achieved with the introduction of new, academic vocabulary through a series of activities. There was a brainstorming activity, aiming to promote the student's critical thinking and general knowledge of the topic. There were also different exercises in the handouts given to the students incorporating writing, reading and speaking activities that made the lesson more enjoyable. (S6)

The students were often shy in the classroom, and the teachers needed to help them to overcome their shyness, see the excerpt (38):

(38) I didn't want to call random students out to give answers because I didn't want to ambush anyone and make them give an answer when they didn't want to or when they were shy/socially awkward. (S3)

Many teachers reported difficulties with IT, technology, audio tracks or projectors, see excerpts (39)-(40):

(39) I also feel very pleased with my teaching practice as I wanted to be calm during my teaching practice. Even with IT issues that happened at the beginning of my presentation I managed to keep calm and resolve my issues. (S11)

(40) I provided students with visual aids, as I made use of the projector, the computer and power-point slides, but more time was eventually spent on the exercises in the handout. (S32)

The findings indicated that some of the teachers relied overly on handouts, see excerpt (41):

(41) Then, I distributed the handouts, and I explained clearly to them the instruction for each exercise. (S4)

They also reported that concept-checking questions facilitated the students' understanding; accordingly, checking the students' comprehension during the lesson was considered to be important, see the excerpt (42):

(42) After this point, I asked concept-checking questions to see whether they understood what I wanted them to do. (S25)

Sufficient time should be provided for the students to think about and perform the tasks, see the excerpt (43):

(43) I provided enough time for them to think about what they intended to say. (S36)

According to the participants, pair work was an important part of the lessons, see excerpts (44)-(46):

(44) The students seemed to enjoy the lesson, or I assume so because everyone in class was smiling and conversing with ease. The pair work went well with no quarrels or impolite disagreements between the students and from beginning to end the class was bright and instantaneous when answering the questions. (S9)

(45) Of crucial importance for me was to make them feel comfortable in class and also confident in order to express themselves. Solving exercises on the board, having them work in pairs and also on their own, were the main teaching strategies that I wanted to use. (S34)

(46) Moreover, I mostly incorporated pair work for students' interactions and sharing of different ideas. I also tried to check if students comprehended my instructions and clarified any misunderstandings by monitoring the class and moving amongst the different pairs while they were discussing and preparing their answers. (S15)

The participants believed that group work promoted discussions and the students' engagement, see the excerpt (47):

(47) I also encouraged group work because students are more relaxed when talking to each other than when talking to the teacher. (S4)

In addition, voice modulation helped the teachers to teach and to explain the material, see excerpts (48)-(50):

(48) At each stage of the lesson, I spoke loudly and clearly to assist them in understanding what they had to do. (S19)

(49) My voice was clear and calm because I did not want the students to get nervous. (S5)

(50) I think that my voice was loud and clear to everyone in the class and that what I was saying was comprehensible. (S26)

The results of the study showed that most of the novice teachers attempted to follow their lesson plans, see excerpts (51)-(53):

(51) My teaching practice was at all times according to my lesson plan. (S4)

(52) One of the most important things to achieve a good session is to organise a good lesson plan, as I did. I manage to do the exercises in a certain time and organise them in a specific order. This was also helpful for my anxiety and for the students not to be lost or confused. (S5)

(53) Filling out my lesson plan allowed me to allocate specific times to each activity during the lesson in order to get them all finished within the set time. It also allowed me to plan for any unplanned confusion or the activities being carried out too quickly. (S18)

In the participants' opinions, questions could help to elicit answers and to include students in the communication, see the excerpt (54):

(54) When my students talked about the topic, I tried to make them speak even more by commenting on their responses, and asking questions about the things that they talked about. (S33)

It is important to note that the students appeared to be self-critical and were able to evaluate their own and their peers' teaching to reveal areas for improvement, such as the use of technology, better time management and more individual work; see Figure 2. They emphasised the importance of decreasing the anxiety of both teachers and students, slowing down the pace of teaching, and the use of clarification and concept-checking questions, see the excerpt (55):

(55) If I had the chance to change something from my lesson delivery that would be my anxiety. I think that I would be calmer as this prompted me to talk a lot faster than I was supposed to talk. Also, I would like to have asked them some clarification questions to be sure that they had understood the material fully. (S2)

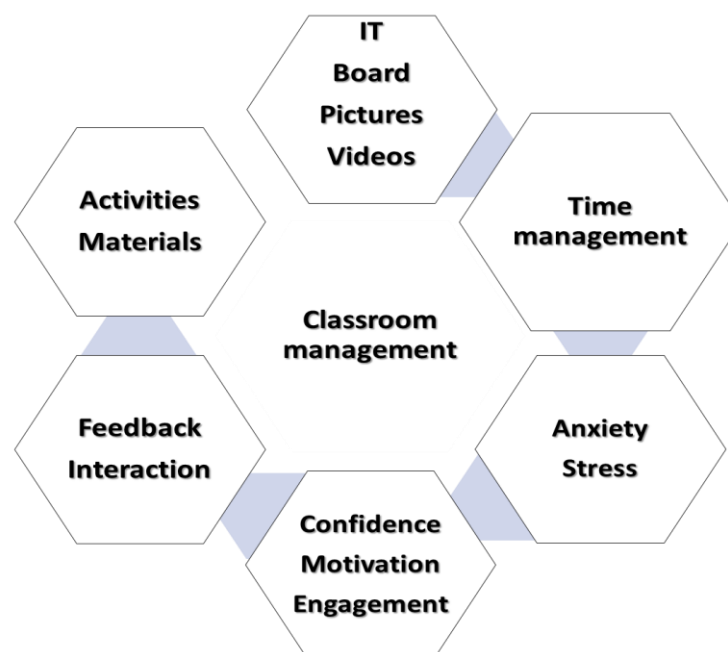


Figure 2. Suggestions for improvements

In their blog entries and comments, the participants wrote about the use of the board and additional teaching materials, and felt that more speaking activities and more interesting topics were important aspects when teaching. Their suggestions for improvements included a focus on teaching materials, pair work and discussions. They thought that it would be a good idea to swap the roles of the teacher and the students, to provide more comments about the students' progress, to correct their mistakes, to give them extensive feedback and to provide extra sessions. Their advice for their peers and themselves included speaking louder and being more confident while teaching, writing answers on the board, walking around the classroom, and using non-verbal cues and gestures in their instruction, as well as technology, pictures and videos. More game-based activities could increase the students' interest, engagement and motivation. Moreover, the participants considered that a balance between teachers' talking time (TTT) and students' talking time (STT), interactive activities in class, discussions, competitions and team work could help both teachers and students to overcome feelings of anxiety, and to increase their confidence, to promote independence and autonomy, to facilitate the interactions between the teachers and the students and to develop critical thinking.

It is obvious that blogs allowed students, future EFL teachers to be engaged in a community of practice (Wenger, 2001) or a community of praxis during teacher education (Anderson & Freebody, 2012; Mycroft, 2016; Wright et al., 2017; Marquez-García et al., 2020) by collaborating with their peers, and sharing their critical thinking, ideas, emotions,

experiences and actions regarding the learning and teaching process, theory and practice (Galvan & Parker, 2011), which is in line with the ecologies of learning theory (Fernandez & Anguita, 2015) and the paradigm of complexity (Morin, 2005).

Discussion and conclusion

This study focused on future EFL teacher's cognitions, perceptions of and attitudes towards online teaching and the use of ICT, in particular blogging in EFL classrooms. The results of the study showed that the students, who were future EFL teachers, were aware of the importance of digital literacy and the use of ICT and blogs in language learning and teaching. The analysis of future teachers' cognitions is important as they are related closely to their future teaching practice (Borg, 2019; Gao, 2019; Li, 2020). The participants in our study were students in an online teaching practicum course. The online delivery of the course was due to the current pandemic situation. The students experienced the advantages and disadvantages of online teaching and learning and the benefits of blogging and ICT use in class. Their learning experience will be reflected in their future teaching practice, classroom management, teaching methods and techniques, materials and curriculum development and the implementation of blogging and digital technology in classrooms (Nunan & Richards, 2015; Borg, 2015). The analyses of the questionnaires and blog entries showed that the students believed that the use of blogs and ICT in classroom, in synchronous and asynchronous ways, could enhance learner-centred instruction and could increase students' engagement and motivation, which is in line with the previous research by Demouy et al. (2016) and Gravells (2017).

The students considered themselves to be digitally literate, but still wanted to increase their knowledge and acquire new digital skills, especially in the current pandemic situation. Technology-enhanced teaching is beneficial for knowledge enhancement and reinforcement; thus, the digital literacy of both teachers and students should be developed and updated constantly (Gravells, 2017; Harris & Jacobs, 2021). The students understood the advantages and disadvantages of blogging, synchronous and asynchronous learning environments and were aware of the wide range of tools, applications and digital devices available. They were aware that it was their responsibility to learn how to 'navigate' online in secure and safe ways (Elkins & Pinder, 2015; Allen, 2016).

Keeping abreast of technological advances can help them to become good teachers, and to promote blogging, discussions, peer collaboration and group work; thus, the students liked the idea of blogs, flipped classrooms that include students' projects, multimodality and extra-curricular tasks (Ingle & Duckworth, 2013). Students' individual differences, as well as

affective and social factors, equity, equality and diversity, should be taken into consideration in teaching, learning and assessments via ICT. The students also acknowledged the role of the instructor and his/her personal characteristics, enthusiasm, commitment, approachability, and role as a facilitator and moderator in successful blogging, teaching, learning and assessment (Starkey, 2012; Taylor, 2016; Gravells, 2017). Although the students understood the need for online education during the COVID pandemic, they still preferred face-to-face sessions in real classroom settings. They emphasised the importance of physical and eye contact, the ability to interact with their peers and tutors, and to observe and be involved in classroom activities, as well as being able to concentrate on the course material without the distraction of technical problems with internet connections and equipment.

Nevertheless, the students admitted that their online experience during the current pandemic situation changed their attitudes towards blogging, ICT and their role in EFL class. The students, who were future EFL teachers, were willing to learn, to attempt to be flexible and to adapt to the current situation; they planned to implement blogging and digital technology in their own teaching practice in the future in line with the ideas of multiliteracy and multimodality. Some of the reasons in support of online or blended education were that the students were safer during the pandemic, that they saved time that would have been spent commuting to the university campus and were able to remain at home in a relaxing, comfortable atmosphere; furthermore, some students said that blogging and communicating in an online class helped them to overcome shyness and to feel more confident.

The findings of this study suggest that, overall, the CG university students, who were future EFL teachers, had positive attitudes towards the blogging experience because it enhanced their knowledge construction, collaborative and autonomous learning and professional development. Blog entries, feedback and comments allowed the students to be part of online community, to interact with their tutors and peers, to share their knowledge and experience, and express their views and ideas, which echoes the previous research conducted by Robertson (2011), de Andrés Martínez (2012) and Meinecke et al. (2013). The students stated that blogging helped them to revise the material covered in class, to comprehend it in a better way, and to construct knowledge based on critical thinking, analysis, reflection, feedback and multiple sources. It is obvious that writing blogs increased their critical digital literacy and helped to overcome the anonymity of a large class in the digital space, particularly given the situation during the current pandemic, which is in line with the previous findings by Deng and Yuen (2011), Goktas and Demirel (2012) and Kaçar (2020).

The students needed more encouragement and support from the tutors and their peers regarding their participation during online sessions. They tended to have more written forms of communication (blogs and chats) than oral modes (audio and/or video). Blogs seemed to be a suitable learning and educational tool because they help to engage the students both in synchronous and asynchronous learning, as was suggested previously by Hung (2010). After their sessions, the students need to spend time writing blog entries and reading their peers' blogs, as well as on commenting, comparing, drawing conclusions, and constructing new knowledge based on the blogging experience and meaningful, contextualised learning in authentic contexts, thus providing evidence in support of the previous research findings by Aydın (2014) and (Noel, 2015).

In addition, the students stated the need for the freedom to choose topics that were relevant to their interests and needs in order to express their views and benefit from the interactions pertaining to issues related to teaching methods and techniques, the link between theory and practice, curriculum and material design, assessment, problems and solutions regarding multilingual classes and students with special learning difficulties. As noted by the students, the main purpose of blogging is to develop communicative competence, critical and reflective skills, creativity, autonomy and collaboration.

Blogging was part of the students' formative assessment, as the students received feedback from their tutor and their co-students, and their blogs formed part of their portfolios. Many of the students expressed the need for group work, group blogging or discussion boards, as this could increase the students' interest and motivation to cooperate. There should be a balance between autonomous learning and collaborative learning. According to the students, blogging played a positive role in development of their cognitive, social and self-directed learning skills, which is in line with the previous research by Churchill (2009), Halic et al. (2010) and Sun (2010), but it also had disadvantages due to being time consuming; in addition, some of the students felt that blogging could be quite stressful if they struggled with the topic, or were unable to write due to a lack of critical thinking and reflective abilities or because of their personalities. Thus, a teacher needs to be a facilitator in class and should use blogging in an effective way. The instructor should scaffold the learning process, and assist the students in their attempts to write blogs by providing feedback, support and encouragement to participate, and show them ways in which they can improve. If the students are aware their progress, they will be more motivated and engaged in blogging, which can increase their critical thinking, analysis, synthesis, evaluation, higher-order skills and critical digital literacy skills, which are

of great importance in our modern world of education, particular the one that takes place in a digital space.

This paper contributes to the discussion of pre-service teachers' education, learning and teaching experiences based on the analyses of blog entries in order to raise awareness of the importance of critical digital literacy, the use of ICT, reflection, collaboration and critical analysis in the curricula for pre-service, in-service and continuing teacher education (Kitchen & Petrarca, 2016; Russell & Martin, 2016; Marquez-García et al., 2020). This study is important because it has implications for future research and the further development of pre-service programmes by taking the university experience into consideration, and combining theory and practice. The findings from this study highlight the importance of integrating blogging and reflective, collaborative writing, discussion and training in both pre-service and in-service teachers' education, as they contribute to teachers' growth and professional development by making them aware of critical digital literacy, knowledge construction, critical thinking, reflection, autonomous and collaborative learning, cognitive, social and psychological dimensions of teaching and learning.

Further research in this field is needed, including a larger sample of the participants, both pre-service and in-service teachers in Cyprus and abroad in order to have more valid and reliable results, representative of the teaching and learning processes taking place in higher education contexts and the benefit of ICT-based alternative educational delivery systems and applications such as blogs on the successful learning outcomes and professional development.

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Appendix

Questionnaire:

Date:	Gender:
_____	_____
Age:	Year of studies:
_____	_____
L1:	Other languages:
_____	_____
Future career plans:	
_____	_____

1. Which digital tools are used for teaching at the university?
 - a. Microsoft Teams
 - b. Zoom
 - c. Blackboard
 - d. Skype
 - e. Other _____

2. Which tools you would like/prefer to use?
 - a. Chat
 - b. Channels/breakout rooms (group discussions)
 - c. Raising the hand/individual answers
 - d. Camera
 - e. Recording of the sessions
 - f. Social networks
 - g. Wikis
 - h. Blogs
 - i. Turn-it-in/on-line assignments
 - j. On-line material (Blackboard)
 - k. Videos
 - l. Facebook
 - m. Twitter
 - n. What's up
 - o. Viber
 - p. Other _____

3. In which way do you prefer to participate during on-line session?

- a. Oral (audio)
- b. Oral (video)
- c. Written (chat)
- d. Written (blogs)
- e. Public blogs
- f. Private blogs
- g. Written + Oral
- h. No participation
- i. Why? _____

4. Which of the teaching/learning experience do you prefer?

- a. Face to face
- b. On-line
- c. Blended

Why? (e.g. COVID situation, other reasons)

5. Please rate from 1 (low) to high (5):

1.	I am digitally literate.	1	2	3	4	5
2.	I want to improve my digital competence.	1	2	3	4	5
3.	Bloggng is a useful pedagogical and educational tool.	1	2	3	4	5
4.	Writing a blog is a creative activity.	1	2	3	4	5
5.	Bloggng is time-consuming and tiring.	1	2	3	4	5
6.	Writing a blog helps to develop reflective skills.	1	2	3	4	5
7.	I like that the others can read my blog and leave a comment.	1	2	3	4	5
8.	It is great to share my ideas with my peers in a blog.	1	2	3	4	5
9.	The blogs should be private, only the teacher can read them.	1	2	3	4	5
10.	Bloggng is the type of assessment.	1	2	3	4	5
11.	I do not like blog entries, it is a waste of time.	1	2	3	4	5

12.	I read my peers blog entries before I write my own entry.	1	2	3	4	5
13.	I do not like to share my feelings and experience with the others.	1	2	3	4	5
14.	Blogging gives me the sense of belonging to a community.	1	2	3	4	5
15.	Blogging is just our homework.	1	2	3	4	5
16.	I am tired of blogging; it has become a routine.	1	2	3	4	5
17.	I find blogging tasks boring.	1	2	3	4	5
18.	I find blogging tasks difficult.	1	2	3	4	5
19.	I find blogging tasks challenging.	1	2	3	4	5
20.	I find blogging tasks irrelevant.	1	2	3	4	5
21.	Blogging helps me to comprehend the material better.	1	2	3	4	5
22.	I will use blogging in my future teaching.	1	2	3	4	5
23.	Blog entries and comments should on a voluntary basis only.	1	2	3	4	5
24.	I have freedom to express my views and ideas in a blog.	1	2	3	4	5
25.	I am affected by the answers of my peers.	1	2	3	4	5
26.	Tutor comments are useful.	1	2	3	4	5
27.	My peers/co-students do comment on my blog entries.	1	2	3	4	5
28.	Bloggings has more advantages than disadvantages.	1	2	3	4	5
29.	Blogging has more disadvantages than advantages.	1	2	3	4	5
30.	Blogging is a useful skill.	1	2	3	4	5
31.	Blogs stimulate me to read more on the relevant topics.	1	2	3	4	5
32.	Blogs have helped me to increase my interaction with peers.	1	2	3	4	5
33.	Blogs have helped me to overcome anonymity of a large class.	1	2	3	4	5
34.	I add comments to the blog entries of my peers.	1	2	3	4	5
35.	Blogs can help me to become a reflective practitioner/teacher.	1	2	3	4	5
36.	Blogging facilitates teacher-student communication.					
37.	I do not know what to write in a blog.					
38.	I feel insecure because I write blog entries.					
39.	I do not have necessary skills to write blogs.					
40.	I am not comfortable with blogging due to my personality.					

6. Which topics you would like to discuss in blog entries? Why?

7. What is the purpose of the blogging?
 - a. Communication
 - b. Education/learning
 - c. Teaching
 - d. Psychological support
 - e. Reflection
 - f. Assessment
 - g. Interaction (comments)
 - h. Creativity and innovation
 - i. Critical thinking development
 - j. Discussion
 - k. Sharing thoughts, feelings, ideas
 - l. Collaboration
 - m. Cooperative learning
 - n. Motivation
 - o. Digital literacy
 - p. Problem Solving
 - q. Decision Making
 - r. Intellectual development
 - s. Creation of on-line environment in the times of COVID
 - t. Access of information
 - u. Use of information
 - v. Online learning community
 - w. Continuous professional development
 - x. Self-directed learning

8. **Please describe your blogging experience so far** (e.g. knowledge gained, practice valuable knowledge and skills, teacher-student communication, peer comments, feedback, perceived learning, sense of community, reflective thinking, social and peer interaction, overcome the anonymity of a large class, social networking, meaningful discussion, engagement, enhancement of narrative writing, exchange of ideas, feelings, difficulties, challenges, positive/negative attitudes, advantages/disadvantages)

9. Do you have any ideas of how to improve your blogging experience?

10. Which other on-line activities that can enhance your learning experience you would like to suggest?
