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Abstract

Educational technology has a significant role in language learning; therefore, strengthening student teacher's digital literacy has recently become one of the main requirements in teacher education programs. This study aims to explore student teachers' experience about using 'Edmodo' and a flipped classroom model. The course, Teaching English to Young Learners, which is one of the compulsory courses of the English Language Teaching (ELT) program, was flipped for ten weeks in a class of 31 student teachers at a state university in Turkey. A reflection questionnaire with close- and open-ended questions was given to the student teachers to understand their perceptions of Edmodo and flipped classroom. The findings showed that Edmodo and flipped classroom are good at training student teachers to increase their digital literacy, working collaboratively and controlling their own learning process. The paper also highlighted that student teachers intended to use them as a teacher in the future though this was the first experience for most of them. In the light of the findings, teacher educators might be suggested to enhance student teachers' digital literacy first by allowing them to experience multimedia tools in teacher education programs.

Key words: Teacher education, Educational technology, Multimedia tools, Edmodo, Flipped classroom

INTRODUCTION

The last few decades have seen advancements in technology on an unprecedented scale, and the twenty-first century students and teachers are expected to use technology effectively and comfortably to enhance learning both in the classroom and beyond the classroom. In order to meet changing societal needs students are assumed to be equipped with both domain knowledge and skills in the schools (Chan, 2010; Gut, 2011). However, it is the teachers who should be first equipped with them to be able to develop their students' digital literacy knowledge and skills.

As developments occur rapidly in the area of educational use of technology, teachers' use of technology has become exhausting (Bozdoğan & Özen, 2014). There is a growing need to integrate teaching with technology. Although the majority of studies have focused on this necessity (Albion, 1999; Chen, 2008), teachers still need more training and practice in the use of technology effectively during teaching in accordance with the requirements of the 21st century technology skills, as they could largely use technology for emails and search engines (Chen, 2008). The fact that teachers are reluctant and sceptic about integrating technology might draw on the lack of digital literacy education in their pedagogy, and at the same time the lack of experience. As student teachers need more experience of technology use during their own education in case of a lack of role model showing how

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to practice them in the classroom during their university education, they would probably fail to use it in their own classrooms in the future, or fail to integrate technology effectively into their instruction (Cuban, 2001; Dawson, 2006; Koehler & Mishra, 2008; Swain, 2006).

In this century, instead of adhering to traditional modes of instruction student teachers are expected to reverse the traditional classroom-based learning and include new technology while presenting and sharing content knowledge. This leads us to the flipped classroom model which is a type of blended learning. The theoretical ground for using a flipped classroom model comes from student-centered learning (Bishop & Verleger, 2013), active learning (Lemmer, 2013) and constructivism (Basal, 2015). Flipped classroom model complies with the principles of constructivist learning in that the teacher is a guide and the learners are "active", "self-regulatory", "self-mediated" and "self-aware" (Doolittle, 1999, p. 14). In the flipped classroom, instructors benefit from a wide range of instructional materials and include their own activities by means of online tools outside of the classroom. According to Jensen *et al.* (2015), the main purpose of flipping a classroom is delivering the content of the course by pre-recorded videos or other online tools and using the class time more effectively for implementing constructivist and hands-on activities (problem solving, critical thinking, pair work, group work, etc.) and increasing interaction in classroom between learners and instructor. In order to share content and contact students and assign course content prior to the course in the classroom, Edmodo emerges as a closed and secure social network by creating online learning environment. Hence, it is considered that the integration of Edmodo into instruction is perfectly suitable for the flipped classroom model.

Teacher education programs have a great role on student teachers to encourage them to integrate technology into teaching in their future classes, thereby gaining knowledge and ability which are required for the 21st century skills. However, it is seen that the previous research mostly focus on how technology is utilized by students and teachers. More research is needed to report on student teachers' use and perception of information and communication technologies (ICT) and teacher education programs. The implementation of the flipped classroom model is not a straitjacket. The instructors are often free to create their design among various tools and materials available for the flipped classroom (Webb, Doman & Pusey, 2014) to deliver the course content so that the class time can be used with more constructivist and hands-on learning activities such as problem solving, discussions, workshops and group work (Jensen, Kummer & Godoy, 2015). Therefore, the primary focus of this paper is to help student teachers gain insights into implementing Edmodo as a web-based learning tool and flipped classroom as a learning model, question the use of flipped classroom via Edmodo in a teacher education program, and evaluate how the implementation of Edmodo and flipped classroom might contribute to their teaching practice in the future.

LITERATURE REVIEW

It is of great significance for student teachers to have knowledge of web-based technological tools used in education and to have digital literacy skills to implement these tools in their classes during their teaching practice. Therefore, their teacher education programs at the university are expected to enable student teachers to experience the educational use of ICT. According to Hooper and Rieber (1999), five stages are described to indicate how teachers use technology in their classes: 1) familiarization, 2) utilization, 3) integration, 4) reorientation, 5) evolution. Considering these five stages, Smith and Greene (2013, p. 124) suggest teacher educators should "encourage the use of technology in instruction for pre-service teachers and to model this use for pre-service teachers." Therefore, this study entailed the use of Edmodo in a flipped classroom in exploring student teachers' knowledge and experience of digital technologies within and beyond educational contexts.

Edmodo is included as it is an online social learning environment where teachers can create digital classrooms in which teachers and students can upload content knowledge, assign learning tasks, manage schedules and events, share ideas and have quizzes. With a Facebook-like interface, Edmodo allows students to have ease of use. Moreover, "it allows students to feel comfortable posting in a

secure site to share ideas about learning contents" (Gan, Menkhoff & Smith, 2015, p. 4). Likewise, Dobler (2012, p. 13) reminds "teachers and parents might be concerned about security and privacy issues for communicating with people online." Once again internet safety is provided in this digital class as it has a code through a teachers' account, and particularly the students of this classroom can have an access to the closed and private learning platform, that is, an online classroom. Moreover, this code can also be given to parents to observe activities, discussion postings and comments. Edmodo enables students to communicate with their peers in their classroom or around the world and to collaborate with each other, thereby making comments to posts or works, responding to discussion threads. Metzger (2014) suggests teachers should encourage student discussions and collaborations with posts and initiate their communication because the immediate feedback given by their peers and teachers helps students in the construction of knowledge.

Flipped classroom model, as a result of integration of technological advancements into instruction, assumes an *inverted classroom* (Fraga & Harmon, 2014), "which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class" (Bergmann & Sams, 2012, p. 13). It draws on "constructivism, emphasizing social interaction and active knowledge building" (Comber *et al.,* 2018, p. 684). The strategy underlying the flipped classroom is that "work typically done as homework is better undertaken in class with the guidance of teachers" (Kong, 2014, p. 161). Students gain knowledge about the content of subject outside of formal class time and use their formal class time to actively construct their knowledge in an interaction with their peers and teachers (Bergman & Sams, 2012; Davies, Dean & Ball, 2013). In order to get students engaged in learning activities and make interactions with their peers outside the classroom, digital tools and digital classrooms are required, which enables students to have an access to online resources and learn their subject content through interactions with their peers and teachers in the digital form. If teachers have knowledge of how to embed technology into classrooms and encourage students to process information outside of the classroom, interaction among students and learning process in the classroom can be more fruitful by means of creating an ideal constructivist learning environment. As well as the presentation of subject content, another benefit of flipped classroom is its facility for students to "take control of their own pace, progress and responsibility in the learning process based on their own individual needs" (Kong, 2014, p. 161).

Smith and Greene (2013, p. 123) highlight that studies show teachers' instructional strategies are still unchanged even though new technologies are integrated into the classroom. Therefore, instead of consulting to one web-based tool and naming it a digital classroom or considering it as the inclusion of technology, it is necessary for teachers to change the mode of instruction in accordance with the aims of this technology use, and also, adjust classroom teaching to the online learning environment by means of digital instructional strategies. It is noticed that the previous studies focused on the integration of Edmodo into the traditional classes and investigated its effects on students and teachers. However, this study changed the mode of teaching in accordance with the needs of Edmodo and utilized Edmodo in a flipped classroom. Moreover, the study is significant because it promoted the learning process of student teachers rather than students and teachers who were extensively studied groups. Thus, it investigates student teachers' perceptions of Edmodo use in a flipped classroom during their teacher education program and the contribution of their experience of constructing knowledge to their teaching practice in the future, thereby being a role model for student teachers to develop their own online classes in their prospective teaching career.

Considering the significance of the issue and lack of research on student teachers' practices of and perceptions towards Edmodo in a flipped classroom in their teacher education program, the present study aimed to explore this issue by analyzing the perceptions and practices of third grade ELT student teachers at a large state university towards the use of Edmodo and flipped learning in their teacher education program. The following research questions guided the study:
1. What are the student teachers' perceptions of using 'Edmodo' in a flipped classroom?
2. What challenges and benefits does 'Edmodo' in a flipped classroom offer while student teachers use this tool in teacher education methods coursework?

3. How might 'Edmodo' and 'flipped classroom' contribute to the teaching practice and experience of student teachers in the future?

METHODOLOGY

Participants

Participants in this study were composed of 31 junior student teachers in the department of English Language Teaching at a state university in Turkey. Among these participants, 29 student teachers responded to the questionnaire, and 22 student teachers responded to the open-ended question for which they were asked to write a brief reflection essay.

Data Collection and Procedure

The student teachers enrolled in the course named Teaching English to Young Learners in which they were required to attend the lessons regularly, make assignments and participate in the class discussions during the whole semester. At the beginning of the semester they were informed about their use of Edmodo in a flipped classroom model. First, they were taken to the computer lab for two weeks and were asked to join a digital classroom within Edmodo with the guidance of the teacher. In the flipped classroom model, the student teachers' use of Edmodo lasted for 10 weeks. Each week, the readings were uploaded to the online classroom in Edmodo, the materials including readings, website links and videos were posted one week before they attended the class. To exemplify, in the first week the readings from the selected resources were uploaded, the relevant websites and videos were suggested, some digital stories the teacher created by herself were shared, the student teachers were asked to create and post their digital stories at Edmodo. From the beginning the teacher encouraged student teachers to make comments on their peers' products, gave feedback to their products and comments by means of initiating discussions in the digital platform before the class. In the following weeks, the content knowledge of subjects was introduced one week before, and then they were led to construct knowledge in the classroom with the help of their peers and teacher. Even though they first avoided posting comments to each other, then they followed the products and comments which were made by their peers. After the teacher was sure of their having sufficient theoretical knowledge, she planned their student teachers to take action. The teacher asked student teachers to create a lesson plan for young learners, record their demo, and upload their video to Edmodo. In this way, it is aimed that student teachers and their peers could have a chance to observe the way they taught, to analyze, to comment on and to discuss about peers' way of teaching.

Data Analysis

Data were gathered through a survey questionnaire which draws on two scales: Edmodo and flipped classroom, as shown in Appendix 1. The variables were composed of the questions focusing on the benefits and challenges of Edmodo and flipped classroom: perception towards usefulness, ease of use and influence on their teaching practice in the future. The first 11 items were related to student teachers' perceptions of Edmodo, and the last 11 items measured their perceptions of flipped classroom. The respondents were asked to indicate their agreement on a five-point-type-Likert scale. All items were presented in English. The questionnaire was delivered to the student teachers through Edmodo. The means were calculated via Excel program to measure the frequency of the student teachers' perceptions, and the results were indicated in the figures. In the questionnaire, there were also four open-ended questions related to the challenges and benefits of Edmodo and flipped learning. In addition to the questionnaire, the student teachers were asked to respond to an open-ended question by writing a brief reflective essay which compares the regular (traditional) way of training in the course, Teaching English to Young Learners, with a flipped classroom via Edmodo in terms of their usefulness, effectiveness and deficiencies, as shown in Appendix 2. A top-down qualitative coding

was used to analyze the answers of the student teachers to the open-ended question regarding the challenges and benefits they experienced with Edmodo and flipped learning.

RESULTS and DISCUSSION

In this part of the study, the research questions given above are dealt with under three sections, respectively. The first section presents student teachers' perceptions of Edmodo and flipped classroom; the second section provides excerpts of the student teachers and analyzes the challenges and benefits of Edmodo and flipped classroom; the third section addresses to the contribution of student teachers' experience to their future teaching practice.

Research Question 1: What are the student teachers' perceptions of using 'Edmodo' in a flipped classroom?

Regarding the perceptions of student teachers towards Edmodo, the means of the closed-ended questions in the questionnaire are largely high, as shown Figure 1. The mean value of the first eleven items is M= 4.49. It is suggested that the student teachers have positive perceptions of Edmodo at a high level, and they do not seem to be even undecided. On the other hand, the means of Item 2 (M= 3.96) and Item 5 (M= 3.93) were relatively lower compared to the other items. It suggests that the student teachers considered that reaching Edmodo might be difficult, and also Edmodo did not allow them to participate more easily. A similar study analyzed pre-service teachers' opinions towards web-assisted collaborative learning by means of using Edmodo, and the results of their pre- and post-tests supported the findings of the present study by suggesting "a more positive perception to computer and web technologies" (Hamutoğlu *et al.,* 2019, p. 134).
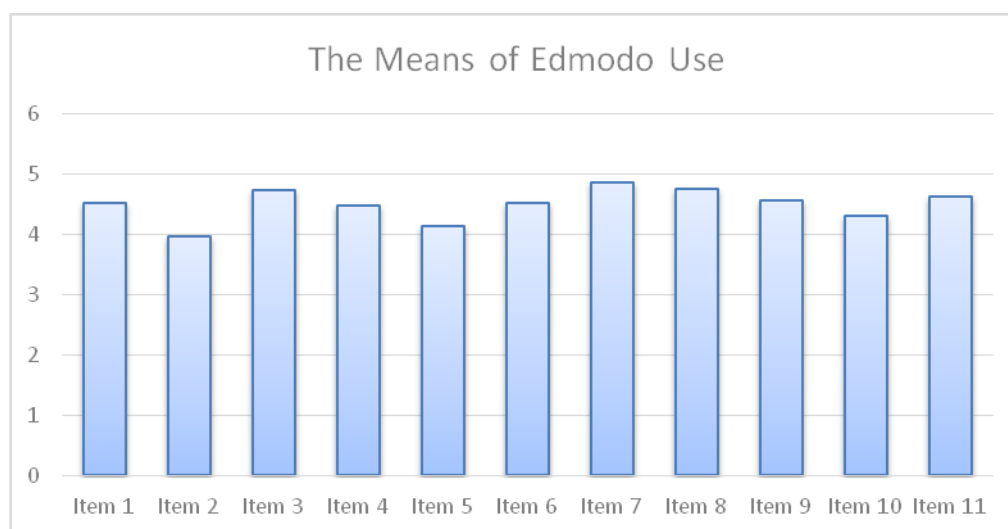
Figure 1. The student teachers' perceptions towards Edmodo

Similarly, with respect to the perceptions of student teachers towards flipped learning, the means of the closed-ended questions in the questionnaire are largely high, as shown Figure 2. The mean value of the last eleven items is M=4.40. The findings suggest that the student teachers have positive perceptions of flipped classroom at a high level, and relatively at a lower level compared to Edmodo use. On the other hand, the means of Item 18 (M=3.93) and Item19 (M=4.13) are lower compared to the other items. It suggests that the student teachers considered that learning subjects through flipped classroom might be difficult, and flipped classroom did not allow them to have fruitful in-class discussion as they expected.

Figure 2. The student teachers' perceptions towards flipped classroom

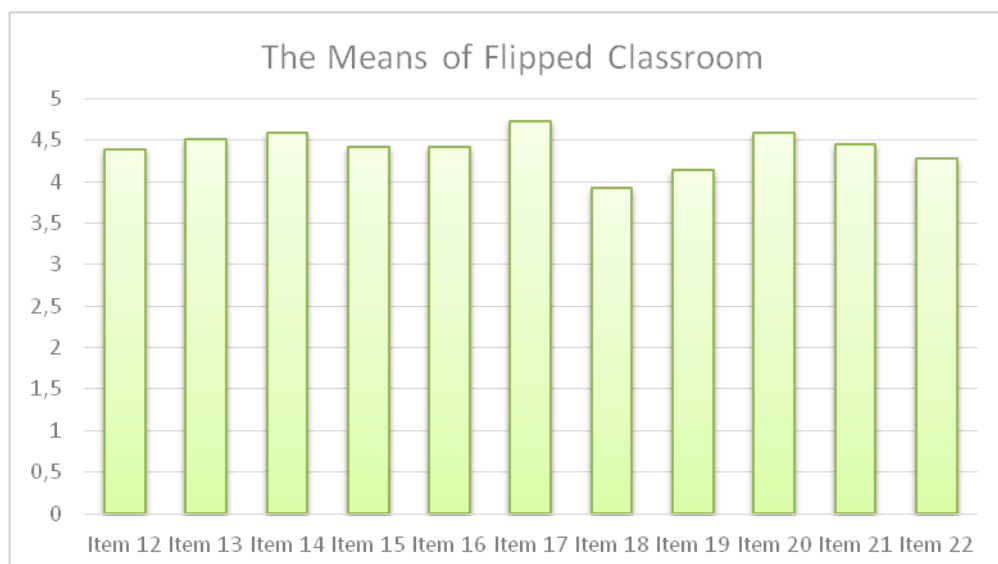In accordance with the findings of this research, the use of educational online tool, Edmodo and flipped learning model is well received by the student teachers, and the student teachers were mostly open and willing to experience Edmodo in a flipped classroom. To begin with the first research question, the perceptions of student teachers towards the use of Edmodo were mostly positive. Their responses suggested that Edmodo is a compatible learning environment for a flipped learning model. Firstly, as it creates a digital lesson to interact with students and a teacher before the class. Students can be informed about what they are going to learn. Secondly, they have more time for in-class activities and discussions when they prepare for the lesson via Edmodo.

Research Question 2: What challenges and benefits does 'Edmodo' in a flipped classroom offer while student teachers use this tool in teacher education methods coursework?
As for the challenges and benefits of Edmodo in accordance with the results of the four open-ended questions in the questionnaire and of an open-ended question for a brief reflective essay, the codes were grouped, as shown in Table 1.

Table 1. The challenges and benefits of Edmodo

Challenges	Benefits
	student teachers and teacher interaction
	asking questions openly
limited access to internet connection	teacher and peer feedback
complicated website	analyzing peers' works
taking time for adjusting to a new tool	having background information prior to class
incompatibility of mobile app and website	feeling calm and confident
lack of notifications from mobile app	enjoyable
limited storage for uploading videos	interesting
	multimodal
	self-management of space and time

To begin with the educational tool Edmodo, student teachers favored its interactive aspect as it creates a social learning environment by giving such answers as "I like the interaction between students and teacher" and "Students may express their thoughts and ask some questions freely on Edmodo." Student teachers also found it useful to read their peers' works, comments and evaluation: "Sharing our works and getting comments about it are useful", "Also, peer evaluation is good and useful for the class" and "We can see easily our friends' works." Another advantage of Edmodo was to provide

insight to student teachers about the subject of the week before they come to the class. Student teachers stated "We have a background information thanks to Edmodo", "I can get general ideas about the topic before coming to the class" and "Before the class, we have a chance to see and revise something and we maybe get prepared for the lesson." As student teachers could write freely at Edmodo, they were also relaxed to be able to express how they felt. A group of student teachers indicated, for example, "It is helpful for keeping affective filter low." They found Edmodo "enjoyable" and "interesting for students" because of the rich sources of materials: "I think especially sharing videos and links are more beneficial than just the written material." As it offers an opportunity to student teachers to reach Edmodo beyond the classroom, they found it easy to reach. Even though they do not attend the classroom, they can follow course materials, participate online discussions, and get peers' and teacher's immediate feedback. One student teacher said "We can connect to each other even if we aren't at the school. It enables students to take feedback easily" and another stated "We had the chance to get teacher's feedback and peer correction." On the other hand, most of the students found it difficult to follow updates at Edmodo due to their limited access to internet connection as seen in their statements: "As this program needs internet connection, I can't always enter the program" and "It was always difficult to follow Edmodo because we don't always use the internet." Some student teachers had some difficulty in using Edmodo and told "The website is a bit complicated to me" and "It is a new program for use so it can take time to getting used." The student teachers who downloaded the application to their mobile phone complained about the incompatibility of mobile and website versions, the lack of notifications which inform users about recent posts and "limited storage for downloading the videos."

As regards the second research question, the findings suggest that the student teachers could largely benefit from the Edmodo and flipped classroom in a teacher education method coursework in the sense of increased interaction with the teacher and the peers and learner autonomy; however, they found the use of Edmodo in a flipped classroom challenging to practice due to their limited access to the internet connection and the limited storage of Edmodo. Recognizing that Edmodo might be a good learning platform, and similarly flipped classroom might be an effective model of learning, the student teachers found Edmodo to provide a safe and secure environment for learners as Gan *et al.* (2015, p. 4) approve that learners feel relaxed and safe to share their ideas in this platform. In addition, the results suggested that student teachers found the use of Edmodo helpful for developing technology knowledge and practice of learners as it requires the use of digital literacy skills. At the same time, the student teachers emphasized their having freedom of doing activities and assignments at their own pace beyond the classroom, which is important for learner autonomy. Last, it enables the student teachers to interact with the teacher and the peers in order to get feedback, to follow the assignments of their peers and to comment on each other's works. In this study, it is noticed that the student teachers paid attention to their peers' feedback as well. This situation might be explained by another similar study which was conducted among the students in a higher education institution in Korea. The results of this study suggest "students in the flipped classroom learn not only from an instructor but also from peers" (Jin-Young, 2017, p. 6). The issue of interaction at Edmodo is also strongly valued by various researchers. For example, Metzger (2014, p. 72) highlights "teachers can initiate student discussions and collaborations with posts." Nevertheless, it should be noted that the use of Edmodo was challenging from time to time. The student teachers had difficulty in using Edmodo anytime and anywhere due to their limited access to internet connection. Moreover, due to the limited storage of Edmodo, they had some problems with sharing their demo presentations.

To continue with the challenges and benefits of flipped classroom in accordance with the results of the four open-ended questions in the questionnaire and of an open-ended question for a brief reflective essay, the codes were grouped, as shown in Table 2.

Table 2. The challenges and benefits of flipped classroom

Challenges	Benefits
limited access to the internet	more time for in-class discussion
taking time for adjusting to a new learning model	practical way to reach course materials
tiring	increasing learner autonomy
lack of emphasis on theoretical knowledge in class	feeling motivated and confident
ineffective in-class discussion	enjoyable
coming to class unpreparedly	student-centered learning environment
	collaborative learning situation

It is seen that student teachers mostly favored the flipped learning model. The most liked aspect of the flipped model was its presentation of information prior to the class through videos, audios and texts. Student teachers stated "We didn't have to waste time watching the videos or looking at the websites in the classroom" and "We spend time to talk and discuss in the classroom." In this way, they were satisfied of having more time for in-class activities. In addition, its practicality was emphasized by the student teachers as it facilitated to reach the documents. Using technology for educational purposes was favored. As student teachers revised the documents and materials before coming to the class, they found learning through this model easier and they had more time for discussions. The flipped classroom encouraged learners to gain autonomy and control their own learning. For example, some commented on the speed of learning "I can study the lesson at my own pace" and "It develops personal area." The learning model also influenced their emotional perceptions in a positive way. For example, one student teacher stated "Students come to class more motivated and confident" and another said "I can feel free during working." Nevertheless, student teachers do not seem to be as satisfied with flipped classroom as Edmodo. There are complaints to be taken seriously. First, as flipped classroom required the use of internet, student teachers stated how difficult it was for them to access to the internet anytime and anywhere. As the model is different from the traditional way of learning, they stated "It is a new model for us and we need more time to getting used to this" and "Actually it is in general a good model, but sometimes there is difficulty in participating because we are new in this type of teaching." For some student teachers "It is hard to read some documents from computer because sometimes it is eye-straining." Some indicated a lack of emphasis on theoretical knowledge in the class "I think we should have spent a little bit more time studying the theory part in the classroom" and "I didn't understand some topics and flipped classroom didn't help me." For some student teachers, even discussions were not effective "I don't think it allowed us to have more fruitful discussion in the class." They complained some peers came to the class without reading them and stated "Sometimes children can come to the school without reading them." They furthered "If you didn't have the chance to read and prepared for the class with Edmodo, the lesson would be insufficient for you." Interestingly, some student teachers suggested teachers to control if their students read texts and watch videos before coming to the class, while some suggested learners should be aware of controlling their own learning and said "First, students should be aware that they are responsible for their learning."

Based on the reflective essays of student teachers who compared traditional classroom with flipped classroom, the findings indicated that most of the student teachers chose flipped classroom over traditional classroom, and also some supported the use of both types of classroom by indicating the benefits of traditional and flipped classes. With regard to the flipped classroom, student teachers' perceptions were mentioned above; therefore, the distinctive results will be provided. In the flipped classroom model, student teachers stated that they felt comfortable and were confident to express their opinions through Edmodo. Therefore, they considered that the flipped classroom could create a student-centered learning environment, while traditional classroom was rather a teacher-centered learning environment. Student teachers in the flipped learning model could discuss about what they studied before the class; on the other hand, in their traditional classes the teacher often lectured. The results of a research by Zappe *et al.* (2009) on flipped classroom support the findings of the current study by arguing that "students perceived the method of teaching as being more effective than

lecturing" (Danker, 2015, p. 174). In light of the findings, it might be suggested that the flipped classroom model first leads to a more collaborative learning situation, and second, class time is allocated to learning rather than teaching by means of flipped learning. Lastly, it is considered to enhance learner autonomy as "Students have more control over their own learning" and "Students are more responsible for educating themselves." However, student teachers highlighted that the flipped classroom should also be used when it is necessary as well as a mode of traditional teaching and stated "Teachers should decide which one is most suitable." In addition, "It requires a careful interaction and burden on teachers", so it might require teachers to introduce their lessons in a careful and planned way. Considering the course is teaching English to young learners, one student teacher added "It is not appropriate for young learners." Finally, when student teachers compared and contrasted both types of classroom models, most of the student teachers found the traditional classroom model inefficient because it is teacher-centered, focuses on conveying information than establishing meaning, fails to draw learners' interest, allows for a limited participation and discussion, and excludes interactive and cooperative learning with peers no matter how it facilitates one-to-one interaction or face-to-face learning, which leads to a strong communication between students and teachers (Leckhart & Chesrire, 2012). With respect to the challenges and benefits of the flipped classroom, the findings suggest that the student teachers largely benefited from this mode of teaching because it enabled them to engage with the online lessons outside of the classroom. In this way, they could learn on their own time and at their own pace by promoting learner autonomy in and outside the classroom (Rochmawati, 2014). By indicating that it tends to improve learner autonomy, Kong (2014, p. 161) underlines its facility for students to "take control of their own pace, progress and responsibility in the learning process based on their own individual needs." In addition, after the student teachers studied by themselves beyond the classroom, they could have a fruitful discussion in the class. Providing digital sources such as videos and website links was also found effective in the flipped learning model. Nevertheless, the student teachers considered the use of flipped model inefficient in some aspects. As they were not used to this learning model, it might have been difficult for them to learn the content. In addition, it did not allow the student teachers to have more fruitful discussion in the class as they expected. In a similar vein, the findings of another study exploring the challenges of flipped learning model by students revealed that "they had mixed feeling about the flipped learning course. While several students enjoyed the flipped learning method and appreciated its advantages, others found difficulty adjusting to it, mostly due to the necessary phase of voluntary learning" (Jin-Young, 2017, p. 6). Lastly, the student teachers coming to the class in an unprepared way is also considered as a limitation of flipped classroom by Danker (2015). Similar to the suggestions of the student teachers, Kachka (2012) proposes that teachers should check whether their students complete their online tasks and integrate them into in-class activities in a way.

Research Question 3: How might 'Edmodo' and 'flipped classroom' contribute to the teaching practice and experience of student teachers in the future?

As regards the third research question, the means of Item 10 (M= 4.31) and Item 21 (M= 4.44) indicated that student teachers were eager to practice with Edmodo in a flipped classroom. It might be suggested that this study has become a role model for student teachers and encouraged them to use Edmodo and the flipped learning model in their future career. In addition, the means of Item 9 (M= 4.55) and Item 20 (M= 4.58) indicated that for most of the student teachers this was the first time they have ever used the instructional tool, Edmodo and the flipped learning model. In terms of having firsthand experience how they are practiced in the learning environment and identifying the pros and cons, a great number of the student teachers stated that they gained insights how to practice Edmodo and flipped learning with their own students in the future. Thus, they tend to agree that the practice of Edmodo and flipped model during their preservice teacher education contributed to their knowledge of how to adapt to their future teaching practices by considering their challenging and beneficial aspects.

CONCLUSION

The purpose of this study was to explore how Edmodo in a flipped classroom is perceived, what challenges and benefits of Edmodo and flipped classroom might exist during teacher education program, and what contributions they might add to the student teachers' teaching practice in the future. The data gathered in this study suggested that the use of Edmodo in a flipped classroom was mostly well received because Edmodo and flipped learning model enabled the student teachers to interact with each other before the class, to share documents and to become prepared for the class. The possible challenges were listed as follows: the limited access to the internet, the limited storage of Edmodo, the lack of awareness of student teachers concerning Edmodo and flipped classroom, the lack of responsibility of student teachers to take control of their own learning process, the difficulty of spending time in front of a computer. After all, Edmodo in a flipped classroom was considered useful and effective to a large extent by the student teachers because of their ease of use for an interactive and a collaborative digital learning environment. Hence, most of the student teachers seem to be interested in employing Edmodo and flipped classroom in their classes in the future even though they claimed that they have used them for the first time. In the light of these findings, teacher educators might be suggested to allow student teachers to practice educational technology during their teacher education program, to enhance their digital literacy skills and to raise awareness towards possible handicaps and profits of information and communication technologies for their prospective language classes.

Further research is needed to investigate deeper understanding of the role of experiencing educational technology in a teacher education program, and the study might be extended to explore possible influences of technology use and flipped learning model on these student teachers' teaching practice in the following years.

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APPENDICES

Appendix 1. The questionnaire for student teachers' perceptions towards 'Edmodo' and 'flipped classroom'

Please indicate your agreement on the following statements of the list below:

1	2	3	4	5
Totally disagree				Totally agree

PART A	1	2	3	4	5
1. Edmodo is a good learning platform for learners.					
2. Edmodo has ease of use for anytime and anywhere.					
3. Edmodo provides a safe and secure environment.					
4. Edmodo helps me to develop my digital literacy skills.					
5. Edmodo allows me to participate more easily.					
6. Uploading assignments electronically is interesting and useful.					
7. The feedback provided by the teacher is useful.					
8. It is useful to see the assignments of my peers.					
9. This is the first time I have used this program.					
10. I would like to use Edmodo for my students in the future.					
11. Thanks to this class I have gained an insight how to use Edmodo for my students in the future.					
What did you particularly like about using Edmodo while getting prepared for the classroom?					
Is there anything you *did not* like about using Edmodo? If yes, please specify.					

Please indicate your agreement on the following statements of the list below:

	1	2	3	4	5
Totally disagree					Totally agree

PART B	1	2	3	4	5
12. Flipped classroom is good model of learning.					
13. Flipped classroom is useful for me to engage with a digital lesson at home.					
14. Flipped classroom allows me to learn on my own time and at my own pace.					
15. Flipped classroom allows me to have an interaction and collaborate with my peers.					
16. Flipped classroom is good to have an access beyond the classroom.					
17. Flipped classroom is effective at providing digital sources such as videos and websites.					
18. It is easier to learn the subjects in this way.					
19. It allows us to have more fruitful discussion in the class.					
20. This is the first time I have used this learning model.					
21. I would like to use Flipped classroom for my students in the future.					
22. Thanks to this class I have gained an insight how to practice Flipped classroom for my students in the future.					
What did you particularly like about using Flipped classroom while getting prepared for the classroom?					
Is there anything you *did not* like about using Flipped classroom? If yes, please specify.					

Appendix 2. The open-ended question

Teslim edildi (11)

Please compare our regular way of training in Teaching English to Young Learners Course with doing it via edmodo in a flipped classroom. Which one is more effective? things you particularly find beneficial or problematic?