



RESEARCH ARTICLE

Determination of Pre-Service Teachers' Opinions on Moodle Lesson Management System Application

Derveiş Amca Toklu¹, Pınar Akçaba²

¹Department of Preschool Education, Department of Elementary Education, Atatürk Faculty of Education, Near East University, Near East Boulevard, Nicosia, Cyprus

²Teacher, Ministry of Education, Department of Primary Education, Akdoğan Doctor Fazıl Küçük Primary School, Freedom Street, Famagusta, Cyprus

ARTICLE INFO

Received: Aug 18, 2024

Accepted: Oct 12, 2024

Keywords

Moodle

Preschool teacher training program

Teacher education

ABSTRACT

In this study, it was tried to determine the opinions of teacher candidates about the moodle lesson management system application. 37 teacher candidates participated in this research in which a qualitative method was used. All of the teacher candidates participating in the research are studying in the department of pre-school teaching at the education faculty of a private university. At the end of the applications that lasted for 12 weeks, it was concluded that the teacher candidates had positive opinions about the moodle lesson management system application. In line with this result, suggestions were made about how pre-service teachers can achieve success in technology-supported courses and to integrate all courses with technology.

*Corresponding Author:

dervise.amca@neu.edu.tr

INTRODUCTION

It is known that the developments in the field of information and technology bring along new understandings in the field of education as well as in every field (Şad and Göktaş, 2013). In order for individuals to be active in this process, they must have the ability to closely follow the developments and meet their needs. Teachers have the greatest responsibility in the formation and progress of information societies. Teachers should be trained as life-long learners who follow the innovations that can meet the needs of the society. 21st century for future generations. In order to have the necessary skills, besides the oretical courses, practical courses need to be increased quantitatively, especially in teacher training programs, practical courses are very important (Becit et al., 2009).

In this context, the teaching practice course is one of the sine qua non of teacher training programs. Teaching practice is the most important field work that senior university students must complete in this process in order to become a teacher (Korucu, 2016). Many studies on teaching practice emphasize the importance of teaching practice. In the literature, teaching practice; The importance of the lesson is emphasized by expressing that "to truly learn something is only possible by being present in the teaching activity" (Sevim and Ayas, 2002). In addition, it is stated that the teaching practice course acts as a bridge between theory and practice (Giebelhaus and Bowman, 2002). When

its importance for teacher candidates is investigated; pre-service teachers gain professional competencies such as preparing lesson plans, creating lesson content, applying special and general teaching methods, using and developing basic educational technologies (YÖK, 2007), however, such as understanding the curriculum in their own field, evaluating the course contents, carrying out measurement and evaluation activities. they gain gains that can improve their professional competencies (Wong and Tsui, 2007; Saleekongchai et al., 2024). In general, teaching practice enables pre-service teachers to gain experience by getting to know the teaching profession closely, to realize how they can transform their theoretical knowledge into practice, and to gain experience by taking the first step into the profession.

When the problems experienced by pre-service teachers in teaching practice were investigated; Teacher candidates argue that the duration of the teaching practice course is insufficient and that this course should be included in the curriculum at certain times in each semester, not in the last year. The weekly practice period of the course is considered sufficient. In order for the teaching practice course to be carried out more efficiently, pre-service teachers think that the class and period in which the course takes place should be organized, the practice time should be increased, the practices should be carried out with different age groups in different schools and financial support should be provided to the teacher candidates (Gömleksiz et al., 2017; Riouch et al., 2024).

As a result of the examination of the problems experienced in teaching practice, they were grouped. These problems are handled in three groups as problems experienced in school, faculty and counseling. Teacher candidates; At the beginning of the problems they experience in the school is that the classroom teachers do not have enough experience in teaching the subject due to the intense schedules in the practice classes and the unwillingness to spare enough time for the pre-service teacher to give lectures. In another study in which this problem was addressed, pre-service teachers reported the problems they experienced regarding the application period and stated that the application courses should be continued throughout the semester starting from the second grade (Oğuz, 2004). As a result of another study, it was stated that the reasons why pre-service teachers were not successful in classroom management stemmed from the fact that they were not accepted as teachers by classroom teachers (Koç and Yıldız, 2012). At the beginning of the problem experienced in the faculty and consultancy, it is due to the fact that the advisor and the intern student cannot establish an effective communication and cannot find a solution to their problems immediately. In their study, Oproiu and Chiciooreanu (2012) emphasized that by integrating the teaching practice course with technology, in cases where the stakeholders of the course could not come together due to the problems mentioned, the stakeholders could provide faculty-school cooperation through online environments; Tomlinson and Wittaker (2013), on the other hand, argued that thanks to developing educational technologies, online learning environments can be eliminated by using interaction and communication opportunities as in face-to-face learning environments. In this context, the integration of technology into the teaching practice course is considered important for the solution of many problems.

In this study, it is aimed to determine the opinions of teacher candidates about the moodle lesson management system application. In order to achieve the general purpose of the research, answers to the following questions were sought:

- What are the opinions of prospective teachers about moodle lesson management system?
- What are the advantages of moodle lesson management system according to teacher candidates?
- What is the most liked feature of moodle lesson management system according to prospective teachers?

- What are the limitations of moodle lesson management system according to teacher candidates?

2. METHOD

In this study, a qualitative method was used. The data of the research were collected with a semi-structured interview form. The research was carried out with 37 teacher candidates studying in the preschool teaching department of a private university. 4 of the teacher candidates participating in the research are male and 33 of them are female. The 4th grade teacher candidates stated that they will work as pre-school teachers in pre-school institutions after graduation.

2.1. Research Design

At the end of the 12-week application, a semi-structured interview form was applied to determine the feelings and thoughts of the teacher candidates about the moodle lesson management system. Interviews with teacher candidates lasted between 10-15 minutes.

2.2. Data Collection Tools

A semi-structured interview form was used to determine the opinions of prospective teachers about the Moodle lesson management system.

2.2.1. Interview form.

A semi-structured interview form prepared by the researcher was used to determine the opinions of prospective teachers about the Moodle lesson management system. With the interview form, it was tried to determine the feelings and thoughts of the pre-service teachers about the practice they participated in. Face-to-face interviews at the end of the study were conducted only with volunteer teacher candidates (n=25). In order to collect qualitative data within the scope of the interview form, 4 semi-structured interview questions were asked to the pre-service teachers. These questions are:

- Are you satisfied with the moodle lesson management system application?
- What are the advantages of Moodle lesson management system application?
- Which feature of the Moodle lesson management system application did you like the most?
- What are the limitations of the Moodle lesson management system application?

2.3. Analysis of Data

In the data analysis part, in-depth analysis method was used. In the in-depth analysis method, the data are analyzed and interpreted in depth. In this method, data is defined, classified and interpreted by coding. In-depth analysis; content analysis, discourse analysis or speech analysis methods (Sönmez, 2014). The data obtained within the scope of the research were analyzed using the content analysis method.

In the content analysis method, first of all, the qualitative data obtained are coded separately by the researcher and gathered under themes. In the second stage, the themes are compared and it is confirmed whether the determined codes represent conceptual themes. Thus, the aim at this stage is to increase the validity of the research by providing harmony and consistency in data analysis. In the third stage, the common themes obtained are grouped within themselves and the findings are interpreted (Yıldırım and Şimşek, 2008).

In the research, the interviews were video and audio recorded in line with the permissions obtained from the pre-service teachers. Later, for the analysis of the obtained data, the opinions of the pre-service teachers were transcribed, and the content analysis method was used in the analysis of the data. In the content analysis, in the first stage, the qualitative data were coded separately by the researcher considering the word groups expressed by the participants, themes were created in line

with the codes obtained and the codes were categorized under themes. At this stage, while analyzing the opinions of the pre-service teachers, groupings were made according to the similarity of the expressions. A special code number was given to the pre-service teachers whose opinions were consulted during the analysis. In the second stage, in order to test the reliability of the semi-structured interview form, the answers given by the pre-service teachers to the open-ended questions were examined by the researcher and five experts from the field (preschool education specialist n=3 and education program and teaching specialist n=2). Codes with "separation" were determined. Reliability calculation of qualitative data was performed using Miles and Huberman's (1994) formula [Percent of Agreement = Consensus / (Agreement + Disagreement) x 100]. As a result of this research, 80 of the 82 codes determined by the researcher were approved, and a consensus of 97% was achieved on the suitability of the codes (Büyüköztürk et al., 2013). Based on this result, it can be said that the coding performed is reliable. With the consensus obtained, the codes obtained from the qualitative data were categorized under themes, and the opinions of the grouped teacher candidates were interpreted in the findings section. At the last stage, in order to support the opinions stated in the findings section and increase the validity of the study, quotations from the views of the sample teacher candidates regarding each of the themes obtained from the research were made. The sample opinions expressed in this section are the P1, P13, P21 expressed in codes. The data obtained were also supported by the literature.

3. RESULTS

The findings obtained from the qualitative data within the framework of the purposes of the research are interpreted in the table below. Opinions of Teacher Candidates on the Application of Moodle Lesson Management System Face-to-face interviews were conducted with the volunteer teacher candidates (n=25) in order to determine the feelings and thoughts of the teacher candidates participating in the research about the moodle lesson management system application. In the study, in which a semi-structured interview form was used, 4 questions were asked to the pre-service teachers and the themes and categories created for these 4 questions, along with their frequency distributions, are given below.

Table 1. Opinions of pre-service teachers about the Moodle lesson management system application

Theme	Code	f
	yes	24
Satisfaction		
	partially	1

At the end of the application, the teacher candidates were asked about their satisfaction with the moodle lesson management system environment and it was seen that almost all of them (n=24) were pleased to participate in the applications. Only one of the pre-service teachers stated that they were bored of participating in practices in moodle environment. When the pre-service teacher was asked why she had a negative opinion about the moodle environment, she stated that she did not like technology very much and did not want to spend her time in technological environments:

P21: "Because I work, I cannot follow technology closely, and I do not like to spend time in front of the computer in my spare time".

However, as seen in Table 1, almost all of the pre-service teachers were satisfied with performing project-based learning activities in the moodle environment. In this context, it can be said that pre-service teachers have positive views on the moodle environment. The advantages of the moodle environment in teacher education are given in Table 2.

Table 2. Advantages of moodle lesson management system application

Theme	Code
An effective environment	
Permanent learning	21
Active Participation	19
Information sharing	15
Gaining professional competence	14
Free use of time and space	11
It's free	9
Developing thinking skills	
Developing different perspectives	17
Ability to express myself comfortably	8
Problem solving	7
Ability to self-assess	6
Questioning	4
Effective learning	
Motivation	25
Partnership	20
Effective communication	18

Pre-service teachers' views on the advantages of the moodle environment were grouped under 3 different themes. Pre-service teachers stated that the moodle lesson management system is an effective environment in teaching practice. While the majority stated that the moodle environment was effective because it provided permanence in learning (n=21), some of them stated that it was effective due to active participation in the lesson (n=19). While 15 pre-service teachers explained that environments such as the moodle lesson management system provide information and experience sharing for the teaching profession, 14 pre-service teachers have gained professional competence, and 11 pre-service teachers have explained that they use space and time freely in education, 9 pre-service teachers stated that it is an advantage for them that the application is free:

P20: "We can study without being in a classroom environment and it enables us to learn permanently"

P19: "It is a very useful application for information sharing. Forming a group and seeing different opinions and gaining more knowledge thanks to the shared information"

P3: "Learning by discussion"

P12: "It allowed me to convey my ideas about a subject comfortably"

P22: "There is no time or place limit. I had the chance to follow the posts by logging into the moodle environment at any time with my computer or phone"

P21: "It is an environmentally friendly application as it does not use paper. It offers free access. It is a portable learning method"

17 teacher candidates stated that they gained different perspectives on events thanks to the moodle lesson management system. Eight pre-service teachers stated that they were able to convey their thoughts without hesitation, since the moodle lesson management system application was also used outside the classroom. Pre-service teachers, who stated that they had the chance to see each other's thoughts thanks to online discussions, stated that they could produce solutions to problems (n=7), realized their professional competencies and evaluated themselves (n=6), and gained the ability to question the situations they encountered (n=4). explained that they gained behavior at the synthesis level:

P18: "Creating a group and seeing different opinions, changing our perspective by gaining more knowledge thanks to shared information"

P8: "We had discussions in moodle environment by producing solutions for the problems experienced in teaching practice"

P15: "I noticed my shortcomings in myself", "I had the opportunity to test myself with the answers I gave to the questions asked"

P23: "How competent or inadequate am I about my observations? It made me question the question"

P5: "Sometimes I cannot express myself by speaking in class, but I can express myself comfortably in moodle"

Pre-service teachers who stated that they learned effectively in the moodle environment stated that they were motivated towards the lesson (n=25) and stated that they had the opportunity to work collaboratively (n=20). Some of the pre-service teachers stated that the moodle environment strengthens effective communication (n=18):

P17: "Participating in the course willingly increased my motivation to learn"

P4: "We had the opportunity to share our experiences by collaborating with my friends on the determined topics"

P9: "It provided a chance to share our own thoughts, discuss about a topic, think about and answer the questions asked, and have an effective conversation"

Teacher candidates were also asked which features they liked most in the moodle lesson management system application. The opinions of the pre-service teachers regarding this question are given in Table 3.

Table 3. The features that teacher candidates like the most in the moodle lesson management system application

Theme	Code	f
	Instant feedback and correction	21
	Contact	17
Properties	Information sharing	13
	Usefulness of the application	12

As seen in Table 3, pre-service teachers stated that immediate feedback and corrections for sharing in moodle environment are their favorite features (n=21). While 17 pre-service teachers stated that they liked the effective communication feature in the moodle environment, some of them stated that the moodle environment offered an opportunity to share information (n=13). 12 pre-service teachers reported that the moodle environment is a useful application:

P1: "It was very nice that our teacher gave positive feedback to our answers and made comments"

P7: "I liked the communication booster feature"

P13: "I liked the feature that allows us to share ideas and learn new information"

P20: "I liked its usefulness and visual structure"

As can be seen above, the majority of teacher candidates have positive views about the moodle environment.

The opinions of pre-service teachers about the limitations of the Moodle lesson management system application are given in Table 4.

Table 4. Limitations for the moodle environment

Theme	Code	f
Limitations	internet	9
	No	16

While 16 of the pre-service teachers reported that there was no limitation of moodle application, 9 pre-service teachers reported that internet connection could be the main limitation.

P3: "Sometimes, when I log in to the application, it would cause opacity to prevent me from accessing and my participation in events was delayed"

The results obtained from the research indicated that the majority of teacher candidates willingly participated in the practices in the moodle environment. Based on this result, it can be said that the moodle environment is a useful application in teaching practice.

4. DISCUSSION AND CONCLUSION

In this study, which aims to determine the opinions of pre-school teacher candidates about technology-assisted teaching practice, it was concluded that pre-service teachers had positive thoughts about the application of moodle lesson management system. When the results obtained from the research were examined, it was found that in the face-to-face interviews with the prospective teachers, they were satisfied with the moodle application, the moodle application was an effective environment and permanent learning was provided at a high rate, they gained different perspectives due to the opportunity to express their opinions individually, and their learning motivation was strengthened. They reported that they acted in cooperation, effective communication was ensured between the teaching staff and their peers, and they had the chance to get immediate feedback when they asked questions through the system. In practice, they stated that the only issue that can be considered as a limitation may be the problems originating from the internet.

Similar to the results found in the study; Başkan (2023), distance education application with Moodle platform: In the grammar course framework online education example study for French teacher candidates, it was concluded that they achieved positive and productive user experiences thanks to the use of interactive content and a structured platform in the distance education course with Moodle. Yıldırım Altınok (2023), online teaching application for english teacher candidates in the research conducted on collaborative experiences in the course, prospective teachers it has been

concluded that interactive online application participation increases the quality of application courses and provides a dynamic learning environment. Kılıç and Gürler (2022), digital transformation in higher education: student opinions on the research-inquiry-based blended learning environment were determined, and it was concluded that they achieved more effective and permanent learning with online applications in the education process, and therefore, improvements in temperatures were reached in different of the courses. Altıok et al. (2017), concluded that the developed web-based support system brought various advantages to students in their study on the attitudes of information technology teacher candidates towards the school experience course and their views on the web-based support system. Elçiçek and Bahçeci (2016), in their study on examining the usefulness of a moodle-based system designed for the teaching practice course, concluded that it is a software that can meet the needs of teacher candidates for teaching practice and that it increases the effectiveness of the course. Sarıkaya (2014), in this study on examining the usefulness of a web-based system developed for school experience and teaching practice courses, it was concluded that the web-based system contributed to the functioning of the teacher candidates' teaching practice course. Caner et al. (2013), in their study on a new trend in teacher education, they concluded that the majority of pre-service teachers showed a positive attitude towards the use of technology, especially the web-component in the lesson. Arkün (2011), in the study of developing a social media-based model for faculty-school cooperation, it has been concluded that school applications for faculty-school cooperation positively affect their use of educational technologies when conducted over online environments. Alkan and Erdem (2010) in their study, it was concluded that the use of educational technologies in the teaching practice course positively affected them. In the context of these results, it is suggested to researchers to determine stakeholder opinions by applying web-based environments developed for teaching practice in all departments receiving pedagogical formation education.

AUTHOR CONTRIBUTIONS

All authors contributed to the study conception and design. Design of the research, material preparation, data collection and analysis were performed by ATD and AP.

The first draft of the manuscript was written by ATD. AP commented and

corrections on previous versions of the manuscript. All authors read and approved the final manuscript.

ACKNOWLEDGMENTS

The authors would like to thank all stakeholders who contributed to the study.

REFERENCES

- Alkan F. and Erdem E. 2010. The attitudes of student teachers towards educational technologies according to their status of receiving teaching application lessons. *Procedia Social and Behavioral Sciences*, 2: 2523-2527.
- Altıok S, Kutlu Z ve Yükseltürk E. 2017. Bilişim teknolojileri öğretmen adaylarının okul deneyimi dersine yönelik tutumları ve hazırlanan web tabanlı destek sistemi ile ilgili görüşleri. *Journal of Instructional Technologies & Teacher Education*, 6(2): 78-86.
- Arkün S, 2011. Fakülte-okul işbirliği için sosyal medya tabanlı bir modelin geliştirilmesi:
- Başkan N S, 2023. Mise en application de l'enseignement a distance sur moodle : etude d'un cours de grammaire pour de futurs professeurs de Français. Doktora Tezi, Marmara Üniversitesi, İstanbul.
- Becit G, Kurt A ve Kabakçı I, 2009. Bilgisayar öğretmen adaylarının okul uygulamaderslerinin yararlarına ilişkin görüşleri. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 9(1), 169-184. *Bilim Dergisi*, 37(134), 223-236.

- Büyüköztürk Ş, 2014. *Bilimsel araştırma yöntemleri*. Pegem Akademi.
- Caner M, Yüksel İ and Keçik İ, 2013. A new trend in teacher education: A web-enhanced methodology course. *Social and Behavioral Sciences*, 70, 1831-1838.
- course design and Implementation. British Council.
- Elçiçek M ve Bahçeci F, 2016. Öğretmenlik uygulaması dersi için tasarlanan moodle tabanlı birsistemin kullanılabilirliğinin incelenmesi. *Eğitim Teknolojisi Kuram ve Uygulama*, 6(2).
- Giebelhaus C R and Bowman C L T, 2002. Teaching mentors: Is it worth the effort? *The Journal of Educational Research*, 95 (4), 246-254.
- Gömlüksiz M, Ülkü Kan A ve Öner Ü, 2017. Etkili öğretmenlik eğitimi perspektifinde öğretmenlik uygulaması dersine eleştirel bir yaklaşım. *Journal of History School*, 10(17), 927-954.
- Kılıç A and Gürler N, 2022. Digital Transformation in Higher Education: Student Views on Inquiry-Based Blended Learning Environment. *Journal of University Research*, 5(2), 234-247.
- Koç C ve Yıldız H, 2012. Öğretmenlik uygulamasının yansıtıcıları: Günlükler. *Eğitim ve Korucu*T.A.,2016.Staj Yönetim sisteminin geliştirilmesi ve geliştirilen sisteme yönelik öğretmen adaylarının görüşleri.*Gazi Eğitim Bilimleri Dergisi*, 2(2), 93-128.
- Oğuz A, 2004. Okul Deneyimi I dersinin öğretmen adayları üzerindeki etkileri. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 11, 141-162.
- Okul uygulamaları örneği. Yayınlanmamış Doktora Tezi, Ankara.
- Oproiu G C and Chicioreanu T D, 2012. Using virtual learning environments in adulteducation. *Scientific Research & Education in the Air Force-AFASES*,1.
- Riouch, A., Benamar, S., Ezzeri, H., & Cherqi, N. (2024). Assessing Student Perceptions of Pollution and Management Measures Related to COVID-19 Vaccination Tools in Morocco. *Pakistan Journal of Life and Social Science*, 22(2).
- Şad S N and Göktepe Ö, 2013. Investigation of traditional and alternative measurement and evaluation approaches among teaching staff at higher education. *Ege Eğitim Dergisi*, 14(2), 79-105.
- Saleekongchai, S., Bengthong, S., Boonphak, K., Kiddee, K., & Pimdee, P. (2024). Development assessment of a Thai university's demonstration school student behavior monitoring system. *Pakistan Journal of Life and Social Science*, 22(2).
- Sarıkaya Y, 2014. Okul deneyimi ve öğretmenlik uygulaması dersleri için geliştirilen web tabanlı bir sistemin kullanılabilirliğinin incelenmesi. *Fırat Üniversitesi Eğitim Bilimleri Enstitüsü, Yüksek Lisans Tezi, Elazığ*.
- Sevim S ve Ayas A, 2002. Okul deneyimi-i etkinliklerinin yeniden düzenlenmesi ve etkinliği, v.ulusal fen bilimleri ve matematik eğitimi kongresi, ODTÜ. *Bildiriler Kitabı II.Cilt*, (1312-1317).
- Sönmez V ve Alacapınar F, 2014. Örneklandırılmış bilimsel araştırma yöntemleri. Anı Yayıncılık.
- Tomlinson B and Whittaker C (Ed.), 2013. *Blended learning in english language teaching*:
- Wong J. L. N and Tsui A. B. M, 2007. How do teachers view the effects of schoolbased inservice learning activities? a case study in China. *Journal of Education for Teaching*, 33(4), 457-470.
- Yıldırım Altınok F B, 2023. İngilizce öğretmen adaylarının çevrimiçi öğretmenlik uygulaması dersinde işbirlikçi tecrübeleri üzerine bir araştırma. *Doktora Tezi. Hacettepe Üniversitesi, Ankara*.
- YÖK, 2007. *Öğretmen Yetiştirme ve Eğitim Fakülteleri (1982-2007)*.