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Examining the Views of Instructors on Micro Teaching Technique

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Abstract

The purpose of this qualitative research is to examine the views of the instructors on the micro teaching technique. Content analysis was conducted in the analysis. Criterion sampling was used for the study participants in the sample. Instructors teaching micro teaching, special teaching methods or teaching principles and methods courses were determined as the criterion. As a result, the instructors expressed their views on the contribution of the micro teaching technique to the professional development of teacher candidates, such as applying different teaching techniques, principles, methods, recognizing deficiencies, self-assessment, self-confidence, gaining experience, providing preparation for the teaching profession and the opportunity to get to know the classroom environment. According to instructors, the micro teaching technique provides critical thinking skills, improves cooperation skills and problem solving skills in relation to the effect of the micro teaching technique on the solution of the problems that the teacher candidates may encounter in their professional lives.

Keywords: Instructors, micro teaching technique, micro teaching course, special teaching methods, teaching principles and methods.

About the Article

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Introduction

Teaching is one of the most significant professions in human history, and the teacher is a vital contributor to education. For many years, people have sought to pass down information, particularly their culture, to future generations. Teaching has gained importance over time and has become a profession. However, societies have not been content with teaching being just a profession. They have also been in search of qualified teachers to educate. This situation brought about the testing and using different approaches, models, strategies, methods, and techniques in the training of teachers (Küçük & Bağ, 2018, p. 146; Bars & Kinay, 2019, p. 29). One of the techniques used in teacher training is micro teaching. Micro teaching is a teaching technique that encourages teachers or teacher candidates to see the approaches they use to help students gain the determined goals and to identify and correct their mistakes and deficiencies (Küçük & Bağ, 2018, p. 146). In addition, in the micro teaching technique, teacher candidates aim to perform another skill after mastering one (Singh, 2006; Sharma & Chandra, 2003; Chandra & Sharma, 2004). For this reason, it is seen as necessary for teacher candidates to try one teaching skill at a time. In micro teaching, teacher candidates aim to apply the teaching steps successfully rather than teaching a subject (Demirel, 2004). The micro teaching technique is critical to ensure the professional development of teacher candidates in the pre-service and in-service stages. It is a scaled-down teaching application that reduces the complexity of the real classroom environment in terms of class size, duration of the lesson, variety of activities, teaching, and applying a single subject (Sucuoğlu & Güven, 2019, p. 101). In conclusion, micro teaching is a technique teacher candidates' course experiences are observed by lecturers, teachers, and other teacher candidates through short video shots. By doing so, teacher candidates realize the positive aspects of the course delivery methods in line with the given feedback, complete their deficiencies, and correct their mistakes (Çelebi & Erginer, 2019, p. 126). In other words, micro teaching can be expressed as a set of activities for the education of teacher candidates that are carried out in a controlled manner to acquire teaching skills.

Micro teaching is a teaching technique in which an artificial environment is created for short lessons, where each lesson has teaching purposes, the number of students is limited, and all participants, including the teacher candidate, participate in the evaluation processes (Sucuoğlu & Güven, 2019, p. 110). In addition, it is seen that micro teaching practices have an effective place in teacher education among the preparation practices for teacher candidates such as collaborative learning practices, active short courses, simulated work-based teaching practices, and faculty mentoring (Dunst, Hamby, Howse, Wilkie & Annas, 2019, p. 15).

The micro teaching technique which was met with excitement when it was introduced in teacher education, has quickly found application and has been given importance by those who teach at teacher faculties. In recent times, thanks to technological inventions and the integration of educational practices with technology, its value in teacher education approaches is gradually increasing (Çelebi & Erginer, 2019, p. 125). Micro

teaching, which traditionally means observing the teacher's in-class behavior and correcting their behavior with the feedback given, now analyzes the thinking processes of the teacher to learn how to teach, with the influence of cognitive psychology. It provides new generation teachers with the skills of problem-solving, creative thinking, strategic and practical thinking, and expressing themselves well (Çelebi & Erginer, 2019, p. 126). The instructors suggest that micro teaching has contributed to the professional development of academicians working in teacher training institutions, and it should be a part of teacher education for teacher candidates (Santagata, Zannoni & Stigler, 2007). Besides, in the micro teaching technique, apart from the classical lesson, that is, the teacher or the instructor teaching the lesson and giving homework at the end, it is possible to submit the video of the lesson to the students, share the learned information in the lesson, and shape the gains accordingly (Liu, Wei & Gao, 2016; Sams & Bergmann, 2013). Today, micro teaching techniques are used in this context and contribute significantly to teacher education (Vaughan, 2014).

Micro teaching has now been integrated into the programs at faculties of education as an elective course. When the literature is examined, it is seen that many studies have been conducted on applying micro teaching techniques in the training of teacher candidates in recent years. However, there is a need for research to determine the views of instructors on micro teaching techniques. In this context, the findings of the current study can reveal the thoughts of the instructors about how the micro teaching technique will contribute to the professional development of the teacher candidates and to solving the problems they may encounter in their professional lives. In addition, it is expected that the current research will make significant contributions to the research on teaching techniques in terms of how technological tools can be used in micro teaching by determining the instructors' different views and suggestions on the treatment of the subject in the lessons.

In recent years, with the widespread use of the micro teaching technique in teacher education and the increase in the number of studies conducted on the subject, the need to examine and evaluate the instructors' views on the technique has emerged. To perform these examinations and evaluations, it is necessary to benefit from the instructors who apply the technique in the classroom. It is thought that a study in which the instructors are directly involved and their opinions on the technique are examined is essential in increasing the effectiveness of the micro teaching technique. Looking at the literature, there is a need to evaluate the instructors' views in scientific studies where the micro teaching technique has been applied.

Purpose of the Study

The purpose of the current study is to reveal the views of instructors on micro teaching. In line with this purpose, answers were sought for the following sub-objectives:

1. What are the views of instructors regarding the contribution of micro teaching to the professional development of teacher candidates?

2. What are the views of instructors regarding the impact of micro teaching on solving the problems that teacher candidates may encounter in their professional lives?

3. What are the views of instructors regarding how to use technological tools and equipment in micro teaching?

4. What are the views of instructors regarding covering the topic of micro teaching in the lesson?

Method

Research Design

The current research, which aims to examine the views of instructors regarding the micro teaching technique, was conducted using the basic qualitative research design, one of the qualitative research designs. Qualitative research is a research method that uses qualitative data collection methods such as observation, interview and document analysis, and aims to determine events in their natural context as they are (Yıldırım & Şimşek, 2016, p. 41).

Basic qualitative research focuses on understanding and interpreting participants' experiences, views, and perspectives. The researcher collects data through such tools as interviews, observations, or document analysis. They decide on the questions, the phenomenon, or the documents related to the research within the context of the theoretical framework. In basic qualitative research, it is necessary to distinguish between data and separate them into appropriate categories when analyzing them. The researcher creates themes from the data in the findings section and tries to make sense of the participants' statements (Merriam, 2013).

The data for this study was collected using a semi-structured interview, one of the qualitative data collection techniques. The semi-structured interview technique allows the researcher to examine the researched topic in depth with fixed-choice answers (Büyüköztürk et al., 2013, p. 152 & Patton, 2005). This technique allows the researcher to ask the participants questions prepared in advance. It provides researchers partial flexibility during the interview and to rearrange the interview questions in the questions and discussions (Ekiz, 2017, p. 63).

Research Participants

The criterion sampling method, one of the purposeful sampling methods, has been used in the study. In the criterion sampling method, it is essential to have a sample that meets the previously determined characteristics. The researcher can form the criteria list or use a previously prepared one (Yıldırım & Şimşek, 2016, p. 122). In this study, the criteria are the instructors who teach "micro teaching, special teaching methods or teaching principles and methods" courses at a state university. The research group includes 23

instructors: 17 men and 6 women. Table 1 shows the data regarding the personal information of the instructors.

Table 1. *Personal Information of the Instructors Participating in the Research*

Personal Information	Groups	N	%
Gender	Male	17	74
	Female	6	26
		23	**100**
Title	Research Assistant with a PhD	5	22
	Lecturer	1	5
	Assistant Professor	4	17
	Associate Professor	7	30
	Professor	6	26
		23	**100**
Age	30-35	5	22
	36-40	7	30
	40+	11	48
Total		**23**	**100**

Table 1 shows that 17 (74%) of the instructors participating in the study are male, 6 (26%) are female. According to the titles of the instructors, 5 (22%) are Research Assistants with a PhD, 1 (5%) is Lecturer, 4 (17%) are Assistant Professors, 7 (30%) are Associate Professors and 6 (26%) are Professors. 5 (22%) of the instructors are between the ages of 30-35, 7 (30%) are between the ages of 36-40, and 11 (48%) are over 40.

Data Collection

The data of the study were collected by the researchers between 27/09/2021 and 30/01/2021 with the Ethics Committee Approval numbered E-14679147 and dated 09/08/2021 given by the Dicle University Social and Human Sciences Ethics Committee and the research permit numbered E-53959260 and dated 20/08/2021 given by the Dicle University Ziya Gökalp Faculty of Education. The data were collected using the interview method with a semi-structured form. While collecting the data, the instructors

who teach any of the "micro teaching, special teaching methods or teaching principles and methods" courses were selected as criteria. By scanning the scientific research literature on micro teaching techniques, an open-ended interview form consisting of four questions was created in draft form. Before finalizing the interview form, the researchers requested views from four experts in the field of curriculum and instruction and two experts in linguistics. After the feedback was received, three of the four experts who provided views in the field of education programs and teaching were asked to give their views again. Later, the interview questions were finalized, and it was decided to include a total of four questions in the interview form. The interviews in the study lasted between 25 and 40 minutes, and after the participants were asked to express their views in writing in line with the questions posed, they were asked to transfer their views to the interview form. Content analysis was used to analyze the data obtained as a result of the interview. The common characteristics of the instructors' views on micro teaching were determined, and themes were created. Then, the themes were divided into codes, and the views of the lecturers were explained. In addition, direct statements of the lecturers were given below the tables to support the findings.

Data Analysis

The data were analyzed using the content analysis technique. Content analysis has been defined as a systematic and repeatable technique for compressing texts consisting of many words into fewer content categories based on clear coding rules (Stemler, 2001, p. 2). According to Stemler (2001, p. 2), although content analysis in qualitative research simply means counting word frequencies, this technique goes far beyond simple word counts. Content analysis is a systematic and repeatable process for compressing the text into fewer content categories based on open coding rules (Krippendorff, 2004, p. 221). In addition, in content analysis, researchers bring together data with common characteristics as defined concepts and themes and interprete them in a meaningful way (Yıldırım & Şimşek, 2016, p. 242). What makes this technique particularly important and meaningful is that it is based on coding and categorizing data (Krippendorff, 2018). The views of the instructors who participated in the current study were examined in detail, and then the findings were thematized from a holistic perspective and interpreted in the context of the sub-objectives of the research.

Reliability of the Study

To ensure the reliability of the research during the data analysis process, the answers given by the instructors to the interview questions were examined and coded independently and separately by two researchers. After the coding, the codings made by both researchers regarding the research data were compared. By comparing the codings made by the two researchers, similar and different codes in both codings were determined. However, one way to measure reliability is to measure the percentage of agreement between raters. This involves adding up the number of cases coded identically by two raters and dividing by the total number of cases (Stemler, 2001, p. 3). To ensure internal validity and transferability in the research, the aim, method, study

group and purpose of this research are explained in detail. Characteristics of the group, sampling method, data collection, data analysis process, interpretation of findings and all processes related to the results are explained in detail.

The reliability formula suggested by Miles & Huberman (1994, p. 64) was used to find out the reliability of the study: Reliability = Consensus / (Consensus + Disagreement). In the current research, intercoder reliability was calculated twice by two different researchers. In the first coding, the intercoder reliability coefficient was calculated as .89. After one week, it was calculated again, and the coefficient was found as .91. According to Miles & Huberman (1994, p. 64), since a minimum rate of .80 is accepted for intercoder consensus in studies, this study is reliable.

Direct quotes are the raw data source in qualitative studies (Labuschagne, 2003). Sutton & Austin (2015) emphasized that codes and themes should be supported by taking participant views through direct quotes. So, some of the answers of instructors to the research questions are presented in the findings section to ensure the reliability of the study. While expressing these quotes, codes were specified for each instructor using letters and numbers such as "I-1, I-2, I-3..."

Findings

The data obtained from the opinions of the instructors about the micro teaching technique were analyzed and presented in this section. Themes and codes were created in accordance with the sub-objectives of this research, and the data were presented in the form of tables. In addition, the findings were supported and interpreted by giving quotations from the opinions of the instructors.

Findings Regarding the First Sub-Objective

Table 2. *Views of the Instructors on the Contribution of Micro Teaching to the Professional Development of Teacher Candidates*

Theme	Codes	Frequency (f)	Participants
The contribution of micro teaching to the professional development of teacher candidates	Applying different teaching techniques, principles, methods, and strategies	2	I-1, I-2
	Realizing deficiencies	6	I-1, I-9, I-10, I-12, I-16, I-17,
	Self-assessment	7	I-1, I-4, I-11, I-13, I-17, I-19 I-23
	Self-confidence	6	I-1, I-3, I-8, I-10, I-16, I-17
	Providing experience	10	I-3, I-4, I-8, I-12, I-14, I-16, I-17, I-18, I-19, I-22
	Peer assessment	2	I-4, I-16
	Opportunity to practice	5	I-5, I-11, I-15, I-18, I-23
	Providing feedback	3	I-5, I-7, I-9
	Self-criticism	2	I-5, I-16, I-10,

	Preparation for the teaching profession	5	I-6, I-12, I-20, I-21, I-22
	Classroom management skills	4	I-10, I-11, I-14, I-17
	Using materials	2	I-10, I-11
	Communication skills	4	I-11, I-14, I-17, I-18
	Opportunity to get to know the classroom environment	3	I-14, I-15, I-18

Table 2 shows the views of the instructors regarding the contribution of the micro teaching technique to the professional development of teacher candidates. The highest frequency among the views on the theme "the contribution of micro teaching to the professional development of teacher candidates" is in the code “providing experience” (f=10). The "providing experience" code is followed by: “self-assessment” (f=7), “realizing deficiencies” (f=6), “self-confidence” (f=6), “opportunity to practice” (f=5), “preparation for the teaching profession” (f=5), “classroom management skills” (f=4), “communication skills” (f=4), “providing feedback” (f=3), “opportunity to get to know the classroom environment” (f= 3), “applying different teaching techniques, principles, methods, and strategies” (f=2), “Peer assessment” (f=2), “self-criticism” (f=2), and “using materials” (f=2).

According to the codes in Table 2, the views of some of the instructors are expressed below in order of codes:

I-12: Micro teaching provides teacher candidates with an experience close to (similar to) the classroom environment. Through micro teaching, teacher candidates have the opportunity to see their strengths and weaknesses. In addition, teacher candidates can develop their professional competencies through micro teaching.

I-19: Micro teaching helps teacher candidates experience the teaching profession, even if on a small scale, and gain experience imparting knowledge to students. It helps teacher candidates gain and develop teaching skills. It also helps teacher candidates self-assess their teaching process and abilities.

I-10: I think micro teaching is quite effective in developing professional skills. Through micro teaching, teacher candidates are more aware of their strengths and weaknesses and try to develop these aspects, thus gaining self-confidence. I also think it is quite effective in developing reflective thinking skills. It paves the way for teacher candidates to think reflectively, easily share their thoughts based on theoretical knowledge regarding the materials and techniques, and reveal the aspects that work and do not work. In addition, it offers teacher candidates the chance to make first-hand concrete observations about classroom management, body language, and use of voice. Besides, it allows them to see their deficiencies in these areas. In addition, through micro teaching, they can test new methods that work or do not work in the classroom, and a critical perspective can be developed.

I-5: This technique provides teacher candidates with the opportunity to practice outside of the teaching practice course. It provides teacher candidates with feedback on their strong teaching skills or those that need to be developed. Besides, thanks to this technique, teacher candidates can self-criticize their teaching skills and processes.

When the opinions of the instructors were evaluated, they stated that the micro teaching technique provided more experience regarding the contribution of the prospective teachers to their professional development. In addition, according to the instructors, the micro teaching technique improves students' ability to make self-evaluations, to realize their professional deficiencies and to develop self-confidence skills. In addition, instructors stated that the micro teaching technique provided students with the opportunity to practice and helped them to give feedback.

Findings Regarding the Second Sub-Objective

Table 3. *Views of Instructors on Suggestions to Solve Problems that Teacher Candidates May Encounter in Their Professional Lives*

Theme	Codes	Frequency (f)	Participants
Suggestions for solving problems that teacher candidates may encounter in their professional lives	Developing critical thinking skills	3	I-2, I-8, I-23
	Developing collaboration skills	2	I-2, I-10
	Developing effective strategies	2	I-12, I-16
	Increasing class participation	2	I-14, I-18
	Developing problem-solving skills	9	I-1, I-3, I-8, I-10, I-12, I-14, I-18, I-19, I-20,

Table 3 shows the views of the instructors regarding the solutions to problems teacher candidates may encounter in their professional lives. The highest frequency of codes among the instructors who expressed their views on the theme of "micro teaching suggestions for solving problems that teacher candidates may encounter in their professional lives" is in the code "developing problem-solving skills" (f=9). The frequency of the "developing problem-solving skills" code is followed by the codes "developing critical thinking skills" (f=3), "developing collaboration skills" (f=2), "developing effective strategies" (f=2), and "increasing class participation" (f=2), respectively.

The views of some of the instructors according to the theme in Table 3 are expressed below in order of codes:

I-2: Micro teaching develops the critical thinking skills of teacher candidates. It creates the opportunity for quick solutions to problems that may be encountered during the lesson. Thanks to its critical thinking skills, it allows teacher candidates to approach the solution of their problems with more than one option. Since it is a technique open to collaboration, it enables them to produce solutions for problems that they have difficulty noticing.

I10: We can say that micro teaching is a simulation of the teaching process. In this context, it creates awareness about the problems that teacher candidates will encounter in their professional lives, such as possible discipline problems in the classroom, the use of technological tools and equipment, and low participation of students. Besides, micro teaching provides experiences about the differences between a real classroom environment and an idealized one. Through micro teaching, teacher candidates try to understand and solve the problem by collaborating or exchanging ideas with other candidates, thus contributing to the teacher candidates' skills in collaborative work or teamwork. They also gain experience in getting help from other friends. In addition, it helps teacher candidates develop different perspectives toward understanding the nature of the problem by allowing them to make self-assessments. Thus, their problem-solving skills also improve in this process.

I-12: Thanks to micro teaching, they can develop effective strategies and behavioral models to solve the problems they encounter by making use of their previous observations.

When the opinions of the instructors were evaluated, they expressed their opinions on the effect of the micro teaching technique on solving the problems that prospective teachers may encounter in their professional lives in this theme. According to the opinions of the instructors, micro teaching technique contributes more to the development of problem-solving skills of prospective teachers. In addition, the instructors expressed the benefits of this technique in terms of gaining critical thinking skills, gaining cooperation skills, developing effective strategies and increasing participation in the lesson.

Findings Regarding the Third Sub-Objective

Table 4. *Views of Instructors Regarding Teacher Candidates' Use of Technological Tools in Micro Teaching*

Theme	Codes	Frequency (f)	Participants
Being able to benefit from technological tools in micro teaching	Recording video and audio	9	I-1, I-3, I-4, I-6, I-9, I-11, I-12, I-15, I-19
	Using a projector	3	I-2, I-4, I-8
	Using a tablet	2	I-2, I-19
	Using a smart (interactive) board	7	I-2, I-4, I-8, I-14, I-15, I-16, I-18
	Using mobile devices (smartphones)	3	I-12, I-18, I-19
	Using technological programs	2	I-13, I-14
	Using web tools (Kahoot, Zoom, Google Class)	5	I-10, I-14, I-16, I-17, I-20
	Using simulations	2	I-16, I-18

Table 4 shows the views of instructors regarding teacher candidates' use of technological tools in micro teaching. Among the codes formed by the answers received from the instructors who expressed their views on the theme of "Being able to benefit more from technological tools in micro teaching" the highest frequency is seen in the code "recording video and audio" (f=9). This code is followed by the codes "using a smart

(interactive) board" (f=7), "using web tools (Kahoot, Zoom, Google Class)" (f=5), "using a projector" (f=3), "using mobile devices (smartphones)" (f=3), "using a tablet" (f=2), "using technological programs" (f=2) and "using simulations" (f=2).

The views of some of the instructors according to the themes in Table 4 are expressed below in order of codes:

I-4: In micro teaching, teacher candidates' experiences are recorded using recording (video) devices. Thus, teacher candidates are provided with the opportunity to make self-evaluations. Besides, teacher candidates can use technological tools and equipment such as smart boards, projectors, and computers during their lectures.

I-15: Interactive boards should be used effectively for educational purposes during the lesson, not just for showing slides, of course. Teaching materials such as video and audio files should also be used. Accessing videos suitable for lessons is easier today than before. Teacher candidates should learn to use appropriate videos in their lessons (especially for disciplines such as science, foreign language, and social sciences).

I-18: Thanks to smartphones, recording micro teaching has become easier. Providing environments where teacher candidates can benefit from applications such as smart boards and virtual reality, which are likely to be used in real classroom environments, can make micro teaching more successful.

In this theme, the opinions of the instructors on how technological tools can be utilized in micro teaching techniques were examined. According to the opinions of the instructors, it was determined that cameras, video and audio recording devices were mostly used while applying the micro teaching technique. In addition, smart boards and web tools are also frequently used. Additionally, it was determined that other technological tools used when implementing the micro teaching technique were projectors and mobile devices. It was also stated by the instructors that tablets, technological programs and simulation programs were used together with other technological tools in the micro teaching process. It was also stated by the instructors that tablets, technological programs and simulation programs were used together with other technological tools in the micro teaching process.

Findings Regarding the Fourth Sub-Objective

Table 5. *Views and Suggestions of the Instructors Regarding the ınstruction of the Topic of Micro Teaching*

Theme	Codes	Frequency (f)	Participants
Views and suggestions regarding the instruction of the topic of micro teaching	Creating a suitable teaching environment for micro teaching	6	I-2, I-10, I-16, I-17, I-20, I-23
	Providing opportunities for practice	3	I-2, I-14, I-19
	Reducing class sizes	3	I-3, I-20, I-23
	Making micro teaching a mandatory course	1	I-6
	Integrating it into teaching practice	2	I-6, I-17
	Collaborating with teachers of other disciplines	2	I-7, I-22
	Effective use of technology	3	I-8, I-10, I-11
	Providing training to instructors on the relevant subject	2	I-10, I-14
	Providing opportunities for the development of 21st-century skills	2	I-7, I-19

Table 5 shows the views of the instructors regarding the instruction of the topic of micro teaching. The highest frequency of codes among instructors who expressed their views on the theme of "views and suggestions regarding the treatment of micro teaching" is in the code “creating a suitable teaching environment for micro teaching” (f=6). This code is followed by the codes “providing practice opportunities” (f=3), “reducing class sizes” (f=3), “effective use of technology” (f=3), “integrating it into teaching practice” (f=2), “collaborating with teachers of other disciplines” (f=2), “providing training to instructors on the relevant subject” (f=2), “providing opportunities for the development of 21st-century skills” (f=2) and "making micro teaching a mandatory course” (f=1).

The views of some of the instructors according to the themes and codes in Table 5 are expressed below in order of codes:

I-20: As is known, micro teaching is a technique applied with small groups. It can be used for the whole class, perhaps thinking it would be more appropriate in real life, or, for some students in a real class environment (schools).

I-14: It would be beneficial to provide support such as education, professional development, and participation in academic activities to the teaching staff who take this course within the scope of trainer training, as it should be emphasized micro teaching. Teacher candidates who take this course as a common course can practice in a certain

order according to their branches, and in this way, peer learning can be implemented effectively.

I-23: In teacher training programs, micro teaching should be used more frequently by limiting class sizes, and importance should be given to feedback and correction. An environment should be prepared for teacher candidates to make presentations freely, and their freedom to express their thoughts should be supported.

I-7: Since it is a relatively new technique, it is an area open to development and change. As it is known, interdisciplinary working methods are popular in almost every academic field (science, numerical sciences, health sciences) in the 21st century. Therefore, to make progress in micro teaching, it is necessary to benefit from other fields and to focus on working in collaboration with them. In particular, it is very valuable and important to benefit from the views and studies of expert educators and academicians working in the field of instructional technologies.

I19: Micro teaching should allow the teacher candidate to practice after acquiring theoretical knowledge. This process should be planned in a way that will develop and use the 21st-century skills (creativity, innovation, communication, critical thinking, problem-solving) and metacognitive skills (reflection, problem-solving) of the teacher candidate. The student's personal development should be focused on determining their deficiencies and working on them or providing support. The student should be active in the process, and the lessons should be planned by taking their views and expectations into account. In addition, the micro teaching course should be opened as a common elective course in YÖK programs and should be conducted with students from different branches. Although it is good for students to see different teaching approaches between disciplines, I think it would be good for professional development for students from the same discipline to share their own experiences. I also think that it would be good for experienced teachers to be invited to the classroom environment or to make micro teaching presentations within the scope of this course.

In this theme, different opinions and suggestions of the instructors regarding the processing of the micro teaching technique were evaluated. While the instructors expressed different opinions and suggestions regarding the processing of the micro teaching technique, they mostly stated that appropriate environments should be created for this technique. In addition, the instructors explained that providing the opportunity to practice in the micro teaching process, reducing the class size and using technology are also very important. On the other hand, they stated that it is important to integrate micro teaching with teaching practice. In addition, they also suggested cooperation with other fields and providing training to instructors about micro teaching. Some instructors emphasized that micro teaching enabled the development of 21st century skills. In addition, one instructor's opinion that the micro teaching course should be compulsory can be considered as a remarkable suggestion.

Results and Discussion

In this section, the discussion of the findings obtained as a result of the research is given in order according to the sub-objectives of the research. The findings related to the first sub-objective of the research show that the instructors have expressed their views on the theme of 'the contribution of micro teaching to the professional development of teacher candidates.' According to the instructors, micro teaching provides opportunities for the teacher candidates such as experience, self-assessment, awareness of deficiencies, self-confidence, practice, preparation for teaching profession, classroom management skills, communication skills, feedback, the opportunity to get to know the classroom environment, applying different teaching techniques, principles, methods and strategies, peer assessments, self-criticism and material usage. In their study, Balcı & Yanık (2022, p.1062) stated that teachers should organize workshops that will enable them to experience various teaching styles theoretically and practically regarding microteaching practices, which is consistent with this study. Semerci (2000, p. 6) stated in his research that the implementation of techniques that develop critical skills, like micro teaching, enables teacher candidates to produce ideas. The current research states that the classroom management skills of teacher candidates improved thanks to the application of micro teaching. Karadağ & Akkaya (2013, p. 54) noted that micro teaching is an effective technique because it provides a practical learning environment, and it is consistent with the findings. In the research of Karataş & Cengiz (2016, p. 578), similar to the results of the current study, it is stated that teacher candidates have gained experience through micro teaching. Oliveira (2009, p. 870) has concluded that micro teaching-related practices improve the teacher candidates' presentation and communication skills, supporting the results. Zhou, Xu & Martinovic (2017, p. 95) have stated that it is essential to practice in a real classroom environment and that only in this way can teacher candidates gain experience and self-confidence. As stated in the study of Gürses, Bayrak, Yalçın, Açıkyıldız & Doğar (2005, p. 9), teacher candidates stated that micro teaching has contributed to the development of their professional skills. In the study conducted by Ralph (2014, p. 24), it is observed that the application of micro teaching, like the results in this study, provides experience and self-confidence to teacher candidates (Ping, 2013, p. 169; Ramasubramaniam and Renganathan, 2014, p. 246; Mergler & Tangen, 2010, p. 17). In addition to these studies, in research by Sevim (2013, p. 310), similar to the findings of the current one, teacher candidates explained that micro teaching improved their communication skills. Besides, implementation in a real classroom environment increases the participation and interest of teacher candidates in the lesson and helps them gain a positive attitude toward the profession. Therefore, micro teaching is a technique that allows teacher candidates to improve themselves personally and professionally.

The findings related to the second sub-objective of the research show that the instructors have expressed their views on the theme of 'views of instructors on suggestions to solve problems that teacher candidates may encounter in their professional lives'. According to the instructors, micro teaching improves the problem-solving skills of pre-service

teachers, provides them with critical thinking and collaboration skills, enables them to develop effective teaching strategies, and increases participation in the class. In the study conducted by Hamidi & Kinay (2024), the opinions that the application of the micro teaching technique improves the presentation skills of prospective teachers, contributes to changing the perspective of teaching and provides the opportunity to practice teaching are in line with the results of this study. Related studies have concluded that micro teaching provides various opportunities for pre-service teachers to develop their teaching skills, which supports the results of the current study (Fernandez & Robinson, 2006; Higgins & Nicholl, 2003). In the studies conducted by Aydın (2013) & Duman (2022), if the micro teaching process has continued, teacher candidates' skills in preparing activities, determining teaching strategies, and making lesson plans, as well as their perception of the effectiveness of this technique have been improved. In addition, Ceyhan (2014), as a result of his research on micro teaching practices, stated that teacher candidates' teaching skills improve thanks to micro teaching, similar to the results of the current study. In addition, in Semerci's (2000, p. 6) study, similar to the views of the instructors participating in the current study, micro teaching improved the problem-solving skills of teacher candidates. Küçükoğlu et al. (2012) explained in their research that micro teaching is effective in using the teaching skills of teacher candidates. Sevim (2013) also stated that micro teaching has improved the teaching skills of teacher candidates. This result supports the results of the current research. Abdulwahed & Ismail (2011) pointed out that micro teaching provides effective teaching strategies to teacher candidates. In another study, Küçükoğlu et al. (2012) noted that micro teaching allows teacher candidates to develop their teaching skills. In addition, Görgen's (2003) statement that micro teaching increases the competence of teacher candidates regarding the teaching process is consistent with the results of this research.

Regarding the third sub-objective of the research, instructors explained their views on teacher candidates' use of technological tools in micro teaching. The instructors who expressed their views on the theme of "being able to benefit more from technological tools in micro teaching" stated that micro teaching improves the teacher candidates' video and audio recording skills, interactive board usage skills, web tool (Kahoot, Zoom, and Google Class) usage skills, projection device usage skills, and mobile device (smartphone) usage skills. Furthermore, tools such as Kahoot or Zoom will not only be available but will also enhance the pedagogical role of technology in teaching applications. In addition, instructors stated that teacher candidates' skills in using tablets, technological programs, and simulations improved when implementing micro teaching. In the study conducted by Asma (2023) with prospective teachers using the school-based and social media-supported micro teaching method, the positive behaviors of the participants during the application support the result of our study. Babacan & Şaşmaz Ören (2017, p. 204) explained in their research that teacher candidates mainly use interactive boards in their course presentations. In the study conducted by Karataş & Cengiz (2016, p. 579), similar to the results of this research, teacher candidates frequently use technological tools while implementing micro teaching. In this study, teacher candidates also stated that they gained experience in using smart boards. On

the other hand, the study of Babacan & Şaşmaz Ören (2017, p. 204) shows the contributions of teacher candidates' use of technological tools in micro teaching practices, supporting the results of the current study. Research conducted by Yıldız (2022) has shown that the experience of distance education using technology in this technique contributed to the knowledge and self-confidence of teacher candidates. In the study conducted by Wu & Kao (2008), teacher candidates stated that using technological tools such as computers and interactive boards is beneficial in teaching techniques such as micro teaching, supporting the results of the current study. Akyüz, Pektaş, Kurnaz & Kabataş Memiş (2014, p. 8) stated in their research that the use of technological tools such as interactive boards in teaching practices is significant, and this is similar to the results of the current research. Similarly, in the studies of Goldwaite (1968, p. 102) and Saban & Çoklar (2013, p. 239), the statements of the teacher candidates that using technological tools such as video cameras contributes significantly to the implementation of micro teaching are consistent with the results of the current research. In the study conducted by Koehler & Mishra (2009, pp. 66-67), teacher candidates stated that using projectors and computers enabled students to actively participate in teaching techniques such as micro teaching, similar to the views in the current study.

Regarding the fourth sub-objective of the research, instructors made different views and suggestions regarding the treatment of micro teaching in the courses. They stated that there is a need for suitable educational environments to implement micro teaching; it is significant to provide practice opportunities for teacher candidates, and class sizes should be reduced. In addition, the instructors stated that it is significant to use technology while the subject of micro teaching is being treated or practiced, that this technique should be integrated with teaching practice, and that cooperation should be established among teacher candidates. They stated that it would be beneficial to provide in-service training to instructors on the subject of micro teaching. In addition, they stated that micro teaching enables the development of 21st-century skills and finally that the micro teaching course should be compulsory. When these views and suggestions are examined, it is seen that to make the application more efficient, it is necessary to reduce class sizes that can affect the educational environment and to implement it in schools, that is, in real classroom environments. In Ülper, Aydın & İnnalı's (2015, p. 138) study, the importance of providing prospective teachers with competence in microteaching starting from the pre-service period was explained. Thus, the fact that they stated that this technique should be used efficiently in educational settings is similar to the results of this study. One of the results of a study conducted on this subject (Kablan, 2012) is that teacher candidates receive both practical and theoretical training when preparing a lesson plan and can prepare the lesson plan during the teaching process. This result supports the findings of the current study. Karışan's (2017, p. 197) opinion that teacher candidates should practice micro teaching in schools, that is, in real classroom environments, rather than in universities, is similar to the results of the current study. In Karaman's (2014, p. 171) research, teacher candidates expressed that they prefer to apply micro teaching in a real classroom environment. Similarly, the research results (Dere, 2019, p. 51) show that teacher candidates encountered some problems arising

from the artificiality of the classroom environment. Allen & Ryan (1969, pp. 2-3) explained that micro teaching would be effective and efficient if it were used in a real classroom environment. In the study by Christian (2017, p. 18), pre-service teachers stated that using materials is significant when preparing for micro teaching practice. This result supports the findings of the current study. In the research conducted by Peker (2009, p. 369), pre-service teachers stated the importance of reducing class sizes in micro teaching practice, similar to the findings of the current research. In addition, Leal-Rodríguez & Albort-Morantn (2018, p. 2), Meutia, Elyza & Yusnila (2018, p. 110); Undiyaundeye & Agbama-Inakwu (2012, p. 101) stated that micro teaching should be implemented in schools and real classroom environments.

Recommendations

Based on the research results, the following recommendations can be made:

For the micro teaching technique to be more effective and efficient, arrangements should be made to create classroom environments suitable for it. In the implementation phase of micro teaching, opportunities should be provided for implementation in small classes and by reducing class sizes. Micro teaching courses should be included in the curriculum of education faculties as compulsory courses so that all teacher candidates can know and apply micro teaching. Digital infrastructures should be developed by creating classrooms that are well-equipped with the necessary resources. While implementing microteaching, extra activities should be planned for teacher candidates to use their 21st-century skills (creativity, innovation, communication, critical thinking, problem-solving) and metacognitive skills like reflection. Professional development, in-service training, or academic activities related to micro teaching should be provided to instructors.

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Genişletilmiş Türkçe Özet

Bu araştırmanın amacı, öğretim elemanlarının mikro öğretim tekniğine ilişkin görüşlerinin incelenmesidir. Öğretim elemanlarının mikro öğretim tekniğine ilişkin görüşlerinin belirlenmeye çalışıldığı bu araştırmada nitel araştırma modellerinden temel nitel araştırma deseni kullanılmıştır. Bu araştırmada ölçüt olarak bir devlet üniversitesinde "mikro öğretim, özel öğretim yöntemleri veya öğretim ilke ve yöntemleri", derslerini veren öğretim elemanları belirlenmiştir. Ulaşılabilen öğretim elemanı sayısına göre, çalışma grubu 17 erkek 6 kadın olmak üzere toplam 23 öğretim elemanından oluşmaktadır. Bu araştırmanın verileri, nitel araştırma yönteminin görüşme tekniği türlerinden yarı-yapılandırılmış görüşme tekniği ile elde edilmiştir. Bu araştırmada, çalışmanın verileri içerik analizi tekniği kullanılarak çözümlenmiştir.

Araştırmanın birinci alt amacına ilişkin bulgular incelendiğinde öğretim elemanları mikro öğretim tekniğinin öğretmen adaylarının mesleki gelişimlerine olan katkısı temasına ilişkin görüş bildirmişlerdir. Öğretim elemanlarına göre mikro öğretim tekniği öğretmen adaylarına; deneyim kazanmayı sağlamakta, öz değerlendirme yapma becerisi kazandırmakta, eksikliklerini fark etmeyi sağlama, özgüvenlerinin gelişmesine imkân verme, uygulama yapma imkânı sunması, öğretmenlik mesleğine hazırlık yapma imkânı sağlaması, sınıf yönetimi becerisini kullanma, iletişim becerisini geliştirme, geribildirim verme, sınıf ortamını tanıma imkânı vermesi, farklı öğretim, teknik, ilke yöntem ve stratejileri uygulama, akran değerlendirme yapabilme, özeleştiri yapabilme ve materyal kullanma gibi katkılar sağlamaktadır.

Araştırmanın ikinci alt amacına ilişkin bulgular incelendiğinde öğretim elemanları mikro öğretim tekniğinin öğretmen adaylarının mesleki hayatlarında karşılaşabilecekleri problemleri çözmeye etkisine ilişkin görüşlerini açıklamışlardır. Öğretim elemanlarına göre mikro öğretim tekniği öğretmen adaylarının problem çözme becerisini geliştirdiği, eleştirel düşünme becerisi kazandırdığı, işbirliği becerisi kazandırdığı, etkili strateji geliştirmeye imkân sağladığı ve derse katılımı arttırdığını belirtmişlerdir.

Araştırmanın üçüncü alt amacına ilişkin bulgular incelendiğinde öğretim elemanları mikro öğretim tekniği konusunda teknolojik araç-gereçlerden nasıl yararlanılabileceğine ilişkin görüşlerini açıklamışlardır. Mikro öğretim tekniği konusunda teknolojik araç-gereçlerden daha fazla yararlanabilmesi teması hakkında görüş bildiren öğretim elemanları mikro öğretim tekniğinin öğretmen adaylarının kamera, video ve ses kaydetme, akıllı (etkileşimli) tahta kullanma becerisini geliştirme, web araçları (Kahoot, Zoom, Google Class) kullanma becerilerini geliştirme, projeksiyon cihazı kullanma ve mobil cihazlardan (akıllı telefon) yararlanılmasına katkı sunduğunu ifade etmişlerdir. Ayrıca öğretim elemanları öğretmen adaylarının mikro öğretim tekniğini uygularken tablet kullanma, teknolojik programların kullanılmasını öğrenme ve simülasyon kullanma becerilerinin geliştiğini belirtmişlerdir.

Araştırmanın dördüncü alt amacına ilişkin bulgular incelendiğinde öğretim elemanları mikro öğretim tekniği konusunun işlenişine ilişkin farklı görüş ve önerilerde bulunmuşlardır. Öğretim elemanları mikro öğretim tekniği konusunun işlenişine ilişkin farklı görüş ve önerilerini açıklarken mikro öğretim için uygun ortamların oluşturulması gerektiğini, uygulama yapma imkânı sağlanmasının önemli olduğunu, sınıf mevcutlarının azaltılması gerektiğini belirtmişlerdir. Bununla birlikte öğretim elemanları mikro öğretim tekniği konusu işlenirken veya uygulama yapılırken teknolojinin kullanılmasının oldukça önemli olduğunu, bu tekniğin öğretmenlik uygulamasıyla bütünleştirilmesini, öğretmen adayları arasında işbirliği yapılması gerektiğini de ifade etmişlerdir. Ayrıca öğretim elemanları mikro öğretim tekniği konusu hakkında öğretim elemanlarına eğitim verilmesinin yararlı olacağını söylemişlerdir. Bununla birlikte mikro öğretim tekniğinin 21.y.y. becerilerinin geliştirilmesine imkân sağladığını ve son olarak ise mikro öğretim dersinin zorunlu olmasına ilişkin düşüncelerini belirtmişlerdir. Bu görüş ve öneriler incelendiğinde uygulama ortamının geliştirilmesine bağlı olarak sınıf mevcutlarını azaltmak, okullarda yani gerçek sınıf ortamında uygulama yapmak gerektiğini açıklamışlardır.

Araştırmanın sonuçlarına göre mikro öğretim tekniğinin uygulama aşamasının daha etkili ve verimli olması için uygun sınıf ortamlarının oluşturulmasına yönelik düzenlemeler yapılabilir. Mikro öğretim tekniğinin uygulama aşamasında kalabalık olmayan sınıflarda ve sınıf mevcutları azaltılarak uygulama yapmasına ilişkin olanaklar sağlanabilir. Mikro öğretim tekniğinin tüm öğretmen adayları tarafından uygulanabilmesi için seçmeli mikro öğretim dersinin yerine zorunlu bir mikro öğretim dersi eğitim fakültelerinin programlarında yer alabilir. Mikro öğretim tekniğinin daha etkili ve verimli olarak işlenebilmesi amacıyla teknolojik araç-gereçlerle donatılmış sınıf ortamları sağlanarak dijital altyapılar geliştirilebilir. Mikro öğretim tekniği uygulanırken öğretmen adaylarının 21. y.y. becerilerini ve (yaratıcılık, yenilikçilik, iletişim, eleştirel düşünme, problem çözme) ve üst bilişsel becerilerini (yansıtma) kullanmalarına ilişkin etkinlikler düzenlenebilir.

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