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AN INVESTIGATION OF TEACHER CANDIDATES' METAPHORIC PERCEPTIONS REGARDING THE VIRTUAL CLASSROOM

(Research article)

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Abstract

Determining the metaphorical perceptions of teacher candidates with regard to the concept of virtual classroom is the purpose of this research. 199 prospective teachers studying at Gazi University participated in the study. The opinions of prospective teachers were tried to be presented by means of a qualitative method in this research. The data were obtained from 199 students. By applying the content analysis method, the data were analyzed. A total of 156 metaphors were obtained as a result of the analysis. The relevant codes are gathered together and the metaphors with similar meanings were collected under nine different categories. These categories were determined as waste of time, unfruitful, source of information, comfort, restriction, effectiveness, boring, obligation, and limited communication. As a consequence of the research, it was concluded that more than half (58%) of the metaphors asserted by the teacher candidates about the virtual classroom involved negative (waste of time, unfruitful, restriction, boring, limited communication) judgments, while a third (34%) of the prospective teachers were positive (source of information, comfort, effectiveness). Other teacher candidates (8%) defined the virtual classroom as an obligatory system. Positive and negative metaphors created by prospective teachers didn't have significant differences in terms of gender and departments.

Keywords: Distance Education, Virtual Classroom, Metaphor, Prospective Teachers

1. Introduction

Higher education services in several countries urgently proceeded with distance education systems owing to the COVID-19 pandemic (Bozkurt & Sharma, 2020). Depending upon the progress of the pandemic; the unpredictability of the period when the face-to-face education will take place and the predictions of the risk of a similar pandemic required the continuation of studies on receiving and developing feedback on distance education. Courses are conducted via virtual classrooms during the implementation of distance education. Clark and Kwinn (2007) describe virtual classroom environments as online environments in which individuals from different places can gather during the same period. In recent years, the significance of making education independent of physical location has increased. In this way; although teachers and students stand in different places at the same time, virtual classrooms enable them to meet on a common platform. Therefore; despite being time-dependent, virtual classrooms are identified as location-independent interactive learning environments (McBrien, Cheng, & Jones, 2009). The most significant advantage of virtual classrooms over real classrooms is that they provide the opportunity to be involved in the learning environment no matter where the

participants are. Furthermore; some other strengths are being economical, rewatchable, and enabling simultaneous verbal, written, and visual communication. On the other hand, virtual classrooms have some disadvantages as well. These weaknesses are that the instructors may not find an appropriate period for the sessions, the necessity of training for the instructors, not being suitable for every lesson (Posey et al., 2010), communication barriers (Karaca, Topal, & Aldır, 2011) and the fact that students' being more passive compared to face-to-face education environments.

This research aims to determine the metaphorical perceptions of prospective teachers who study in different departments regarding the concept of virtual classroom. Metaphors are used as a tool to reflect the lives and experiences of individuals, to determine their perceptions, to understand, make sense and concretize concepts with analogies, and explain the properties of objects or events (Patton, 2014). While metaphors are used in scientific research, they serve as data collection tools that do not direct the perceptions of the participants. Contrary to this, they take the participants to the center and increase the scope of applicability by examining their perceptions in depth (Güneş & Fırat, 2016). By means of metaphors, the meanings that individuals attribute through metaphors are analyzed. In this way, their real perceptions can be obtained either explicitly in their consciousness or latently before they are conscious. In other words, metaphors express what students cannot say (Tuncay & Özçınar, 2009). Metaphors are also used in the field of educational sciences, in conveying experiences and in determining perceptions about a concept or phenomenon (Aykaç & Çelik, 2014). It was found that Erten (2020) investigated the opinions of university students about the concept of virtual classroom through metaphors when the literature was analyzed. As a result of the study, it was concluded that the number of students who believe that the real and virtual classroom environments are the same is quite high. By using metaphors, teacher candidates' perceptions of the virtual classroom can be revealed. In the literature, it is observed that among the studies with metaphors, the ones with regard to distance education perceptions (Atik, 2020; Bozkurt, 2020; Demirbilek, 2021; Fedynich, Bradley, & Bradley, 2015; Zhan & Mei, 2013) are higher in quantity. In this study, it is aimed to determine the metaphorical perceptions of the students towards the virtual classroom- the environment in which they receive distance education. From this viewpoint, the purpose of this research is to identify the metaphors created by prospective teachers studying at Gazi University within the scope of the virtual classroom concept. In this regard, this research seeks to address the following research questions:

- What are the metaphors that teacher candidates have for the virtual classroom?
- Under which conceptual categories do the metaphors developed by prospective teachers regarding the virtual classroom concept fall?
- Do prospective teachers' metaphors for the virtual classroom differ in terms of their gender and department?

2. Method

Explanations regarding the research model, participants, data collection tool, and data analysis are given in this section.

2.1. Research Model

This is qualitative research aiming at determining prospective teachers' perceptions of the virtual classroom by means of metaphors. Specifically, in clarifying new and complex events, phenomena, and concepts, metaphor analysis is considered as an efficient qualitative research method (Schmitt, 2005; Lakoff & Johnson, 1980). According to Collins and Green (1990),

fundamentally metaphors be used to understand the opinions of individuals. These are considerably significant since they influence the real-life behavior of individuals. Therefore, with the use of metaphors, individuals' perceptions of the virtual classroom can be revealed.

2.2. Setting and Participants

The study group consists of teacher candidates who study at Gazi University Faculty of Education in the 2021-2022 academic year. The participants of the study were detected by implementing a convenience sampling method. The convenience sampling method is expressed as the collection of data from a sample that the researcher can easily reach (Büyüköztürk et al., 2019). Data were collected from 199 students via an online data collection tool; however, 12 responses that were left blank and 20 responses that did not have a logical basis were excluded from the analysis. Evaluated forms are coded as (P=participant) P1, P2, P3... and examples are presented with these codes directly. Information on the demographic characteristics of the participants is presented in Table 1.

Table 1. *Information on demographic characteristics of the participants*

Demographic Information		f	%
Gender	Female	120	72
	Male	47	28
Department	Guidance and Psyc. Couns. Edu.	51	31
	Classroom Ins. Edu.	33	20
	Turkish Lang. Edu.	29	17
	Chemistry Edu.	20	12
	Philosophy Edu.	19	11
	Preschool Edu.	15	9

When Table 1 is analyzed, 120 (72%) of the prospective teachers who took part in the study are female and 47 (28%) are male. When the teacher candidates are examined in terms of their departments, it is noticed that the highest participation (31%) is from the guidance and psychological counseling department, and the lowest participation (9%) is from the preschool education department.

2.3. Data collection tool

The research data were obtained by an online measurement tool. In the scale form, voluntary participation in the research was requested, and prospective teachers who did not give consent for voluntary participation were not allowed to respond to the scale form. The data collection tool involves questions consisting of personal information that aims to identify the demographic characteristics of prospective teachers and an open-ended question intending to detect students' metaphorical perceptions about distance education. The teacher candidates were asked to fill in the blanks in the phrase "The virtual classroom is like ... because ..." in the form. Prospective teachers were provided with a data collection tool and approximately 10 minutes were given to develop metaphors. Teacher candidates created metaphors with regard to their perceptions of the concept of virtual classroom with the expression "like". The logical basis of metaphors is developed with the help of the expression "because".

2.4. Data Analysis

The content analysis method was applied in order to analyze the data collected in the research. The essential aim of content analysis is to reach concepts and relationships that can explain the collected data. Content analysis requires an in-depth analysis of the collected data and allows for uncovering themes and dimensions that were not apparent before. Thus, by implementing content analysis, we attempt to define the data and reveal the truths that may be hidden in the data. Gathering similar data within the framework of certain concepts and themes, organizing and interpreting them are the phases that take place during the content analysis process (Yıldırım and Şimşek, 1999, 162). 167 metaphor sources that were considered as being appropriate for the evaluation were included in the analysis. As a result of the analysis, 11 metaphors written under the categories that have less than three items were excluded from the analysis. As a result of this process, a total of 156 metaphors were analyzed. The number of different metaphors is 125. The relevant codes are gathered together and the metaphors with similar meanings were collected under nine different categories. These categories were determined as waste of time, unfruitful, source of information, comfort, restriction, effectiveness, boring, obligation, and limited communication. Reliability was calculated using the formula “Reliability = [consensus / (consensus + disagreement)]x100” (Miles & Huberman, 1994). As a result of the calculation, the mean reliability between encoders was found to be 92%. This result represents that the reliability of the study is at a sufficient level. In the research, reporting the step-by-step analysis of qualitative data is a significant criterion for validity (Yıldırım & Şimşek, 2006). Within this regard, the whole process has been reported by the researchers. Furthermore, students’ opinions were included with direct quotations.

2.5. Ethical Statement of the Study

Research authors declare that they comply with research and publication ethics and that there is no unethical problem in the study. Ethical principles and rules were followed during the planning of the research, data collection, analysis, and reporting. This research was carried out with the ethical compliance decision of Bandırma Onyedi Eylül University, Social and Human Sciences Ethics Committee.

3. Findings

In this section, research findings and comments are presented. The aforementioned qualitative and quantitative findings were obtained by analyzing the data collected within the scope of the study. In the interpretation of the findings, metaphors related to the concept of virtual classroom and conceptual categories including metaphors were presented. As a result of the analysis, it is observed that a total of 156 metaphors regarding the virtual classroom fall under nine different conceptual categories. Direct quotations with regard to the opinions of the prospective teachers and the reasons for the metaphors were expressed. In this research, in which the metaphorical perceptions of teacher candidates about the virtual classroom concept were analyzed, the metaphors created by the teacher candidates were gathered under the same category according to the similarities in their justifications. Information about the created categories and related metaphors is presented in Table 2.

Table 2. *Metaphors of Prospective Teachers with Regard to Virtual Classroom Concept*

Categories	Metaphors	Participants		Gender		Type of Metaphor	
		f	(%)	f	f	f	(%)
Waste of Time	Nothing, emptiness(5), a big gap, empty bucket, darkness, nothing, free time(3), blank page, after-dinner dessert, wasted effort, unnecessary, wasted time(6), plastic water bottle, wasted lecture(2), empty room, black hole	28	(18)	20	8	16	(13)
Unfruitful	A meaningless classroom, burden, unfruitful, barren field, black hole, the black market of face-to-face education, absenteeism, an unfruitful classroom(3), cinema, dry ground, window with a child lock, an inactive blind spot, an unpublished book, a bus stop, late bus, nice looking bitter fruit, unnecessary, none	19	(12)	14	5	17	(14)
Source of Information	Pool, universe, space, fruit garden(2), normal classroom environment, vast space, qualification completion area, library, book(2), music, cherries, fruits, flower garden, stream, unexplored planet, knowledge stage	18	(12)	11	7	16	(13)
Comfort	Bed(2), fun game, home(4), necessity, making a profit, rest, my living room, coziness(2), comfort, convenience, buffet, integrative, food	18	(12)	12	6	13	(10)
Restriction	Prison(2), living between two walls, lantern, cage, cloud, suffering, castle, maze, cemetery, a room with a locked door and a single window, a narrow space(2), plants in pots, aquarium, public bus, being trapped under the sea	17	(11)	12	5	15	(12)
Effectiveness	Place to use time effectively, doing homework, museum, computer room, shoe horn, tool, supportive tool, opportunity, a spare classroom, savior(2), innovative, time-saving(3), drinking coffee	16	(10)	12	4	13	(10)
Boring	Physics lesson, a useless lesson, pillow, nice-looking bitter fruit, boring books, rainy weather, plums, doomy atmosphere, punishment, torture(2), the bottom of the ocean, cinema, television	14	(9)	10	4	13	(10)
Obligation	During the pandemic period, necessity, gym, a leg to stand on, water, necessity, compulsory education, a system made because it needs to be done, bread, straw,	13	(8)	10	3	12	(10)

	trying to save the sinking ship, father's side, saving the day					
Limited Communication	Not a normal classroom(3), no interaction, a wall(2), an inefficient environment in terms of communication, an airless box stuffed with students, moving alone, watching a YouTube video, watching a movie, listening to a radio program	13	(8)	9	4	10 (8)

When Table 2 is analyzed; it is observed that at the highest level, the teacher candidates perceive the virtual classroom as a waste of time. Then, it is determined that they perceive them as being inefficient, restricted, a source of information, comfortable, effective, having limited communication, boring and obligatory respectively. Considering all the categories of metaphors developed by the teacher candidates, 54% created negative metaphors (waste of time, inefficient, restriction, limited communication, boring) and 33% formed positive metaphors (information source, comfort, effectiveness). It was found that 13% perceived the virtual classroom as an obligatory system or daily routine. Qualitative data with regard to the categories obtained are given under sub-headings.

18% of prospective teachers' metaphorical perceptions state that the virtual classroom is a **"waste of time"**. Some of the reasons for the metaphorical perceptions of teacher candidates in the waste of time category are as follows:

(P67): It feels like a waste of time because the monotonous lessons are not efficient. Students become passive.

(P109): Virtual classroom is a waste of time for me because I feel very distracted and get more tired mentally.

(P126): It is like a waste of time because no matter how important it is; I think that I cannot get that efficiency in any way because it is not face-to-face.

(P137): Virtual classroom is a waste of time for me because it doesn't encourage me to listen to the lectures.

12% of prospective teachers' metaphorical perceptions state that the virtual classroom is **"unfruitful"**. Some of the reasons for the metaphorical perceptions of teacher candidates in the inefficient category are as follows:

(P61): It is like not attending the class because nothing is understood and it is not productive.

(P63): The virtual classroom is like a field without rain for me because I don't think I'm getting any products.

(P113): It is like an inefficient class because I think that the efficiency given in the virtual classroom does not fully pass to the other side.

(P118): It is like a meaningless class because a lesson that is not applied face to face will not have any contribution to me.

12% of prospective teachers' metaphorical perceptions state that the virtual classroom is a **"source of information"**. Some of the reasons for the metaphorical perceptions of teacher candidates in the category of information sources are as follows:

(P36): The virtual classroom is like a pool for me because just like the pool is filled with water, the classroom is also a space that is full of information.

(P90): The virtual classroom is like a library for me because I add something new to myself from every classroom I go in.

(P151): It is like an undiscovered planet because every time we use the virtual classroom, we see its new benefits.

12% of prospective teachers' metaphorical perceptions express that virtual classroom is "**comfort**". Some of the reasons for the metaphorical perceptions of pre-service teachers in the comfort category are as follows:

(P17): It is like home because I can attend the class without being distracted in a comfortable and flexible atmosphere.

(P43): It is like the living room of my house because it is more comfortable.

(P47): The virtual classroom is like my bed for me because it is the most comfortable thing in the world unless homework is due.

(P50): Virtual classroom is comfortable for me because I can watch the lesson again whenever I want.

11% of prospective teachers' metaphorical perceptions state that the virtual classroom is a "**restriction**". Some of the reasons for the metaphorical perceptions of pre-service teachers in the restriction category are as follows:

(P7): The virtual classroom is like a lantern for me because I feel that my creativity is limited and the things I have learned hang in the air. I don't enjoy lessons in an abstract atmosphere.

(P46): The virtual classroom is like a prison for me because I feel trapped.

(P83): The virtual classroom is like an aquarium for me because I think that we are exposed to computers instead of classrooms, just as fish are taken from their natural environment and put into an aquarium. We just listen to what is told and can't find the opportunity to express ourselves.

10% of prospective teachers' metaphorical perceptions state that the virtual classroom is "**effectiveness**". Some of the reasons for the metaphorical perceptions of teacher candidates in the effectiveness category are as follows:

(P8): The virtual classroom is like a place to use time effectively for me because I studied without wasting time like commuting to school etc. I think it should be used theoretically as well.

(P20): It is a savior because watching the lessons again allows me to revise the topics when I don't understand them or make a revision before the exams.

(P68): It is like an opportunity because courses that cannot be taken face to face can be taken with the help of virtual classrooms.

9% of prospective teachers' metaphorical perceptions state that the virtual classroom is "**boring**". Some of the reasons for the metaphorical perceptions of teacher candidates in the boring category are as follows:

(P38): The virtual classroom is like a physics lesson for me because I get bored when I go in.

(P133): Virtual classroom is like punishment for me because I do nothing but get locked on the screen.

(P141): Virtual classroom is like torture for me because it is not only difficult to focus on the lesson but also it is a waste of time.

8% of prospective teachers' metaphorical perceptions state that the virtual classroom is "**obligatory**". Some of the reasons for the metaphorical perceptions of teacher candidates in the category of obligation are as follows:

(P22): For me, a virtual classroom is like an education system that was forced due to some events.

(P56): The virtual classroom is like a gym for me because I go out of necessity.

(P111): The virtual class is like a leg to stand on for me because, in situations where face-to-face education cannot be carried out, it is a much better option than not having any lessons.

8% of prospective teachers' metaphorical perceptions state that the virtual classroom is "**limited communication**". Some of the reasons for the metaphorical perceptions of teacher candidates in the limited communication category are as follows:

(P50): Virtual classroom is like listening to a radio show for me because the interaction is very limited, so it feels like I'm passively listening to a radio show.

(P71): It is like an airless box with students stuffed in it because it is difficult to communicate and we have poor communication opportunities with others.

(P93): For me, the virtual classroom is like a wall between me and other students because I find it more appropriate to have bodily contact and eye contact with the class.

(P148): It is like a youtube video because, without much interaction, it's like we're just listening to what's being said.

The negative, positive and neutral metaphorical meanings attributed to the virtual classroom by the prospective teachers according to their gender are presented in Table 3.

Table 3. *The metaphorical meanings prospective teachers attribute to the virtual classroom by gender*

Gender	Positive	Negative	Neutral	Total
Female	36	66	8	110
%	33	60	9	100
Male	17	26	3	46
%	37	56	9	100
Total	53	92	11	156

When Table 3 is analyzed, it is observed that nearly half of the male and female teacher candidates formed negative metaphors for the virtual classroom. Approximately one-third of male and female teacher candidates developed positive metaphors for the virtual classroom. 14% of male teacher candidates and 12% of female teacher candidates stated neutral perceptions regarding the virtual classroom. The metaphors of the prospective teachers within the scope of the virtual classroom concept according to the department variable are presented in Table 4 for each category.

Table 4. *Teacher candidates' metaphors with regard to virtual classroom in terms of their departments*

Categories	Guide and Psy.Couns. f (%)	Classroom Inst. f (%)	Turkish Lang. Teac. f (%)	Chem. Teac. f (%)	Philos. Teac. f (%)	Preschool Teac. f (%)	f _(Total)
Waste of Time	9(18)	8(26)	4(15)	6(32)	1(6)	-	28
Unfruitful	10(20)	3(10)	2(8)	-	2(12)	2(15)	19
Restriction	4(8)	2(6)	4(15)	1(5)	2(12)	4(31)	17
Source of Information	4(8)	3(10)	3(12)	3(16)	4(24)	1(8)	18
Comfort	6(12)	3(10)	5(19)	1(5)	2(12)	1(8)	18
Effectiveness	6(12)	3(10)	2(8)	3(16)	1(6)	1(8)	16
Limited Communication	2(4)	2(6)	3(12)	2(11)	2(12)	2(5)	13
Boring	3(6)	4(12)	2(8)	1(5)	1(6)	3(21)	14
Obligation	6(12)	2(6)	1(4)	2(11)	2(12)	-	13
Total	50	30	26	19	17	14	156

When Table 4 is analyzed, it is observed that teacher candidates created a total of 156 metaphors for the virtual classroom falling under nine different categories. When the metaphors produced are analyzed according to the departments of the prospective teachers, the highest rates are as follows: The concept of the virtual classroom is: for the guidance and psychological counseling teacher candidates are inefficient (20%), for the primary school teacher candidates is waste of time (26%), for the Turkish language teacher candidates is comfort (19%), for the chemistry teacher candidates is waste of time. (32%), for philosophy, teacher candidates are a source of information (24%) and finally for the pre-school teacher candidates are a limitation (31%).

4. Discussion, Conclusion, and Recommendations

The teacher candidates described the virtual classroom with a high rate (58%) of negative metaphors (category=waste of time, unfruitful, limitation, boring, limited communication) in this research in which the metaphorical perceptions of teacher candidates towards the virtual classroom were analyzed. This research was conducted at a time when the effects of the pandemic were considerably diminished. The fact that students took all the courses via the virtual classroom in a closed environment for a long time may have caused them to develop negative perceptions about the virtual classroom and distance education in general. However, in the studies conducted by Kaban (2021) and Akbolat (2021) with student and teacher candidates, it was found that the participants generally had a negative perception towards distance education. Also Safavi et al. (2013) concluded that, distance education in mathematics education is not as effective as traditional education. Prospective teachers identified the virtual classroom at a lower rate (34%) with positive metaphors (category=source of information,

comfort, effectiveness). Other prospective teachers (8%) developed metaphors expressing the virtual classroom as a compulsory practice in the category of necessity. While the metaphors produced by the teacher candidates at the highest rate (28%) are gathered under the category of "waste of time", the metaphors they produce at the lowest rate (8%) are under the category of "limited communication". When the metaphors created by the teacher candidates are analyzed according to their departments, the virtual classroom is perceived at the highest rate as being "unfruitful (20%) by the guidance and psychological counseling teacher candidates as being "waste of time" by primary school teachers candidates (26%), and by chemistry teacher candidates (32%), as being "comfort" by Turkish teacher candidates (19%), as being "source of information" philosophy teacher candidates (24%) " and a "restriction" by pre-school teacher candidates (31%). According to their departments, the department that creates negative metaphors at the highest rate (69%) is pre-school teaching, while the department that produces positive metaphors at the highest rate (42%) is philosophy teaching.

12% of the prospective teachers produced metaphors for the virtual classroom in the "unfruitful" category, and 9% in the "boring" category. In their research, Kaleli Yılmaz and Güven (2015) found out that among the metaphorical perceptions of teacher candidates about distance education, some of the participants' highly negative metaphorical perceptions of distance education fall under the categories of "boring" and "unfruitful". In Erol Şahin's (2019) study on distance education with lecturers, the participants stated that distance education is unfruitful. In the study conducted by Demir and Göloğlu Demir (2021) with parents, parents stated that distance education is a good practice during the pandemic process so that their children do not get bored from school. However, parents (66%) who state that distance education will not replace face-to-face education perceive face-to-face education as more effective and efficient. In İnci's (2021) study, when the frequencies of secondary school students' metaphors for face-to-face and distance education mathematics lessons were compared, it was observed that they had more positive metaphors for face-to-face mathematics lessons and more negative metaphors for distance mathematics lessons.

12% of the prospective teachers produced metaphors for the virtual classroom in the "information source" category. In their studies with distance education students, Usta (2019) reached similar results with this research under the "source of information" category, and Çivril, Aruğaslan, and Özkara (2018) under the "educational" categories. In Erten's (2020) study, in which prospective teachers' perceptions of virtual classrooms were examined through metaphors, it was seen that many students thought that the real classroom-school environment was the same as virtual classrooms. 12% of teacher candidates produced metaphors for the virtual classroom in the "comfort" category. Taş, Yavuzalp, and Gürer (2016) reached similar results with this research under the category of "facilitating education" in the study conducted to determine the perceptions of teacher candidates about distance education through metaphors. The most important advantage of virtual classrooms over real classrooms is that they offer the opportunity to be included in the learning environment from anywhere in the world. However, this advantage can turn into a disadvantage in underdeveloped and developing countries due to problems in accessing computers and high-speed internet access. According to Can (2020), this situation, which causes inequality of opportunity, is predicted to increase the inequalities that already exist in the education system.

In the study conducted by Şahin İzmirli and Mısırlı (2018), the negative metaphors of an academician about distance education were classified as "lack of interaction" and "insufficiency". Similarly, in the study of Yılmaz and Güven (2015), a high number of metaphors were produced for the "non-interactive" category. The results are similar to the "limited communication" (lack of interaction-no interaction) category of this research. Mungania (2003) revealed that the lack of different methods for effective communication in

virtual classrooms and the fact that students are not given the opportunity to express themselves cause students to be distracted. This situation causes detachment from the course, and a decrease in motivation and interest in the course (Nguyen & Yukawa, 2019). The fact that mass distance education systems are far from the school climate and offer limited communication and interaction opportunities for students reduces their interest and motivation of students (Demir & Göloğlu Demir, 2021). Hung et al. (2020) also concluded that distance education causes students to lose their motivation. According to Charles and Senter (1989), students meet their social needs by interacting with their peers, participating in interesting activities, and sharing their success with others around them. The limitations of virtual classrooms in meeting these requirements explain the negative perceptions obtained in this study.

In conclusion, the fact that more than half of the prospective teachers participating in the research produced negative metaphors for the virtual classroom (eg. wasted labor, barren field, prison, wall) reveals that there is a problem in virtual classrooms. Negative metaphorical perceptions of students do not show a significant difference according to gender and department. Can (2020) stated that the lack of sufficient technology literacy skills of teachers before the pandemic caused problems in the distance education process. Simonson et al. (2011) stated that the lack of support, technical problems, withdrawal from the process, and the deficiencies in the use of information and communication technologies by students and teachers came to the fore regarding distance education. This study has some limitations. The qualitative data of the research were collected only through the metaphorical perceptions of the participants. However, more in-depth research can be applied based on the interview technique. Another limitation is that the qualitative data consisted of Gazi University Education Faculty students. In order to increase the diversity of data, collecting data from university students from different universities can contribute to the literature. In future research, possible problems at the higher education level can be revealed by investigating the opinions of the instructors about the virtual classroom.

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