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Virtual Class Management Experiences of Teachers

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ABSTRACT

This study aims to investigate the virtual class management experiences of teachers. The research was designed by adopting a qualitative research approach. The maximum variation sampling method, one of the purposive sampling methods, was used while determining the study group of the research. In this context, interviews were conducted with 18 teachers working in different years of seniority, different branches, and different school types. Semi-structured interview form was used as a data collecting tool. Research data were analyzed by using the descriptive analysis method. As a result of the research, it is seen that teachers plan in advance in virtual classrooms, they include preparation, method, technique, and equipment determination activities in this context, and they prefer EBA, zoom, WhatsApp, and Skype while doing their lessons. To ensure communication and interaction, the participants included activities such as asking questions to the students, informing them before the lesson, monitoring their participation in the lesson, and opening the microphone. Participants have seen things like more than one student talking at the same time, students not looking at the screen, students talking to each other, noise from the environment during the class, etc. The participants observed multiple students talking at once, a student looking away from the screen, students discussing among themselves, background noise during class, and other undesirable behaviors. Teachers take precautions such as turning off student microphones, activating students, determining rules, turning on all microphones, and informing students and parents in advance of undesirable behaviors. It has been concluded that the participants attach importance to planning and preparation studies to manage time effectively, and that they motivate students sometimes by using internal factors and sometimes by external factors. Based on the study's findings, it has been suggested that virtual classrooms differ from physical classrooms, so teachers should be given virtual classroom management training. Various programs that allow for more interaction with virtual classrooms should be introduced to teachers.

Keywords:
Virtual class, class management, teacher.

1. Introduction

Developing technologies provide opportunities and possibilities to transform education, learning, and teaching. Educational institutions are in a race to create distance education courses on the web in light of the expected benefits for students and the whole society. This situation is considered a clear indicator of the rapid and ubiquitous progress of the digital world (Bodein & Robert, 2015), technological innovation and advances bring great social changes (Veletsianos, 2010). These innovations and advances can also provide many benefits in coping with negative situations (Yeşilorman & Koç, 2014). The fight against the recent coronavirus epidemic can be evaluated in this context.

The coronavirus disease, which emerged in the city of Wuhan, Hubei Province of China, in late December 2019, was named the "COVID-19" epidemic by the World Health Organization on February 11, 2020 (WHO,

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2020). The coronavirus (COVID-19) pandemic has caused an unprecedented crisis in all areas. One of the areas affected by the epidemic is education. In this context, face-to-face training activities of educational institutions have been suspended in many countries to prevent the virus's spread and reduce its impact. According to data from the United Nations Educational, Scientific and Cultural Organization (UNESCO), by mid-May 2020, more than 1.2 billion students worldwide have stopped receiving face-to-face education (ECLAC-UNESCO, 2020). In this context, distance education applications have been introduced as an emergency solution to education and training activities.

Distance learning is defined as structured learning where students and teachers are separated according to space and time (Gunawardena & Mc Isaac, 2004). Distance education aims to bring the educational activity from one point to many points (Kırık, 2014). Because in distance learning, the teacher and the student are not required to be in the same place. In the distance education model, it is possible for the teacher to connect with the students participating in the education from different places during the lesson (Yaşlıca, 2019). Although distance education is expressed with terms such as "on-line learning", "virtual lesson", "virtual classroom", "e-learning", and "electronic learning", audio and video virtual classrooms come to the fore in distance education applications (Uçar & Mazlum, 2020).

The virtual classroom is defined as a learning system that includes all necessary course materials and provides the same opportunities for the teaching and learning process beyond the physical classroom walls and boundaries (Rufai, Alebiosu, & Adeakin, 2015). A virtual classroom provides students with course materials as well as providing a lively, contextual and interactive environment for students. Moreover, teachers can control the learning and teaching process as in the traditional classroom environment (Yang & Liu, 2007). In the virtual classroom environment, the teacher can present the lesson live and share the course materials and visuals on the screen. Students can correspond with each other and their teachers in the correspondence area on the system, and students can participate in the lesson with a microphone and camera, audio and video (Yılmazsoy, Özdinç, & Kahraman, 2018). Students who cannot attend the lesson have the opportunity to watch the lesson as a video. Because the virtual classroom software records the lesson during the lesson. Students can watch the lesson whenever and whenever they want (Polat, 2016). In this context, it can be stated that teaching lessons in a virtual classroom environment provides great convenience for teachers and students. In addition, the availability of different environments such as virtual classrooms also enables various applications that address individual differences such as students' personal characteristics, cognitive styles, and learning styles (Bolliger, Supanakorn & Boggs.., 2010). Besides all the advantages of virtual classrooms, there may also be some disadvantages. It is possible to encounter problems arising from infrastructure deficiencies such as slow internet, continuous internet disconnections, camera, microphone and computer hardware (Yılmazsoy et al., 2018).

In virtual classrooms, which remove time or distance limits in teacher and student communication (Van Gorp & Boysen, 1997), the effectiveness of educational activities depends on good management of the learning environment, as in face-to-face education (Uçar & Mazlum, 2020). Classroom management is generally defined as providing and maintaining the necessary facilities and processes, learning order, environment and rules to create an environment where learning takes place (Başar, 1999). Virtual classrooms, like physical classrooms, involve pedagogical interaction between teachers and students. Virtual classroom management refers to some tasks as in managing traditional classrooms. Additionally, communication, motivation, time management, rules and behavior management, instructional planning, and organizational order are important in the management of virtual classrooms, as in the management of traditional classrooms (Kavrayıcı, 2021).

Although distance education applications have gained importance with the coronavirus epidemic, it can be stated that there is an evolution/orientation to distance education within the scope of changes and transformations in the field of technology. In this context, considering that distance education is carried out in virtual classrooms, it can be stated that classroom management, which is an important element in face-to-face education, is also important for virtual classrooms. Few studies on virtual classroom management have attempted to convey virtual classroom management theoretically (Can, 2020; Rufai et al., 2015; Yang & Liu, 2007), while others have examined the relationship between the problems encountered in virtual classroom management (Arslan & Şumuer, 2020), teacher roles in virtual classrooms (Mogonea, 2014), virtual classroom management and the sense of classroom community (Kavrayıcı, 2021), and academic culture (Jefferson & Arnold, 2009).Rufai et al. (2015) state that a different approach, known as virtual pedagogy, is required for a

virtual classroom and that effective use of the pedagogical elements of virtual learning will lead to higher learning and developing critical thinking among students. In this context, it is thought that determining teachers' experiences regarding classroom management in virtual classrooms where distance education applications are implemented as an emergency solution in the Covid-19 epidemic will contribute to the theoretical framework of virtual classroom management. For this purpose, it aims to investigate (reveal) teachers' experiences on virtual classroom management. In line with this main purpose, answers to the following questions were sought;

- What are the teachers' experiences on the planning of teaching activities in virtual classrooms?
- What are the teachers' experiences with the virtual classroom applications?
- What are the teachers' experiences with undesirable behaviors in virtual classrooms? What precautions do teachers take against undesirable behaviors?
- What are the teacher's experiences with time management in virtual classrooms?
- How do teachers motivate students in virtual classrooms?
- What are the teacher recommendations for the effectiveness of virtual classroom management?

2. Methodology

This section presents information regarding the research model, working group, data collection tool and procedure, data analysis and ethics.

2.1.Research Model

In this study, in which the qualitative research method was used to determine the experiences of teachers on virtual classroom management, interview technique was used. In this study, which was carried out to determine teachers' virtual classroom management experiences, phenomenology (phenomenology), one of the qualitative research designs, was used. Phenomenology focuses on phenomena that we are aware of but do not have an in-depth and detailed understanding (Yıldırım & Şimşek, 2008). The phenomenon discussed in this research is the virtual classroom management phenomenon. In this context, phenomenology was utilized to investigate the experiences of teachers who conduct educational activities in a virtual classroom setting.

2.2. Working Group

For a qualitative study, it is defined as sampling to select participants who will help reveal the main phenomenon in the study (Creswell, 2017). This study aimed to reveal the virtual classroom management experiences of teachers. In this context, the maximum variation sampling method, one of the purposeful sampling methods, was used to determine the study group of the research.

The maximum variation sampling method is based on differences in perspectives (Creswell, 2017). With this sampling method, participants with different characteristics can be reached, and their experiences related to the phenomenon can be detected from various perspectives (Suri, 2011). Within this context, teachers working at different school levels, branches, and seniority were reached, and their experiences regarding the virtual classroom were detected from different aspects. Therefore, the maximum diversity sampling method was used to synthesize teachers' experiences in various dimensions. In this context, interviews were conducted with eighteen teachers at different school levels, working in various branches and having different seniority years. Information about the participant group is given in Table 1.

As seen in Table 1, 5 participants work in primary school, 5 in secondary school, and 8 in high school. Participants are in various branches in line with their school level. The seniority of the participants ranged from 1 to 15 years.

Table1. *The Demographical Characteristics of the Participants*

Participant	School Type	Branch	Seniority
P1	Anatolian High School	History	3
P2	Anatolian High School	Biology	6
P3	Secondary School	Science	3
P4	Vocational and Technical High School	Physical	2
P5	Secondary School	Maths	4
P6	Primary School	Classroom Teaching	8
P7	Anatolian High School	German	5
P8	Anatolian Vocational High School	Literature	2
P9	Anatolian High School	English	15
P10	Primary School	Pre-School	1
P11	Secondary School	Turkish	4
P12	Primary School	Classroom Teaching	7
P13	Primary School	Classroom Teaching	5
P14	Secondary School	Religious Culture and Ethics	2
P15	Secondary School	English	4
P16	Anatolian Vocational and Technical High School	Maths	5
P17	Anatolian Vocational and Technical High School	Maths	3
P18	Primary School	Classroom Teaching	11

2.3. Data Collection Tools and Procedure

In the research, the interview method was used to obtain in-depth data on the participants' experiences, ideas, feelings and knowledge (Patton, 2014). In this context, the researcher prepared a semi-structured interview form for teachers' virtual classroom management experiences. In preparing the interview form, the relevant literature was reviewed and care was taken to formulate the questions within the context of the research purpose. After the questions were prepared, expert opinion was taken and a pilot application was made to two teachers to determine the questions' clarity. In order to check the ethical compatibility of the interview questions, it was sent to the Van Yüzüncü Yıl University Ethics Committee and the ethics committee report numbered E-85157263-604.01.02-101063 was received.

During the collection of research data, face-to-face interviews were not carried out due to the Covid 19 epidemic; telephone interviews were conducted at first. In the telephone interviews, participants were told the purpose of the study and their general opinions were obtained.The interviews were recorded by taking notes. Afterward, the prepared interview form and consent document were sent to the participants by e-mail, and the participants were asked to send their answers via e-mail. In this context, the confirmation of the telephone conversations was provided

2.4. Data Analysis

Descriptive analysis, which is a qualitative analysis method, was used in the analysis of the data. The data obtained in the descriptive analysis are summarized and interpreted in line with the previously determined themes. The data can be organized according to the themes revealed by the research questions, or it can be presented by considering the questions or dimensions used in the interview process (Yıldırım & Şimşek, 2020). Descriptive analysis refers to a four-stage process. These stages are; creating a framework for descriptive analysis, processing the data according to the thematic framework, defining the findings, and interpreting the findings (Baltacı, 2019). Within this context, a framework was drawn for data analysis based on the research questions. According to this framework, the themes and categories under which the data would be collected were determined. Then, the data obtained according to the thematic framework were read in detail and arranged. Then, the edited data were defined and supplemented with direct quotations where necessary. Finally, the identified findings were explained, correlated, and interpreted. In this study, themes were created within the scope of research questions, data were processed within the scope of the themes created, and then the data were defined and interpreted. In addition, direct quotations are included where necessary. While quoting the citations, the participants were coded as P1, P2, P3….

2.5. Validity and Reliability

Validity and reliability are considered as one of the most important criteria in terms of the credibility of the results in scientific research (Yıldırım & Şimşek, 2008). In qualitative research, validity is the focus of good, rigorous research. Validity means that the findings are correct (Creswell, 2017). In qualitative research, the concepts of credibility for internal validity and transferability for external validity are used (Yıldırım & Şimşek, 2008). In this context, participants with different characteristics (year of seniority, branch, type of school they work in, etc.) were included in the research to ensure the credibility of the research; from the design stage of the research, an expert (having general knowledge about the research subject and experienced in qualitative research) examination was made, and the data were collected by various methods (telephone interview, on-line interview). In addition, the results obtained were confirmed by the participants. The purposive sampling method was used for the transferability of the study, and the data were given by describing in detail. In qualitative research, the concept of consistency is used instead of the concept of reliability, which emphasizes repeatability in quantitative research. Reliability is about whether the obtained information is reproduced or not. In other words, if the study is done again, the same results are called reliability (Merriam, 2013). Consistency is used instead of internal reliability, and confirmability is used instead of external reliability. This study used Miles and Huberman's (2016) consistency formula to ensure internal reliability. In this context, the consistency between the themes and codes was calculated with the help of an expert. This consistency was over 85% in all dimensions. The collected data continuously confirmed the conclusions reached for external reliability. In addition, the participant characteristics and the data collection and analysis process were shared in detail.

2.6. Ethical

Within the scope of taking ethical principles as a basis in the research, E-85157263-604.01.02-101063 numbered ethics committee approval of Van Yüzüncü Yıl University Social and Human Sciences Scientific Research Publication Ethics Committee were obtained first. During data collection, participants were informed about the study, informed consent was obtained, and participant confidentiality was ensured.

3. Findings

The findings obtained in the research are given in themes within the framework of the research questions.

3.1. Planning

The participants' views were discussed and explained in terms of the categories of preparation, method, techniques, tools, and applications used within the scope of planning.

3.1.1. Preparation

Participants stated that they planned before the lesson and taught their lessons through EBA and ZOOM. When the activities of the participants within the planning are examined; (1) Informing the student beforehand, (2) taking screenshots from various sources, (3) preparing a worksheet, (4) acting within the annual/weekly plan, (5) keeping the materials that will be needed during the lesson nearby, (6) considering the number of students, (7) preparing activities that will attract attention, (8) addressing student attention needs were stated.

One of the participants commented, *"I arrange my teaching activities in accordance with the annual plan's objectives. In general, I am careful not to exceed the gains"* (P11), whereas another participant stated, *"I organize instructional activities in virtual classrooms based on the number of students and the topic to be covered."* Additionally, the level of the student is essential" (P9).

3.1.2. Methods and Techniques

When the methods and techniques used by the participants in virtual lessons are examined; (1) question and answer, (2) lecture, (3) case study, (4) problem solving, (5) showing and doing, (6) discussion, brainstorming, (7) educational game, (8) six hat technique, (9) demonstration were stated. When the answers given by the participants in this context are examined, it is understood that the teachers benefit from methods and techniques within their branches. For instance, a science teacher stated his thought as *"My course is a branch based on experimentation and observation; unfortunately, since I couldn't prepare an environment for this situation*

during the pandemic process, I focus on showing and doing it, and this is the straight narrative I use most. The reason is that I see it as an advantage that it saves time and saves in a crowded environment" (P3). At the same time, another participant, who is a Turkish language and literature teacher, made the following statement: "I often use this method because the content of my course is convenient for me to progress in the form of questions and answers" (P8).

3.1.3. Tools

When the answers of the participants about the tools they use in virtual classrooms are evaluated, (1) slides, (2) visual contents, (3) screenshots, (4) videos, (5) worksheets, (6) textbooks, (7) speed library application, (8) electronic books, (9) interactive sharing, (1) Z-books, (11) sound recordings were stated. The answer of one participant shows that teachers give importance to pre-lesson preparation in distance education, and that the preparation is within the criteria of technological possibilities: *"Before the lesson, I download the pdf of the textbook and prepare the parts to be processed from the ... application. To consolidate the knowledge and provide repetition in a more comfortable environment, I open a source book from the "speed library" application, which also includes educational games on the subject, and prepare the activities and questions to be solved on the subject"* (P15). Another participant expressed what they did in this context: "*Before the lesson, I am preparing to find lesson-related activities from various resource books and take pictures of them and share the screen in the lesson."* (P13).

3.1.4. Applications

The applications used by the participants while conducting their education activities within the scope of distance education are (1) EBA, (2) ZOOM, (3) Whatsapp, (4) Skype. The answer of one of the participants shows that the application used may change according to each activity: *"I define lessons via ZOOM, I share activities and studies from EBA, I share activities from WHATSAPP. I use the training sets that I use at school"* (P10). On the other hand, a participant's response shows that the place and conditions of the task can affect the application used: *"As I am working in a village school, I gave my lectures on Whatsapp because it was allowed by both EBA and the administration. …I send the lecture notes I wrote to the students who could not attend the course via Whatsapp"* (P5).

3.2. Communication and Interaction

Participants stated that they included activities such as (1) asking questions, (2) informing before the lesson, (3) monitoring class participation, (4) turning on the microphones, (5) giving the student the right to speak, (6) drawing attention with simple activities, to ensure communication and interaction with students, (7) assigning duties and responsibilities to the students, sharing the lecture notes, (8) involving the parents in the process, (9) making routine interviews with the students individually, (10) teaching the lesson with examples from daily life, (11) pre-share course content, (12) share fun worksheets, (13) play class-related games.

While a participant expressed their actions regarding communication and interaction with students: "*As a school, communication groups were formed at the beginning of the academic year, with which we will be in constant communication with our students and parents. Students and parents were informed about the importance of distance education. Thus, during distance learning, parents were encouraged to follow the students' lessons. The students who did not attend the classes were contacted frequently. I try to give students duties and responsibilities so that the students who attend the courses continue their course follow-up. For example, making the presentation of the submitted assignment, making an assistant manager. I try to raise the awareness that attendance is monitored by viewing the class participation rates on Eba and sometimes sharing it with the students during the lesson. To ensure communication, I use the question-and-answer method with the students by turning on their microphones from time to time during the lecture presentation"* (P2); another participant made the following statement: *"I share the live lesson program that I have assigned via Eba with parents via Whatsapp and inform my students about the program. Every week, I call the students in turn and conduct interviews to motivate them about the lesson. I am trying to get feedback from these meetings and identify and fix the problems related to distance education. To keep the communication process in the classroom alive, I share and receive comments on surprising short videos or pictures"* (P6).

In the responses received, it can be stated that the teachers are aware of the fact that the attention of the students is easily distracted within the framework of distance education applications. In this context, it can be stated that they are attentive to include different applications to ensure and maintain communication with the students. As a matter of fact, one participant's statement explains this situation: *"Student participation in class*

is dependent on internet facilities, although communication with parents is provided, attendance is not provided when they do not have internet. Since children and teachers are constantly on computer screens, distraction occurs quickly, or we encounter sound problems when the internet's strength is low. When distraction occurs apart from a systemic problem, I ask questions to the students and ensure their participation in the lesson. Apart from that, I try to attract their attention by including simple activities; in this case, I can't do it all the time because there is a time problem" (P3).

3.3. Undesirable Behaviors and Measures Taken

Participants stated undesirable behaviors in the virtual classroom environment as (1) more than one student talking at the same time, (2) the student not being in front of the screen, (3) the conversations between students, (4) students not attending the lesson, (5) the noise in the student's environment during the lesson, (6) lack of necessary materials for virtual lessons, (7) not being motivated to the lesson, (8) lack of knowledge about the use of technological tools.

Participants stated that they took precautions in the form of (1) muting students, (2) making students active, (3) setting rules with students, (4) carrying out the lesson while students' microphones are on, (5) informing students and parents about the applications to be made beforehand, (6) introducing the program to the students against the undesirable behaviors mentioned above.

One of the participants' views clearly states that the situation can change under conditions: *"During the lesson, there may be noises coming from the house and blocking the flow of the lesson. For example, the television's sound and the children's voices at home can be mixed with the lesson. There is an internet problem in our village. We are not able to participate fully. We announce the hours of the classes in advance. Generally, students access with their parents' smartphones. The student cannot use the phone while his father is at work, so they may not be able to attend the lesson. When the internet package runs out quickly, this is another reason to prevent them from attending the lesson. Very few students have tablets. I often use the question-and-answer method to keep students active in the lesson"* (P5). The statements of another participant reveal the importance of students' readiness for virtual classroom applications: *"The leading problem I encounter in virtual classrooms is that students are not conscious of the use of applications. The program's language is English, which makes it difficult to use. For example, mistaking the camera for the lesson and performing inappropriate behaviors during the lesson are among these situations. To prevent these behaviors, I inform the student about the program and how we should behave in virtual classrooms. I tell them to give due importance to the lesson in virtual classrooms as in face-to-face education"* (P13)

3.4. Time Management

Participants stated that they take the following precautions: (1) making a plan, (2) starting the lesson in advance, (3) sharing the lesson contents before or after the lesson, (4) informing the students before the lesson, (5) making use of technological opportunities, (6) turning off the microphones of the students, (7) setting/implementing rules, (8) transferring time between lessons, (9) focusing on visual elements, (10) applying the diluted program to use time effectively in virtual classrooms.

It is noteworthy that technological opportunities, which is an important approach to useg time effectively in traditional classrooms, is also expressed in virtual classrooms. The opinion of a participant belonging to this category is as follows; *"Because I use pdf and graphics tablet, I don't have to rewrite everything. If I'm going to explain some very specific parts more simply, I write them on the white screen. The student takes a screenshot and puts it in his notebook in his own time. Since we evaluate the student's writing time, the time is sufficient"* (P4). While one of the participants who took more than one course in the same student group stated his opinion: *"I believe that I use time effectively when explaining literary subjects, but the lack of basic knowledge of my students in grammar can sometimes make our way longer. I aim to teach them in such cases because I worry about basic grammar issues, not time. I am trying to solve it by using the time I have increased from literature subjects for grammar subjects"* (P8). Another participant, who indicated that he acted in the direction of taking advantage of opportunities according to current conditions, expressed the following: *"Since I worked in a village school, I gave my lectures on WHATSAPP for a while, as this was allowed by both the EBA and the administration. Currently, I only actively use the EBA application via ZOOM. I use textbooks, EBA lecture videos, and tests with appropriate content on the internet as materials. Since the subjects are a bit abstract in mathematics, I give more importance to understanding logic for permanence. I send the lecture notes I wrote to the students who could not attend the course via WHATSAPP."* (P5).

3.5. Providing Motivation

Participants stated that they included practices such as (1) considering student needs, (2) activating students, (3) providing weekly guidance, (4) giving research assignments, (5) using verbal feedback (6) providing a comfortable environment, (7) allowing formal communication between students, (8) making use of visual resources, (9) informal conversations, (10) using educational games/activities to motivate students in the distance education process.

A participant's response as, *"I give verbal reinforcements in virtual classrooms to provide student motivation. I use phrases that motivate students. I mostly keep my students active so that the learning environment becomes positive, I involve them in the lesson with games and fun activities so that they feel that it is their own classrooms and their own environment"* (P12) shows that he thinks that making students active is beneficial in terms of student motivation in distance education as well as in face-to-face education. Another participant used the following statement to show that he tried his best to make the students feel comfortable: *"I use verbal feedback to increase student motivation. I am trying to provide guidance that will increase students' belief that they can be successful I enable students to communicate with one another and pose questions to one another. I facilitate students' participation and cooperation in the classroom. I try to create a suitable classroom environment where students can express themselves more easily."* (P6)

3.6. Suggestions for Making Virtual Classrooms Effective

Participants stated that in order to provide virtual classroom management and to increase the quality of education and training activities carried out in virtual classrooms, following precautions are necessary: (1) turning off the cameras and microphones of the students, (2) the teacher having communication skills, (3) parents creating a special area for the participation of the students in the lesson, (4) paying attention to the importance of virtual safety, (5) the teacher entering to the lesson on time, (6) giving importance to the students' questions and opinions, (7) the teacher having technological competence, (8) ensuring the cooperation of teachers, students and parents, (9) ensuring the participation of students in the lesson, (10) not constantly changing the lesson hours, (11) pre-planning in advance, (12) not having distracting elements in the learning environment, (13) including applications that will attract students' attention, (14) ensuring communication between students, (15) informing students about the program to be used in advance. One of the participants' views regarding this finding is as follows; *"When students attend the lesson, there may be their families behind them. I think this is one factor that distracts both the teacher and the student. A separate area should be created for them, if it is not possible, parents may be more careful during the lesson"* (P3). Another participant's statement that knowing the program to be used well will increase the quality of education in the virtual environment is as follows; *"Especially the features of the platform or platforms used should be well known. If it is well known, the learning environment will take shape accordingly, that is, it will be of higher quality and serve the purpose more"* (K11).

4. Conclusion and Discussion

In this study, teachers' experiences in virtual classroom management were tried to be revealed. Virtual classroom management experiences of teachers; planning, communication and interaction, undesirable behaviors and precautions are taken against undesirable behaviors, time management, motivation and suggestions for effective use of virtual classrooms are discussed in the context of categories.

Effective teaching in virtual and face-to-face classrooms, requires good planning skills (Kear et al., 2012). As a result of the research, teachers' planning within the scope of virtual classroom management consists of preparation, the method used, techniques, tools, and applications. They indicated that they include practices such as informing the student in advance, preparing a worksheet, adhering to the annual/weekly plan, keeping the materials that will be required during the lesson, preparing activities that will attract attention, and addressing the student's attention needs while preparing. It is essential to make preparations in advance for good classroom management. According to Başar (1999), well-organized activities are also a necessary requirement for effective learning. In this setting, pre-planning is necessary in both traditional and virtual

classrooms. The purpose and significance of the lesson to be taught in the virtual classroom, the method and techniques to be used, the tools to be used, the accomplishments, the evaluation form and evaluation criteria of the lesson, the duration of the lesson, the time, the participant groups, and the resources to be used in the lesson must be meticulously planned, organized, and communicated to the students (Bernal, 2011; Can, 2020).When the results obtained in the research are evaluated, it can be stated that the teachers are attentive to make appropriate preparations for virtual classrooms. In the study by Arslan and Şumuer (2020), one-tenth of the teachers stated that they had problems preparing for the lesson. When this rate and the findings obtained in this study are evaluated, it can be said that teachers are attentive to prepare for the effectiveness of their lessons in virtual classrooms, and they do not have a problem in this regard.

The methods and techniques teachers use in virtual lessons are question-answer, lecture, case study, problem-solving, showing and doing, discussion, brainstorming, educational game, six hats technique, demonstration. In this context, it can be stated that teachers try to teach lessons using various methods. Multi-media, where several materials can be used together in virtual classrooms, contributes to the execution of teaching and learning activities. With the teaching supported by multimedia, it becomes easier to gain the desired behaviors. In these environments, students can examine the subjects from different perspectives, get rid of their passive role in traditional teaching methods, and have an active role in the combination of different communication environments (Yaşlıca, 2019). Indeed, Yılmazsoy et al. (2018) found that virtual classrooms are suitable for the use of different teaching methods and techniques, the lessons are supported by visual content and materials, the students know the course content and objectives, and these situations contribute to the students.

On the other hand, when there is a distance between students, learning within a common process gains importance (Liu & Tsai, 2008). Student-student interaction is expressed as an important factor affecting student success and motivation (Polat, 2016). In this context, it has been discovered that teachers are careful to employ a variety of method techniques when conducting distance education activities. However, it can be stated that teachers should also consider method techniques that promote cooperative learning and a sense of community in virtual classrooms.Tools used by participants in virtual classrooms are slides, visual contents, screenshots, videos, worksheets, textbooks, virtual applications, electronic books, interactive sharing, Z-books, sound recordings. Using equipment in the lessons allows students to learn better what they have learned and to be active during teaching activities (Kurtdede-Fidan, 2008). Tools prepared in face-to-face education lose their validity in virtual classrooms; in this context, tools and materials specific to virtual classrooms can be used (Kear et al., 2012). The materials used provide an opportunity for effective and permanent learning by appealing to more than one sensory organ in terms of visual and auditory (Yaşlıca, 2019). In this context, the variety of tools and materials expressed by the participants can be evaluated positively in terms of the effectiveness of the lessons.

The applications used by the participants while conducting their education activities within the scope of distance education were expressed as EBA, ZOOM, Whatsapp and Skype. Virtual classroom applications are implemented through virtual classroom software (Adobe Connect, Blackboard Collaborate, Big Blue Button and Perculus). Different applications in this context (Microsoft Teams, Zoom, Skype Meet Now, Google Meet, StarLeaf, Yandex Telemost, WizIQ, EBA, Flipped, Google Classroom, G Suite, Edmodo, Schology, Advancity, Canvas, Moodle, Sakai, Toltek, TeamLink) can be used (Can, 2020). The fact that the participants preferred EBA, ZOOM, Whatsapp and Skype in this study may be because they are the applications on the agenda that students and teachers are aware of. EBA is the Education Informatics Network (EBA) developed by the Ministry of National Education, and three EBATV channels were established separately at primary, secondary and high school levels in cooperation with EBA and TRT during the pandemic period. The lessons were sometimes tried to be transmitted to students in the form of a joint broadcast over EBA (MEB, 2020). Apart

from this, the school administrations planned the lessons with the EBA Live Class application and the lessons were taught by the teachers accordingly (MEB, 2020). Thus, one-way and two-way courses were conducted over EBA (Türker & Dündar, 2020). ZOOM and Skype, which were opened for free access during the pandemic period, were also preferred by teachers, and Whatsapp applications came to the fore for information. In this context, it can be stated that teachers benefit from the applications that can be reached by taking into account the conditions they are in, the nature of the course and the students' opportunities.

Participants stated that to ensure communication and interaction with students, they included activities such as asking questions, informing before the lesson, monitoring participation in the lesson, turning on the microphones, allowing students to speak, attracting attention with simple activities, assigning duties and responsibilities to students, sharing lesson notes, involving parents in the process, and conducting routine interviews with students.Education is a communication and interaction process. Active participation of students in the learning process can have positive effects on their success (Açıkgöz, 2002). However, eye contact and closeness are limited in distance education; teachers cannot observe the emotions of students in distance education, cannot detect moments of anxiety (Valentine, 2002), cannot provide personal interaction, and cannot benefit from clues for the intelligibility of a subject (Yang & Liu, 2004). Therefore, it can be stated that the interaction in distance education is weaker when compared to face-to-face interaction (O'Neil, 2006). Considering the importance of interaction in the learning and teaching process, it can be said that various applications should be integrated into virtual classrooms to ensure interaction. In this context, teachers should do their best to overcome the limits of technology and involve students in an interactive environment that can work to create a real classroom feeling (Valentine, 2002). If virtual classroom features are used effectively, they can foster a sense of community in terms of their interactive nature, simultaneity, usefulness, and ease of use (Parker & Martin, 2010). In this context, steps should be taken to involve students in the course, and students should be encouraged to ask questions and respond to each other. Particular attention should be paid to the participation of silent students in the lessons (Korsturska, 2020). In fact, the research shows that teachers use different practices to ensure communication and interaction, and it can be said that these practices are important for the development of a sense of community.

Undesirable behaviors encountered by the participants in the virtual classroom environment are more than one student talking at the same time, the student not being on the screen, the conversations between the students, students not participating in the lesson, the noise in the environment where the student is during the lesson, the lack of necessary materials for virtual lessons, the lack of motivation to the lesson, the lack of knowledge about the use of technological tools. In virtual classrooms, eye contact cannot be achieved as in traditional classrooms, and there is no opportunity to constantly observe the student. In this case, the students' attention can be distracted, and in this context, undesirable behaviors can be encountered. The undesirable behaviors expressed by the teachers in the study are similar to the results obtained in several studies (Arslan & Şumuer, 2020; Kaya, 2011).

The participants stated that to prevent undesirable behaviors they encounter, they took precautions such as muting the students, making the students active, determining the rules with the students, teaching the lesson with the microphones open, informing the students and parents about the applications to be made, and introducing the program to the students. In this context, it is seen that some participants take a precautionary approach, while others act with a reactive approach. Good classroom management depends on students knowing what behaviors are expected of them. Carefully prepared preventive regulations make it easier for the teacher to reach their expectations, while facilitating the creation of a safe and productive environment (Bilir, 2014). Therefore, it may be more appropriate for teachers to act with a precautionary approach so that undesirable behaviors do not occur.

The participants stated that, to use time effectively in virtual classes, their activities are planning, starting the lesson in advance, sharing the lesson contents before or after the lesson, informing the students before the

lesson, making use of technological opportunities, turning off the microphones of the students, determining/implementing the rules, transferring the time between lessons, focusing on visual elements, applying a diluted program. Studies are done before the classes ensure that the time is used following the objectives of the lesson. In this context, preparatory work for the course such as making plans, determining classroom rules, preparing course tools, materials and resources can be done (Taş, 2010). The participants' answers in the form of sharing the course content, informing the students and determining the rules before the lesson can be evaluated in this context On the other hand, the approach during class is as important as the preparation for class for time management. In this context, teachers also stated that they focused on visual elements, students turned off their microphones to create a quiet environment, and teachers who had common lessons in the same group sometimes provided time transfer between lessons. All these are important in the effective management of virtual lessons. However, considering the short time in virtual classrooms and the distraction of students in front of the screen, it can be stated that teachers should make a great effort to ensure time management. In the study conducted by Arslan and Şumuer (2020), teachers stated that they could not manage time effectively due to the problems they experienced with software and hardware during the lesson.

Participants said that to motivate students in distance education, they think about what the students need, get the students involved, teach them once a week, give them research assignments, give them verbal feedback, make the classroom comfortable, include formal communication between students, use visual resources, have casual conversations, and use learning games and activities. In this context, it is seen that teachers try to conduct their lessons by considering different motivational factors. Song (2000; cited by Kim & Frick, 2011) examined the motivational effects in web-based teaching in three main categories; internal, external, and personal. When the findings of this study are evaluated from this point of view, it is seen that teachers sometimes include practices such as taking into account the needs, activating, and providing a comfortable environment that will motivate students internally. Sometimes they use external motivation tools such as using reinforcement, benefiting from visual resources, and playing games. In addition, it is stated that students' having self-management and technology competence is also important in terms of motivation in virtual learning (Kim & Frick, 2011). Therefore, although the teacher tries to motivate the students with different practices, the students' personal characteristics also have an important place in student motivation. On the other hand, it is stated in some studies that face-to-face interaction and social interaction cannot be achieved in distance education, which can cause students to feel isolated and negatively affect their motivation (Bolliger et al., 2010). Considering this situation, it can be said that teachers should include different practices from face-to-face lessons that will provide students' motivation in virtual lessons.

In order to provide virtual classroom management and to increase the quality of education and training activities carried out in virtual classrooms by the participants, the following suggestions are developed in the research: turning off the cameras and microphones of the students, the teacher having communication skills, parents creating a special area for the participation of the students in the lesson, paying attention to the importance of virtual safety, the teacher coming to the lesson on time, giving importance to the students' questions and opinions, the teacher having technological competence ensuring the cooperation of teachers, students and parents, ensuring the participation of students in the lesson, not constantly changing the lesson hours, planning in advance, not having distracting elements in the learning environment, including applications that will attract students' attention, ensuring communication between students, informing students about the program to be used in advance. It can be stated that similar suggestions have been developed in the studies on virtual classrooms in the literature. For example, in the study conducted by Yaşlıca (2019) the suggestion about the widespread use of interactive teaching materials in virtual classrooms was developed. In the study conducted by Çakıroğlu (2014), suggestions were developed to increase the technological familiarity of teachers and to ensure that students learn how to use distance learning systems. In the study conducted by Arslan and Şumuer (2020), following suggestions were presented in order to overcome the problems in virtual classroom management: Teachers and students conducting virtual classroom lessons within the framework of appropriate physical arrangements, providing internet facility to teachers, providing access to the lesson with both the teaching management system and session information, designing various digital content and activities suitable for different learning preferences, developing the necessary skills of teachers to produce solutions to technical problems, using process-oriented assessment approaches such as electronic product file that puts the student in the center, taking the opinions of the teachers while determining the course schedules and durations, teachers including various applications to

increase communication in the virtual classroom, informing teachers, students and parents about the security and privacy of web conferencing systems, making a discussion forum for students who do not participate at the end of the lesson, creating classroom rules in accordance with the nature of the virtual classroom.

5. Recommendations

Virtual classrooms are different from physical classrooms in which face-to-face education takes place in traditional education. In this context, the following recommendations can be considered in light of the findings above.

- It can be ensured that teachers are supported with training on the management of virtual classrooms, planning the lesson, communicating effectively with the student, providing student motivation, managing undesirable behaviors, and effective use of time.

- Plans can be made to introduce various programs to teachers, create virtual environments that will enable students to interact with each other and include educational practices in this context.

- Studies can be carried out by taking into account the opinions of different groups (parents, students, administrators, etc.) on virtual classroom management of teachers.

- This research was carried out within the scope of the qualitative research method. Different perspectives can be revealed by supporting the views on virtual classroom management with quantitative research methods.

6. References

Açıkgöz, K. Ü. (2002). *Aktif öğrenme* [Active learning]. Eğitim Dünyası Yayınları.

Arslan, Y. ve Şumuer, E. (2020). Covid-19 döneminde sanal sınıflarda öğretmenlerin karşılaştıkları sınıf yönetimi sorunları [Classroom management problems encounered by teachers in virtual classes during COVID-19 pandemic]. *Milli Eğitim, 49*(1), 201-230.

Baltacı, A. (2019). Nitel araştırma süreci: nitel bir araştırma nasıl yapılır? [The qualitative research process: How to conduct a qualitative research?]. *Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 5*(2), 368-388.

Başar, H. (2014). *Sınıf yönetimi* [Classroom management]. Milli Eğitim Basımevi.

Bernal, B. V. (2011). Challenges in the pedagogy of virtual classrooms. *ASEE Southeast Section Conference.* Retrieved from http://se.asee.org/proceedings/ASEE2011/Papers/FP2011ber103_105.PDF

Bilir, A. (2014). Sınıf yönetiminde başarının aracı: önlemsel model [Tool of success in classroom management: precautionary model]. *Folklor/Edebiyat, 20*(78), 203-214.

Bodein, Y. ve Robert, J.M. (2000). *Investigating distance learning on the internet*. Internet Society INET Conferences, September 06 2000, Yokohama, Japan.

Boliger, D.U., Supanakorn, S. & Boggs, C. (2010). Impact of podcasting on student motivation in the on-line learning environment. *Computers & Education*, 55, 714-722.

Can, E. (2020). Sanal sınıf yönetimi: ilkeler, uygulamalar ve öneriler [Virtual classroom management: principles, practices and suggestions]. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6*(4), 251-295.

Creswell, J.W. (2017). *Nitel araştırmacılar için 30 temel beceri [30 Essential skills fort he qualitative researcher]* (H. Ozcan, Çev.). Anı.

ECLAC-UNESCO, (2020). *Education in the time of COVID-19.* Retrieved 07.08.2021 from https://repositorio.cepal.org/bitstream/handle/11362/45905/1/S2000509_en.pdf

Gunawerdena, C. N. & McIsaac, M. S. (2004). Distance education. In D. H. Jonassen (Eds.), *Handbook of research on educational communications and technology* (pp. 355-395). Lawrence Erlbaum Associates.

MEB (2020). Uzaktan eğitim için uydu frekans ve yayın platformları bilgisi. Retrieved 26.08.2020 from https://www.meb.gov.tr/uzaktan-egitim-icin-uydu-frekans-ve-yayin-platformlari-bilgileri/haber/20565/tr

Jefferson, R.N. & Arnold, L.W. (2009). Efects of virtual education on academic culture: Perceived advantages and disadvanteges. *US China Education Review, 6*(3), 61-66.

Kavrayıcı, C. (2021). The relationship between classroom management and sense of classroom community in graduatae virtual classrooms. *Turkish Online Journal of Distance Education-TOJDE, 22*(2), 112-125.

Kaya, S. (2011). *Sanal sınıf yönetiminde görev alacak öğretim elemanlarının eğitim gereksinimlerinin belirlenmesi* [Identifying the educational needs of instructors commissioned in the virtual classroom management] [Doctoral dissertation]. Anadolu University, Eskişehir. Available from the Council of Higher Education, National Dissertation Center,Dissertation ID: 286819.

Kear, K., Chetwynd,F. Williams, J. & Donelan, H. (2012). Web conferencing for synchronous on-line tutorials: Perspectives of tutors using a new medium. *Computers & Education, 58*(3), 953-963.

Kırık, A. M. (2014). Uzaktan eğitimin tarihsel gelişimi ve Türkiye'deki durumu [Historical development of distance education and the situation in Turkey]. *Marmara University Journal of Communication, 21*, 73-94.

Kim, K.J. & Frick, T.W. (2011). Changes in student motivation during on-line learning. *Journal Educational Computing Research, 44*(1), 1-23.

Kurtdede-Fidan, N. (2008). İlköğretimde araç gereç kullanımına ilişkin öğretmen görüşleri [Teachers' views with regard to the use of tools and materials in the primary level]. *Kuramsal Eğitim Bilim, 1*(1), 48-61.

Liu, C.C. & Tsai, C. C. (2008). An analysis of peer interaction patterns as discoursed by on-line small group problem-solving activity. *Computers & Education, 50*(3), 627-639.

O'Neil, T.D.G. (2006). How distance education has changed teaching and role of the instructor. *E-Leader Slovakia.* Retrieved http://www.g-casa.com/download/ONeil_Distance_Education.pdf)

Mogonea, F. (2014). Reconsidering the teacher's roles and skills in the virtual classroom. *The 10. International Scientific Conference eLearning and software for Education*, Bucharest, April 24-25.

Parker, M.A. & Martin, F. (2010). Using virtual classrooms: student perceptions of features and characteristics in an on-line and a blended course. *MERLOT Journal of on-line learning and teaching, 6*(1), 135-147.

Patton, M.Q. (2014). *Nitel araştırma ve değerlendirme yöntemleri* [Qualitative research & evaluation methods] (M. Bütün- S.B. Demir, Çev.Ed.). Pegem.

Polat, H. (2016). *Çevrim içi öğrenme ortamlarında sınıf yönetiminin çeşitli değişkenler açısından incelenmesi* [Investigation of classroom management in online learning environments in terms of various variables] [Doctoral dissertation]. Fırat University, Elazığ. Available from the Council of Higher Education, National Dissertation Center, Dissertation ID: 445651.

Rufai, M.M., Alebiosu, S.O. & Adeakin, O.A.S. (2015). Conceptual model for virtual classroom management. *International Journal of Computer Science Engineering Information Technology (IJCSEIT), 5*(1), 27-32.

Suri, H. (2011). Purposeful sampling in qualitative research synthesis, *Qualitative research journal*, *11*(2), 63-75.

Taş, S. (2010). İlköğretim okullarında sınıfta zaman kaybettiren etkinlikler [Time consuming activities in primary schools]. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 2*, 73-93.

Türker, A. & Dündar, E. (2020). Covid-19 pandemi sürecinde eğitim bilişim ağı (EBA) üzerinden yürütülen uzaktan eğitimlerle ilgili lise öğretmenlerinin görüşleri [The opinions of high school teachers on distance learning which is carried out through EBA (educational informatics network) during COVID-19 pandemic period]. *Milli Eğitim, 49*(1), 323-342.

Uçar, R. & Mazlum, M. M. (2020). Geleneksel sınıftan sanal sınıfa sınıf yönetimi [Classroom management from traditional classroom to virtual classroom]. In F. Tanhan ve H.İ. Özok (Eds.), *Pandemi ve eğitim* içinde (pp. 103-129). Anı.

WHO. (2020). Retrieved from: https://www.who.int/news/item/29-06-2020-covidtimeline adresinden 08.09.2021

Valentine, D. (2002). Distance learning: Promises, problems, and possibities. *Online Journal of Distance Learning Administration, 5*(3). Retrieved from https://www.westga.edu/~distance/ojdla/fall53/valentine53.html

Van Gorp, M. I., & Boysen, P. (1997). ClassNet: Managing the virtual classroom. *International Journal of Educational Telecommunications, 3*(2/3). 279-291.

Veletsianos, G. (2010). A definition of emerging technologies for education. In G. Veletsianos (Ed.), *Emerging technologies in distance education* (pp.3-22). Athabasca University, AU Press.

Yang, Z. & Liu, Q. (2007). Research and development of web-based virtual on-line classroom. *Computers & Education, 48*, 171-184.

Yaşlıca, E. (2019). *Sanal sınıf ortamında etkileşimli öğretim materyalinin başarıya ve tutuma etkisi* [The impact of interactive teaching material on success and attitude in virtual classroom environment] [Doctoral dissertation] Maltepe University, İstanbul. Available from the Council of Higher Education, National Dissertation Center, Dissertation ID: 555371.

Yeşilorman, M. & Koç, F. (2014). Bilgi toplumunun teknolojik temelleri üzerine eleştirel bir bakış [A critical view on the technological basis of information society]. *Fırat Üniversitesi Sosyal Bilimler Dergisi, 24*(1), 117-133. Doi: https://doi.org/10.47714/uebt.837550

Yıldırım, A. & Şimşek, H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri* [Qualitative research methods in the social sciences]. Seçkin.

Yılmazsoy, B., Özdinç, F. ve Kahraman, M. (2018). Sanal sınıf ortamındaki sınıf yönetimine yönelik öğrenci görüşlerinin incelenmesi [Investigating student opinions classroom management in a virtual classroom]. *Trakya Eğitim Dergisi, 8*(3), 513-525. DOI: 10.24315/trkefd.296409