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A Case Study of Preservice Teachers' Classroom Management Dilemma in a Climate of Uncertainty during the COVID-19 Pandemic

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ABSTRACT

The COVID-19 Pandemic process has brought with it a climate of uncertainty. This uncertain environment also contains a lot of uncertainty about classroom management for preservice teachers. The main purpose of this study was to reveal the metaphorical perceptions and views of preservice teachers about the source of the uncertainties they encounter in online courses conducted via Google Classroom. In this case study, the metaphors and opinions produced by the preservice teachers were evaluated. The results of content analysis revealed that the metaphorical perceptions of preservice teachers are grouped under two different themes. These themes are; "Students' Individual Uncertainties" and "Environmental Uncertainties in Learning". They use the metaphors of "dead end" and "confusion" to describe the environmental uncertainties they encounter in the classroom. It can be concluded that the metaphorical perceptions and views of the preservice teachers about the uncertainties they encounter in the online arrangements in Google Classroom overlap with each other.

Key words: Google Classroom, uncertainty, classroom management, preservice teachers, case study, COVID-19

INTRODUCTION

The Pandemic process continues to transform education and training processes all over the world. This transformation is based on new knowledge and technology much more than before (Kooli, 2021). In fact, many countries have adapted to new conditions in different sectors, especially in education, due to the COVID-19 Pandemic (Octaberlina & Muslim, 2020). Countries have made the transition from face-to-face classroom settings to virtual classrooms with online courses. Face-to-face classroom environments (Arabacı & Polat, 2013), which were accepted as the common meeting point of digital natives and digital immigrants in the pre-Pandemic period, gave their place to online classroom environments after the Pandemic. In this process, it sounds logical to argue that Google Classroom, as an online learning management environment, is an effective tool in increasing the active participation of students (Oyarinde & Komolafe, 2020). Indeed, several universities in Turkey preferred using Google Classroom during the Pandemic Process (Akgün et al., 2021; Durak et al., 2020). One of the reasons could be that Google Classroom is a blended learning tool that changes the strategy of delivering education and training in higher education (Ismail et al., 2021).

Considering the online classroom environments required by education faculties, we can say that one of the most important options is Google Classroom. However, it cannot be claimed that all elements of good classroom management and learning environment for preservice teachers can be found in online classrooms such as Google Classroom. In fact, it should be noted that the notion of online learning and teaching brings preservice teachers many uncertainties. According to Peterson (2020), there is a relationship between students' curiosity levels and their learning in schools/classes. From this point of view, it is clear that the uncertainty variable can be associated with learning by playing a key role in increasing curiosity. However, educational research rarely takes uncertainty into account. Moreover, uncertainty in the context of complex teaching activities is rarely the subject of research. It can be claimed that this situation is likely to trigger negative effects of uncertainty in the classroom in general. Also, investigating the sources of uncertainty that students encounter in online classes can reduce the negative effects of uncertainty on them (Lamnina & Chase, 2019). In this context, first of all, the literature on the subject of uncertainty in classrooms will be examined. Then, the metaphors and opinions of preservice teachers about how they perceive the uncertainties they encounter in the Google Classroom will be determined. The obtained results will be discussed, some suggestions will be made, and the contributions of findings to the field of classroom management will conclude this paper.

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Literature Review

In the literature, there are studies on classroom management and teaching uncertainty that teachers encounter in classroom environments. Floden and Clark (1987) draw attention to this relationship with the view that it is important to explore the various ways in which teaching is uncertain and how uncertainty permeates teachers' lives. They state that teachers encounter uncertainties in creating instructional content and selecting the methods to teach difficult concepts in the classroom environment. Such uncertainties in classrooms can undermine teachers' authority. Helsing (2007) argues that recognizing teacher uncertainties in the classroom is a necessity for alternative and effective teaching. Therefore, teacher uncertainties should not be ignored.

Floden and Buchmann (1993) also explained that the teaching process is an activity full of uncertainties in many ways. According to them, teachers in the teaching process are often unsure of their students' knowledge and understanding, the impact of teaching strategies, and what the most appropriate content will be for students in their limited time in the classroom. They may also be unsure of their intellectual and social authority. Even teachers' early tendencies to reduce ambiguity by introducing routine rules or broader subject studies can be uncertain. Too much uncertainty in the teaching process encourages anarchy, while too little uncertainty leads to dogmatism. Beghetto (2017) claims that the uncertainties experienced by students in their homework are more important for teachers. In the classroom, teachers often try to avoid the ambiguities that students experience with their homework. But, if we want students to cope with current uncertainties along with the complex problems they will face in the future, we must also provide them with insecure and sometimes even confusing learning experiences. Sorrentino et al. (2013) also support such a learning experience. In a study of Chinese and Canadian children, they found that children with high uncertainty orientation had higher self-scores, student scores, and teacher scores in different social and achievement behaviors than certainty-oriented children in both countries.

Mintz (2014) explains the uncertainty in the classroom as a situation where a teacher does not know what information to use when deciding what to do with children with learning difficulties. Teachers experience anxiety and confusion in such ambiguous classroom settings. For this confusion, Wegscheider (2020) suggests that enough emphasis should be placed on didactic approaches to verify that students can actually apply the necessary procedures in their specialty. Yet, according to Degoumois et al. (2017), the quality of the interactional resources used by students is important when applying these approaches. Attention should also be paid to how in the classroom expressions of personal opinions and related resources are responded to by both teachers and peers.

In increasing the quality of resources, Simonds (1997) and Kooli et al. (2019) argue that "openness" should be a part of a teacher's character if the teacher wishes to have a general understanding of the class. According to them, it should be taken into account that teacher clarity is a relational variable in teaching. Emerson and Hazlett (2011) and Kooli (2020) agree that the role of the teacher in the classroom transformed from direct control to a role that delegates authority, addresses status issues, improves students' thinking, and provides specific feedback. This transformation could affect uncertainties in classroom management. Also, according to Fidan (2020), who tries to explain teachers' positive and negative views on distance education through themes during the COVID-19 uncertainty process, teachers have positive views on distance education (themes: academic, social, comfort, time, technology, psychological, motivational, empathy, responsibility, innovation, and parent). But, teachers' views are not positive for the codes of "access, motivation, technology addiction, readiness, perspective, classroom management, inactivity, parents, and comfort".

There are also studies that question uncertainty in higher education. For example, Sollitto et al. (2018) reveal that the uncertainties experienced by university students have serious effects on their academic success and teaching processes. So, it is important to draw parallels between the teaching process and the organizational context. This contextual parallelism will enrich the theories about the uncertainties that students face in their university courses. We are also all faced with uncertainties about the future, but some uncertainty can measure probabilities (Spiegelhalter et al., 2011). On these possibilities, Conati et al. (2002) argue that uncertainty management should be employed. According to them, an education system that aims to provide interactive help to students needs to know what information the student has. In other words, the system should know which goals the students are currently trying to achieve. At this point, an effective assessment and recognition plan should be designed to manage uncertainty. Studies of Costache et al. (2019) suggest that the uncertainties that prospective teachers encounter in the course planning process can be understood with linguistic clues. For example, pre-lesson explanations can prepare prospective teachers for the uncertainty of actual practice. The uncertainties experienced by prospective teachers related to instructional design and content. It can be argued that preservice teachers with higher pedagogical content knowledge discussed uncertainty more. It is also thought that the collaborating teacher candidates can take on different roles to support inquiry and knowledge development.

As it can be understood, it is important to investigate the source of possible uncertainties faced by prospective teachers in Google Classroom during the Pandemic process to increase the quality of online classroom environments. Discovering sources of uncertainty in online classrooms can also be inspiring for educators interested in the topic. Yet, in order for this to happen, it is necessary to elaborate the dilemma of classroom management and uncertainty envisaged in Google Classroom. Because the COVID-19 Pandemic process has brought new conditions to many students from all age groups through distance education. According to Basinger et al. (2020), it can be assumed that uncertainty complicates in-class communication under these new conditions. This uncertainty creates disappointment and leads to a decrease in student satisfaction. In other words, reducing uncertainty can prevent negative emotions in students. Stress

and anxiety come first among these negative emotions. These emotions stand out as the most prominent emotions, especially among university students (Basinger et al., 2020). Then, the main purpose of this research is to reveal the metaphorical perceptions and views of teacher candidates about the source of the uncertainties they encounter in Google Classroom.

This research will contribute to the area by filling a gap in the literature about the possible relationship between virtual classroom management and uncertainty. It will also shed light on the doubts that preservice teachers face about classroom management in online classrooms. In other words, the relationship between the concepts of online classroom environment, classroom management, and uncertainty, which is neglected in the literature, is the subject of this study.

Research Questions

In this context, answers to the following questions were sought:

1. What are the metaphorical perceptions of the preservice teachers towards the uncertainties they encounter in online classes?
2. What are the most remarkable uncertainties encountered about online lessons in Google Classroom?
3. What solutions do preservice teachers prefer to use more when resolving uncertainties about online courses?
4. How effective are the solutions used to resolve the uncertainties encountered in online courses?
5. What are the alternative solutions for preservice teachers in resolving uncertainties about online courses?
6. Do preservice teachers get any help from close or distant people to deal with their uncertainties?

METHOD

This research was a case study. According to Yin (1994), it is possible to define case studies as observations of uncontrollable real-life events. Among the main tasks of case studies is to understand current and complex social phenomena. In these studies, quantitative and qualitative evidence were used together. The metaphors and written opinions of the participants were interpreted (Johnson, 2001). Researchers suggest that metaphor analysis can be used for three main purposes: "Improving the process, explaining the process/progress and explaining the result" (Güneş & Fırat, 2016).

Participants

To select the participants of the study group the theoretical sampling method was used (Guba & Lincoln, 1982). The research was carried out in a faculty of education affiliated to a state university in Turkey. It was conducted on preservice teachers enrolled in different teaching programs in the faculty of education. The study group consisted of 75 (27 men; 48 women) teacher candidates. First year students (n=37) showed the highest voluntary participation in the study. According to class level, the lowest participation rate belonged to the 2nd grade students with n=5 students. There was also a moderate level of participation from 3rd year (n=18) and 4th year (n=15) students. Preschool Teaching Program students (n=31) showed more interest in the research. Among the teaching programs studied, the lowest participation belonged to the students in the Turkish Language Teaching program (n=2). Among the participants, there were also teacher candidates from Primary Education Teaching (n=15), Primary Mathematics Teaching (n=12), Social Studies Teaching (n=9), English Language Teaching (n=3) and Guidance and Psychological Counseling (n=3) programs. The average age of the students (also referred to as 'preservice teachers' or 'prospective teachers' throughout this article) in the study group was 22.2.

Data Collection Tool

Research data was collected through a semi-structured interview form prepared by the researcher. The interview form includes four demographic questions, five open-ended questions and two metaphor questions. To ensure the validity and reliability of this data collection tool, two educational science experts were invited to evaluate it. Based on the expert opinions, minor revisions were made to the questions. Then, the questions in the interview form were presented to four preservice teachers (2 females and 2 males), who provided positive feedback about the comprehensibility of the questions. An example of the questions in the interview form is as follows: What are the uncertainties you encounter on the courses you have taken in the program you enrolled in? (Probe Question: The uncertainty about which subject/subjects you experience affects you more in the lessons?). The interview form was sent to the preservice teachers who volunteered to take part in the research. These participants were requested to write and send their answers. Before they had started answering, the participants acknowledged their consent to their voluntary participation in the study.

Data Collection Process

First of all, preservice teachers were requested to give their informed consent by using the consent forms approved by the Ethics Committee (2021/12608) of the Faculty of Education of Muş Alparslan University. Then, the final version of the data collection tool (https://bit.ly/2OPTr6B) was sent to the preservice teachers online via Google Forms. The data collection process was completed in about five months during the 2020-21 academic year. In this process, preservice teachers answered the semi-structured interview questions in writing.

Data Analysis

Thematic content analysis (Boyatzis, 1998) was used for data analysis in the study. In this context, the analysis steps (determining the codes, deciding sub-categories, creating categories and reporting in themes) recommended by Çelik et al. (2020) were followed. The findings obtained were tabulated. Participant opinions deemed important were reported by quoting. The participants were referred to as K1, K2,

K3,…. Before finalizing the findings, two qualitative methods experts were invited to verify the analysis procedures and the results. Based on their feedback, minor revisions were made in the codes. After these experts had confirmed the categories and themes emerged in the study, the stage findings were reported.

RESULTS

The results are presented following the order of the research questions that were presented above.

Preservice Teachers' Metaphoric Perceptions of Online Uncertainties in Google Classroom

The metaphorical perceptions of the preservice teachers about the uncertainties they encountered in online classes conducted via Google Classroom were coded, thematized, and categorized (Appendix A). As shown in Appendix A, the metaphorical perceptions of preservice teachers were grouped under two themes, "Individual Uncertainties" and "Environmental Uncertainties in Learning". The preservice teachers experienced a high level of individual uncertainty (f=44) in online lessons. The individual uncertainties experienced by the preservice teachers gathered under the category of "Uncertainties the Student is Trying to Cope with". Its subcategories included individual uncertainty (f=37), learned helplessness (f=20), lack of motivation (f=4), inability to access technology (f=2), being controlled (f=2), anti-uncertainty (f=2). As these sub-categories indicate, the preservice teachers felt helpless due to individual uncertainty. The codes obtained in the study (difficulty in solving (f=13), self-doubt (f=8), not understanding the lessons (f=6), not knowing what to do (f=5), having excessive psychological anxiety (f=3) and not being sure (f=3) explains this situation. For these codes, the preservice teachers produced the metaphors Dead End (f=4), Future anxiety (f=4), A frightening emptiness (f=2), Helplessness (f=2), Deadlock (f=2).

With the metaphors achieved, it can be concluded that teacher candidates tend to attribute more negative meanings to the individual uncertainties they encounter in their online learning experiences. Although most of the preservice teachers expressed their individual uncertainties, there were preservice teachers who saw an order within the chaos of online learning. As the anti-uncertainty sub-category indicates, these preservice teachers argued that uncertainty brings order within itself. According to them, the perception of individual uncertainty that they experienced and associated with "chaos" (K51) may have decreased when they saw "the detailed order that the subject had in itself" (K44).

Another theme emerging in the research is "Uncertainties in the Learning Environment". Within the scope of this theme, the category of "Uncertainties Regarding Classroom Management" (f=29) stands out. It was divided into the following subcategories: In-class communication level (f=18), characteristics of the classroom environment (f=18), not getting enough feedback (f=11), lack of motivation (f=8), family relationships (f=2), and access to technology. Prospective teachers are in a great deal of uncertainty about classroom communication and the characteristics of the classroom environment. They complain about not getting enough feedback. This situation may lead to a decrease in motivation and even deterioration of family relationships. Of course, not being able to access technology on time is another important sub-category. The codes that support these subcategories included: Not getting enough information from the lessons (f=11), not being able to understand the lessons (f=6), not being open (f=5), not considering individual differences (f=5), reluctance (f=5), not having access to technology (f=4), difficulty in the course process (f=4), decrease in motivation (f=3), approach to the student (f=3), complex subject distribution (f=3), deterioration of family relationships (f=2), and stress (f=2).

Preservice teachers experience uncertainty as they do not obtain enough information and as they are unable to understand the lessons. They are looking for more clarity in classroom management. It is an important problem that individual differences are not taken into consideration in online lessons. This problem, coupled with inadequate access to technology, brings along reluctance for preservice teachers. Current conditions can make the course process challenging for prospective teachers and can reduce their motivation. As the results indicated, in severe cases, these conditions can lead to stress and even deterioration of family relationships. In this context, prospective teachers produced the metaphors of confusion (f=2), being between (f=2), irresponsibility (f=2) and meaninglessness (f=2). Student views for these metaphors are as follows:

I cannot get enough detailed information from the lessons. (K5)

I get lost in information. (K11)

We are ignored; except for a few teachers, no one cares about the lessons and us. (K15)

The uncertainties I experienced during the lessons started for me with my father's phone registered in the system. (K24)

Any uncertainty I experience during the lessons puts me under great stress. (K34)

Preservice Teachers' Online Uncertainties in Google Classroom

The opinions of the preservice teachers on the uncertainties they encounter in Google Classroom are combined under two themes. These themes are; "Environmental Uncertainties in Learning" and "Individual Uncertainties of Students" (Appendix B). As the Appendix shows, it seems that the most common type of uncertainty encountered by the prospective teachers during their online education process conducted in Google Classroom is environmental uncertainty. It is understood that preservice teachers are faced with uncertainties in online lessons due to poor classroom management (f=62). Characteristics of the classroom environment (f=42) increase preservice teachers' anxiety about uncertainty. In this respect, it can be claimed that they try to cope with uncertainties about the course process (f=26). The least common uncertainty in online classes during the Pandemic process is about activating the student. Also, there

are significant uncertainties about measurement-evaluation processes (f=29) and not getting enough feedback (f=19). Most of the teacher candidates are unclear about the way they are expected to complete their homework in online classes. The number of preservice teachers who argue that there are quite ambiguous rules about homework is also not small (f=9). Moreover, some instructors are content with giving only one piece of homework, while others can give quite a lot of homework. It can be stated that the amount of homework given can lower their tolerance to uncertainty. This situation creates complete ambiguity and confusion in the online course process for preservice teachers. Some preservice teachers stated that they preferred face-to-face training more (f=12) to reduce uncertainties about online courses and classroom management. The preservice teachers seem to be faced with significant uncertainties in subcategories of in-class communication level (f=11) and physical characteristics of the course (f=6) in online lessons.

The attitudes and behaviors of lecturers in online courses are another sub-category worth consideration (f=5). Preservice teachers are concerned about the quality of online courses (f=11); they stated that they could not understand online lessons (f=15). There are also teacher candidates who are uncertain about connecting online course content with their daily life (f=5). Some preservice teachers claim that the online course content is not clear enough (f=2). They emphasize that there are uncertainties about access to course materials and technology (f=8). There are preservice teachers who state that they do not find it easy to work with the system and that the online course process is complex (f=2). It is revealed that preservice teachers face serious uncertainties in many aspects related to the classroom management process in online classes conducted via Google Classroom. When analyzing the uncertainties that prospective teachers encounter in Google Classroom, individual uncertainties (f=13) cannot be ignored. The individual uncertainties preservice teachers encounter in Google Classroom include: "Distraction, stress, low motivation, indecisiveness, and trying to cope with negative peer influence". Yet, the presence of individual uncertainty-avoiding/anti-ambiguous prospective teachers (f=5) should also be taken into account.

The findings of the current research reveal that preservice teachers face uncertainties about classroom management in online classes conducted via Google Classroom. In other words, while preservice teachers try to cope with individual uncertainties in the lessons, they experience the biggest uncertainty about classroom management. This situation also strengthens the idea that face-to-face education is more effective than online education in preservice teachers. In this way, a classroom design can emerge where they can both take the course process better and establish a warmer and more explanatory communication with the instructors. So, the biggest source of uncertainty faced by preservice teachers in Google Classroom as an online classroom environment is environmental uncertainties in the learning process. This is due to inadequate practices in classroom management.

Preservice Teachers' Alternative Solutions for Online Uncertainties Encountered in Google Classroom

Alternative ways that the prospective teachers use to solve the uncertainties they encounter in online classes were divided under three themes (Appendix C). According to this appendix, the alternative solutions come under the themes of "Individual Skills", "Environmental Coordination", and "High Uncertainty Threshold". Teacher candidates prefer searching for individual solutions (f=53). They seem to be in search of more suitable alternatives to produce online solutions (f=14), especially the search methods (f=37). These alternatives are supported by sub-categories such as establishing a healthy feedback mechanism and applying it to course materials. They make attempts to self-learn (f=25) and while doing so, they consult online resources (f=14). Some preservice teachers are of the opinion that active participation (f=3) is enough for uncertainties in online lessons. Preservice teachers developed environmental solutions (f=50) to deal with uncertainties in online classes. The most important of these ways are close environment support (f=30) and peer coaching (f=19). Preservice teachers ask for help from their classmates, families, and instructors through Q&A to resolve the uncertainties they encounter in Google Classroom. They can often fulfill these demands at the same time. They coordinate the information they have acquired to resolve the uncertainties they encounter in online lessons.

Some prospective teachers are more tolerant to uncertainties. They exhibit a kind of blindness to uncertainty (f=6). For this reason, they may prefer to avoid uncertainty (f=5) or deny it instead of trying alternative solutions for the uncertainties they encounter in online classrooms. Since they do not know the path they will follow (f=2), they may want not to make an effort (f=2) and leave it (f=2). In fact, the high uncertainty threshold can be considered natural for preservice teachers when considering online lessons through Google Classroom. But, preservice teachers' preference to seek both individual and environmental solutions to face their uncertainties in online classes is important for their own learning experiences.

The findings show that preservice teachers tend to produce individual solutions through self-learning to solve the uncertainties they encounter in Google Classroom as an online classroom environment. In cases where they cannot reach an individual solution on this issue, they prefer to seek environmental solutions and cooperate as an alternative.

Effectiveness of Preservice Teachers' Alternative Solutions for their Online Uncertainties in Google Classroom

The preservice teachers' opinions on the effectiveness of alternative ways they have created to solve the uncertainties they encounter in the Google Classroom were grouped under two themes (Appendix D). The preservice teachers' views in Appendix D are presented under "positive" and "negative" themes. In general, the preservice teachers have positive opinions about the effectiveness of alternative ways they used to solve their uncertainties in online

classrooms. Preservice teachers are of the opinion that the alternative ways they use for individual uncertainties often work (f=51). Thus, there are preservice teachers who argue that the information they learn in online classes is more permanent (f=3). There are also those preservice teachers who expressed negative opinions on the subject (f=45). In this context, preservice teachers state that despite trying alternative ways, environmental uncertainties still persist for them. The alternative solution is not effective for some of the teacher candidates (f=24). This situation is further reinforced by conditions such as the inability to access enough information (f=7) and behavioral uncertainties exhibited in the teaching process (f=5). However, alternative ways that prospective teachers prefer to resolve their uncertainties generally work well.

Preservice Teachers' Suggestions on Solutions for Online Uncertainties Encountered in Google Classroom

The alternative ways suggested by the preservice teachers for solving the uncertainties in the Google Classroom were grouped under three different themes (Appendix E). As explained in Appendix E, the themes created for the alternative ways suggested by the preservice teachers for the uncertainties they face include: "Alternative ways to the learning environment", "alternative ways for the individual uncertainties of the learner" and "uncertainty avoidance". The participants made suggestions for uncertainty management in the classroom (f=54). The subcategories of focusing on communicative solutions (f=37), improving the online course process (f=15), using different methods and techniques (f=13), and counseling (f=13) are among the prominent solutions. The participants think that their uncertainties can be reduced by producing different solutions for communication in online courses. For them, it is very important to review the online course process in many ways. Thus, the process can become more understandable. It is also emphasized that lecturers should prefer different teaching methods and techniques. Moreover, instructors should look for ways to guide preservice teachers as needed.

In the second place, preservice teachers suggested alternative ways to solve individual uncertainties (f=11). According to them, focusing on personal development and developing self-learning paths can work for individual uncertainties in online lessons. Some preservice teachers agreed that the focus should be on the lessons (f=4). Ways such as improving individual self-control skills, participating more in classes, making use of the school library and different textbooks can use to resolve uncertainty. The importance of awareness is focusing on personal development understood from student views. Yet, there are also preservice teachers who avoid uncertainty instead of trying these alternative ways (f=9). These participants are undecided or ignorant in accepting uncertainty. The view that uncertainties in online lessons will resolve over time is common among these preservice teachers. They argue that the activities done during the course process are enough.

Near/Distant Environment Support for Preservice Teachers for Online Uncertainties Encountered in Google Classroom

The prospective teachers' opinions about the uncertainties they encounter in online lessons regarding the support they receive from their close or distant circles can be reported under two themes. As shown in Appendix F, the participants are generally in agreement regarding the theme of near environment support. For the participants, peer coaching and supportive family structure subcategories stand out (f=47). The preservice teachers try to overcome the uncertainties they encounter in online lessons with peer support. That is, they tend to seek help from their classmates or other close friends. Family support comes second. Consulting with parents and siblings is important for the participants. The number of preservice teachers who apply for distant environment support for uncertainties encountered in online lessons is also not small. Almost half of the preservice teachers resort to distant environmental solutions (f=45). It seems that the preservice teachers are in search of an experienced mentor. It is understandable that they need a mentor to show them the way to follow in the face of uncertainty (f=26). Thus, they believe that they can produce their own solutions (f=19).

DISCUSSION

This research, which aims to reveal the source of uncertainties faced by prospective teachers in online classes conducted via Google Classroom, actually brings up an issue that has been neglected in online classes. The literature about the benefits of Google Classroom for students abounds (e.g., Basher, 2017; Heggart & Yoo, 2018; King & Campbell, 2020; Taufan, 2021; Zuriah, 2020). Of course, there are also studies that prove otherwise (Krutka et al., 2021). But, there are hardly any direct studies examining the source of uncertainties faced by preservice teachers in Google Classroom within the framework of online classroom management.

This study summarized the metaphorical perceptions of the preservice teachers about the uncertainties they encountered in online lessons conducted via Google Classroom under two themes (Individual Uncertainties of the Students, Environmental Uncertainties in Learning). It was found that preservice teachers encounter individual uncertainties in Google Classroom as an online learning environment. Environmental uncertainties come second.

The findings have also revealed that the individual uncertainties faced by preservice teachers in online classes may lead them to learned helplessness. Hiroto and Seligman (1975) suggested that learned helplessness can reduce human performance, and thus the belief that it is futile to respond to existing conditions may spread among people. In other words, preservice teachers' academic skill decreases as a product of the individual uncertainties they encounter in online courses, and this decline may lead to passive behaviors. This situation may cause the motivation of the preservice teachers to decrease. Thus, they can begin to exhibit controlled behaviors. Preservice teachers associate the individual uncertainties they encounter in online classes via

Google Classroom with the "dead-end" metaphor. Yet, the uncertainties they encounter in the learning environment may also be due to online classroom management. As the results of this study indicate, situations such as low in-class communication level, weak environment characteristics, and insufficient feedback from the instructor stand out. When the preservice teachers' inability to access technology deteriorates these situations, negative consequences such as lack of motivation and deterioration of family relationships can occur in preservice teachers. The participants also explained their metaphorical perceptions of the uncertainties they encountered in the learning environment with the metaphor of "confusion". In fact, for classroom management-induced uncertainties, the Uncertainty Reduction Theory (URT) (Knobloch, 2015) can be seen as an alternative way because it seems that student metaphors point to low classroom communication. In this sense, URT, which is accepted as a communication theory, can be beneficial for class socialization in online classroom environments (Danielson, 1995). Basinger et al. (2020) suggested that reducing communicative uncertainty in the classroom environment can reduce negative emotions in preservice teachers. According to them, the following steps can be taken in classrooms:

- to convey the basic outcomes and expectations about the course to the preservice teachers,
- to involve preservice teachers in the process,
- to encourage dialogue between the student and the instructor, and
- to increase student motivation about supported student behavior.

As the results of this study indicated, it seems that the metaphorical perceptions of the teacher candidates about the uncertainties they encountered in online classes and their views supported each other. Yet, student views can state that uncertainty is about the "learning environment". Preservice teachers face a high rate of uncertainties about online classroom management. Among these uncertainties, the characteristics of the classroom environment and the uncertainties encountered in measurement and evaluation stand out more. There are even preservice teachers who say that they find face-to-face training more understandable. In this respect, there are important uncertainties about online classroom management. Moreover, the teacher candidates in this study stated that they had uncertainty in relating the course contents with daily life. The importance of instructors' roles, qualifications, and their methods of guiding the process is once again revealed in reducing uncertainties about classroom management. Insufficient teacher feedback and lack of access to technology increase the perception of uncertainty in preservice teachers. It is also seen that this perception relates to the individual uncertainty theme. A small part of the student views was grouped under the theme of individual uncertainties that the student tries to cope with. Individual uncertainties faced by preservice teachers can cause distraction, anxiety, and stress.

These results support the research results of Basinger et al. (2020). It appears that educational technologies should be used more commonly and efficiently to reduce the uncertainties encountered in online classroom management for students. Many studies in the literature (e.g., Abdulkareem & Eidan, 2020; Boothe, 2020; Ferdig et al., 2020; Hidayat et al., 2019; Mishra et al., 2020; Prestigiacomo et al., 2020) support this result. So, there should be more focus on resolving individual uncertainties experienced by prospective teachers. It is understandable that the alternative ways that teacher candidates use to solve the uncertainties they encounter in online lessons are individual solutions. Among these individual solutions, students prefer self-learning. To do this, researching, examining, and using online resources is their most preferred method.

Some preservice teachers have the view that they can resolve individual uncertainties they encounter only by participating in online classes. In this context, it is necessary to highlight the importance of self-learning. According to Brookfield (2009), self-learning is defined as the process of conceptualizing, designing, executing, and evaluating a learning project/topic autonomously by the student. Thus, it is an important result that students prefer self-learning to solve the uncertainties they encounter. Complementary to self-learning, prospective teachers often need support from the immediate environment for the uncertainties they encounter in online classes. This support can be in the form of peer coaching. In fact, this result coincides with the results of Sollitto et al. (2018). According to them, students prefer to rely on direct communication with their peers while managing the uncertainties they encounter. This state of trust shows the importance of thinking of uncertainty management as a relational activity rather than an independent activity.

It is also noteworthy that some prospective teachers prefer to ignore rather than deal with the uncertainties in online lessons. Some of the participants in this study preferred to avoid uncertainty. Because of the uncertainties they face at Google Classroom, they may prefer to ignore their confusion and solve it. This situation reinforces the belief of having a high uncertainty threshold in preservice teachers. Considering this result can contribute to the process of reducing the uncertainty that students encounter in online classes. One possible solution for this problem would be using blended learning while updating the curriculum. Studies on blended learning (Hidayat et al., 2019; Le & Pham, 2021; Zuriah, 2020) report results that it facilitates the learning process. Additionally, students stated that focusing on personal development could be an alternative way to reduce individual uncertainties encountered in online courses. It may be useful to focus on self-control and prepare for the lesson from different sources.

According to Atkins (2000), uncertainty avoidance behavior relates to culture. The study revealed that the teacher candidates demand more near environment support to reduce uncertainty in online lessons. It can be said that the opinions of teacher candidates concentrate on the subcategories of peer coaching and family support. The results about peer coaching reached in the study coincide with the results of Sollitto et al. (2018). A classroom environment that allows students to work to achieve their academic goals can only be created by instructors. It is quite normal for students to reach their parents or siblings for family support. In this process, it can be stated that they are in search of an online mentor.

This result overlaps with the results of Karo and Petsangsri's (2021) studies. According to them, online mentoring through professional learning is very effective in the learning process.

CONCLUSION

The preservice teachers mostly prefer in-class communication to reduce the uncertainties they encounter in Google Classroom. In addition, it can be stated that both environmental and individual uncertainties can be reduced with peer and family support. It has been observed that the uncertainty thresholds of some preservice teachers are quite high. Therefore, the existence of teacher candidates who tend to avoid uncertainty cannot be ignored. Educators may consider choosing more descriptive and understandable ways to reduce ambiguity in online lessons, taking into account the sensitivities of the Pandemic process. This research details prospective teachers' perspectives on ambiguities in Google Classroom. Thus, the study provides insight for instructors who wish to improve their classroom management skills in online courses. As a result, the study revealed that teacher candidates are in a dilemma about the uncertainties they encounter in Google Classroom. The findings obtained from the participants' metaphorical perceptions and views support this situation.

An important limitation of this research is the number of participants. So, the results reached limited only by the perceptions and opinions of the teacher candidates who participated in the study. Besides, there may be some limitation (number of questions, access to technology, etc.) arising from the data collection process with the characteristics of the data collection tool used in the research. The fact that the research results are not compared with the views of students in different faculties is also seen as a limitation. This research is also inspiring for educators working in higher education when it comes to online classroom management. The results of this research can be used for curriculum updates in higher education. Instructors can combine uncertainty reduction with uncertainty management theories to reduce environmental and individual uncertainties that prospective teachers face in online classes in Google Classroom. Open communication is preferred more in the online course process in Google Classroom. For this, student groups can be formed via social media tools when necessary. As it also emerged from the analysis of the data, differentiated instruction in online classes is necessary. Thus, online professional development courses on alternative methods and techniques can open for educators. Moreover, ways to persuade instructors to make online course content and materials more understandable can be sought. Researchers can produce projects with broad participation about the uncertainties arising from classroom management. Continuing lessons with blended learning in the post-Pandemic period will be beneficial in reducing the uncertainties faced by preservice teachers.

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APPENDIX

Appendix A. Metaphoric perceptions of preservice teachers about the uncertainties they encounter in Google Classroom

Theme	Category	Sub-Categories	Codes	Metaphors
Students' Individual Uncertainties	Uncertainties the Student is Trying to Cope with (f=44)	Individual Uncertainty (f=37) Learned Helplessness (f=20) Lack of Motivation (f=4) Not Accessing Technology (f=2) Being Externally Controlled (f=2) Anti-Uncertainty (f=2)	Difficulty solving (f=13), Self-doubt (f=8), Inability to understand the lessons (f=6), Not knowing what to do (f=5), Excessive psychological anxiety (f=3), Unsure of knowledge (f=3), Feeling of complexity (f=2), Fear of falling scores and staying in the classroom (f=2), Not being sure (f=2), Requesting an outside help (f=2), Seeing as a process of gaining experience (f=2), Lack of self-control (f=2), Willingness to learn (f=2), Order in chaos (f=2), Having a focus problem, Having future anxiety (f=2), Not being open (f=5), Stress, Not getting enough feedback (f=2), Falling into the gap, Not being able to do anything, Not being able to overcome it, Insufficient technology literacy	Dead End (f=4), Future anxiety (f=4), A frightening emptiness (f=2), Helplessness (f=2), Insolvency (f=2), Detective story, Pomegranate, Fog, Inexperience, Jigsaw, Question Mark, Chaos, Complexity, Lack, Skyline, Frosted glass, Match statistics, Dark, Swamp, Frivolous island, Disappointment, Fish out of water, Trigonometry, Being unprepared, An impossible job, Indecision, Labyrinth, Looking for a needle in a haystack, Spare button on a dress, Depression, Technological confusion, Vortex, Lack of self-confidence, Distance education
Environmental Uncertainties in Learning	Uncertainties Regarding Classroom Management (f = 29)	Classroom Communication Level (f = 18) Properties of Classroom Environment (f = 18) Not Getting Sufficient Feedback (f = 11) Lack of Motivation (f = 8) Family Relationships (f = 2) Technology Access Status	Not getting enough information from the lessons (f = 11), Inability to understand the lessons (f = 6), Not being open (f = 5), Unwillingness (f = 5), Not considering individual differences (f = 5), Not getting enough access to technology (f = 4), Difficulty in the course process (f = 4), Decrease in motivation (f = 3), Approach to the student (f = 3), Complex subject distribution (f = 3), Disruption of family relations (f = 2), Stress (f = 2), Ambiguity, Boredom, A colorless lesson environment, Feeling isolated, Bad effect on lesson interaction, Feeling of being lost, Finding the lesson inefficient	Confusion (f = 2), Intervening (f = 2), Irresponsibility (f = 2), Meaninglessness (f = 2), Unwillingness, An incomplete picture, Indifference, Disorder, Post-death, Armageddon place, Lost in space Feeling of lack, Ashura, Sea, Chaos, Inefficiency, Lack of Communication, Indecision, Complexity, Purposelessness, Emptiness, Dissonance, Divergence, Swamp, Despair, Time Confusion, Deafness

Appendix B. Opinions of preservice teachers about the uncertainties they encounter in online classes in Google Classroom

Theme	Category	Sub-Categories	Codes	Quotes
Environmental Uncertainties in Learning	Uncertainty Regarding Classroom Management (f=62)	Properties of the Classroom Environment (f=42) Measurement and Evaluation (f=29) Not Getting Sufficient Feedback (f=19) Face-to-face training (f=12) Classroom Communication Level (f=11) Physical Properties of the Course (f=6) Teaching Staff (f=5) Associating with daily life (f=5) Access to Technology (f=2) Keeping the Student Active	Course process (f=26), Exam anxiety (f=16), Not understanding the lesson (f=15), Quality of Lessons (f=11), Reaction to homework (f=9), Distance education (f=9), Not getting enough feedback (f=7), Insufficiency of course resources (f=6), Inability to theorize context (f=5), Proficiency of instructors (f=4), Level of communication with instructors (f=4), Not solving the system (f=3), Applied courses (f=3), Changes in the curriculum (f=3), Inability to access technology on time (f=2), Low score from the course (f=2), Understandability of the course content (f=2), Ambiguity, Not involving the student in the process, Confusion, Homework ambiguity Measurement-evaluation process, Different applications of lecturers	Distance education is the biggest uncertainty for me about the lessons. (K9) I do not understand distance education. (K14) I cannot establish the relationship between the courses I take and the department. (K26) I am uncertain whether the lessons will have an impact on my teaching life. (K36) When I have problems with the lessons, the uncertainty affects me very much when there is no feedback on the subjects. (K42) I have difficulty understanding the course contents. (K44)
Students' Individual Uncertainties	Uncertainties the Student is Trying to Cope with (f = 13)	Individual Uncertainty (f = 5) Not Experiencing Uncertainty (f = 5) Near Environmental Impacts (f = 3)	Anti-uncertainty (f = 5), Close environment conditions (f = 2), Distraction (f = 2), Stress, Not knowing where to start, Lack of motivation, Negative peer influence	I did not experience any uncertainty. (K51) The most uncertainty I have is that education is online so I can't fully concentrate on the lectures. (K25) Since I live in the village, I cannot follow the lessons all the time. (K17)

Appendix C. The alternative ways preservice teachers use to solve the uncertainties they encounter in online lessons

Theme	Category	Sub-Categories	Codes	Quotes
Individual Skills	Individual Solution Search (f=53)	Search Methods (f=37) Online Solution Generation (f=14) Healthy Feedback Mechanism Consulting Course Materials	Self-learning (f=25), Consulting online resources (f=14), Doing research (f=12), Participating actively in the lesson (f=3), Not getting enough feedback, Continuous repetition, Exam-oriented study, Note-taking, Consulting course syllabus, Consulting related books, Benefiting from course materials	I study the lessons with my own effort as much as I can. (K62) I am looking for alternatives to analyze the course content and source. (K51) I am trying to benefit from different sources. (K31) I'm trying to do it my own way. (K16)
Environmental Coordination	Environmental Solution Seeking (f=50)	Near Environment Support (f=30) Peer Coaching (f=19) Question answer	Asking the lecturer of the course (f=27), Peer support (f=19), Requesting academic counseling, Requesting outside help, Requesting information	Most of the time, I solve my problems with the help I get from my friends. (K25) When I am experiencing uncertainty, I ask the class group to give information on that subject. (K27)
High Uncertainty Threshold	Blindness of Uncertainty (f = 6)	Avoiding Uncertainty (f = 5) Denying Uncertainty	No Effort (f = 2), Letting go (f = 2), Not knowing the way to follow (f = 2), Anti-uncertainty	There is no uncertainty I live in. (K68) I do not use any means. (K69)

Appendix D. The effectiveness of the alternative ways preservice teachers uses to solve the uncertainties they encounter in online courses

Theme	Category	Sub-Categories	Codes	Quotes
Positive	Overcoming individual uncertainty (f=51)	Overcoming (f=39) Intensive communication (f=7) Individual solution generation (f=5)	Highly effective (f=30), Moderately effective (f=8), Technological tools (f=3), Teacher-student interaction (f=3), Persistence of knowledge (f=3), Generally effective, Half and half, Student's own effort, Consultation, Acceleration, Decision making, Continuous repetition, Following the lesson	Although sometimes there is no definitive solution, I cannot deny its usefulness to a large extent. (K10) It is very effective. At least my subjects are sufficiently consolidated. (K23) It solved almost all of it and I adopted an experience-based solution. (K29) So sometimes it is very effective and sometimes I cannot get the solution I want. (K41)
Negative	Ongoing environmental uncertainty (f = 45)	Ineffectiveness (f = 24) Workaround (f = 9) Inability to access sufficient information (f = 7) Behavioral uncertainty (f = 5)	Not very effective (f = 20) Short-term effective (f = 8), Not effective at all (f = 4), Inability to be active in the course (f = 3), Not getting enough feedback (f = 3), Indecision (f = 2), Difference between theory and practice (f = 2), Instructor behavior (f = 2), Confusion, Lack of information about the system, Saving the day	I don't think it's effective. Because the result is obvious. (K11) I report the uncertainties I experience to the professors via e-mail. I cannot get a return from others except one instructor. (K17) The solutions I use do not have much of an effect. (K21)

Appendix E. Alternative ways proposed by preservice teachers for solving the uncertainties they encounter in Google Classroom

Theme	Category	Sub-Categories	Codes	Quotes
Alternative Ways Towards the Learning Environment	Recommendations for Uncertainty Management in the Classroom (f = 54)	Emphasis on communicative solutions (f = 37) Improving the online course process (f = 15) Differentiated methods and techniques (f = 13) Guiding (f = 13) Face-to-face training (f = 5) Context building (f = 2)	More communication with the instructor of the course (f = 12), Increasing the comprehensibility of the lessons (f = 11), Being more explanatory (f = 11), More online lessons (f = 9), More guidance (f = 9), face to face (f = 5), Student coaching (f = 4), Increasing the number of online resources (f = 2), Organizing more question-answer activities (f = 2), Using case studies (f = 2), Social Using media tools (f = 2), Creating student course groups (f = 2), Improving the distance education process (f = 2), Lessons being oriented towards practice rather than theory (f = 2), Considering the class level, Individualization of teaching, Individual taking into account the differences, Doing different activities, Alternative lecture methods, Proficiency of the instructors, No attendance requirement, Bringing external experts, The course being more exam-oriented	I think that the face-to-face training will eliminate many of our problems. (K25) I think that the lecturer who teaches the course can eliminate the uncertainties in the classroom. (K28) I could not find a complete alternative solution, but everything can be learned by experience. (K32) Schools are opened as soon as possible. And the teaching of lessons in the school environment. (K41) Instructions for increasing communication with students should be made clearer. (K42) Closer communication can be established with the lecturers. Increasing the number of resources for the course is also a solution. (K49) It could be going to school and giving up distance education as soon as possible. (K60)
Alternative Ways for Student's Individual Uncertainties	Recommendations for Individual Uncertainty (f = 11)	Personal development (f = 7) Self-learning (f = 4)	Focus more on the lesson (f = 4), Taking notes in the lesson, Reading books about the lesson, Social volunteering, Gaining more experience, Self-control, Using the school library, Complying with the rules	Taking notes and reading lots of lesson-related books. (K7) I should not only ask the lecturer of the course, but also take some steps myself for the retention of the information. (K36)
Avoiding Uncertainty	Accepting Uncertainty (f = 9)	Instability (f = 6) Ignore (f = 3)	I don't know (f = 6), What has been done is enough, Time-lapse/ dissemination, Anti-uncertainty	I usually live in uncertainty, I don't need an alternative way. (K63) I don't think it's a different way. (K58) I have no idea, there is a virus. (K38)

Appendix F. Supports received by prospective teachers from near or distant environments for the uncertainties they encounter in online classes

Theme	Category	Sub-Categories	Codes	Quotes
Near Environment Support	Individual Solutions for Uncertainty (f=47)	Asking for peer coaching (f=35) Supportive family structure (f=12)	Family support (f=12) Peer support (f=35)	First of all, I'm trying to get help from my friends. (K74) I get help from my close circle and friends. (K64) I get support from my close friends with whom we are in the same class. We are trying to do something together. (K60)
Distant Environment Support	Environmental Solutions for Uncertainties (f = 45)	Seeking mentor (f = 26) Producing your own solutions (f = 19)	I'm not getting help (f = 19) Academic counseling (f = 19) Online support request (f = 7)	I am trying to find a solution myself. (K66) I am getting support from advisors. (K58) So technology comes into play in this regard. I try to make it more online. I'm watching videos of the experts. (K41)