# **ORIGINAL ARTICLE**



# Digital Stories, Real Solutions: Teacher Candidates' Path to Classroom Management

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#### **Ethical Statement**

All procedures in the study were conducted in accordance with the ethical standards of the 1975 Helsinki Declaration.

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#### **Conflict of Interest**

No conflict of interest is present in the conduction or the reporting of this study.

#### ABSTRACT

The purpose of this study is to examine the views of teacher candidates regarding potential problems related to classroom management that they may encounter when they start their profession, as well as the problemsolving strategies they develop for these problems, through digital stories. Additionally, the experiences they went through during the process of creating digital stories are to be revealed. The emotions, thoughts, and experiences of teacher candidates in relation to the process were analyzed using the digital stories they prepared themselves. The study was conducted within the scope of the Classroom Management course during the spring semester of the 2021-2022 academic year. The participants of the study consist of 70 pre-school teacher candidates who are junior and senior at the Faculty of Education. Data was collected using digital stories created by teacher candidates and a form prepared by the researcher, consisting of three open-ended questions. The case study model was used in this qualitatively designed study The obtained data were analyzed using content analysis method. As a result of the analysis, the findings were categorized under three main themes: (i) classroom management problems that teacher candidates focus on their digital stories, (ii) problem-solving strategies that teacher candidates emphasize in their digital stories, and (iii) experiences during the process of creating digital stories.

Keywords: Teacher candidate, classroom management, digital story.

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# INTRODUCTION

In schools where educational activities take place, the classroom environment emerges as a living space for goaloriented learning. Teachers, who can be considered the most significant factor determining the quality of the education system, demonstrate their professional knowledge and skills within the classroom environment to ensure effective and permanent learning for students with diverse learning needs. In this context, the primary responsibility of a teacher is to provide students with a supportive and effective learning environment where they can learn. To fulfill this responsibility, teachers need to possess the necessary expertise.

Although knowledge, skills, and experiences are acquired more intensively in the early years of the profession (Bozan & Ekinci, 2020), teacher training programs conduct various courses to equip teacher candidates with competencies of professional knowledge, professional skills, attitudes and values (MoNE, 2017) that can respond to the evolving needs of students and bear the responsibility of human life, considering the requirements of the era. The concept of classroom management takes center stage in terms of fostering the skill competence to manage the teaching and learning process. In this context, Classroom Management courses carried out in Faculties of Education are important.

Classroom management refers to the process of effectively coordinating various factors during the instructional process in a classroom to achieve desired goals (Freiberg, 2019). In other words, the concept of classroom management also encompasses the deliberate efforts made by teachers to create and maintain a conducive environment for learning (lstikharoh, 2021). According to Simms (2015), classroom management encompasses various dimensions in the teaching-learning process, including planning, material selection, activities, classroom environment characteristics, and student engagement. In this context, it should be noted that classroom management extends beyond disciplining students and addressing behavioral issues; it signifies the process of creating, sustaining, and restoring effective learning environments (Akın et al., 2016; Thangarajathi & Joel, 2010). Viewed from a narrower perspective, Allen (2010) expresses that classroom management entails providing discipline and overcoming students' problematic behaviors. On the other hand, Brophy (2006) takes a broader view by defining classroom management as a multi-faceted process involving the establishment of classroom rules, organization of the physical environment, student participation in lessons, behavior management, and relationship management.

Studies on the dimensions of classroom management as an umbrella concept (Prince, 2009) highlight many different dimensions. For instance, Özkul and Dönmez (2019) outline a comprehensive framework encompassing dimensions such as creating a discipline environment based on respect, establishing a classroom climate where teachers can express themselves comfortably, effective communication, time management and program effectiveness, teacher-student relationship, motivation, and behavioral aspects. Additionally, dimensions like organizing the physical environment, managing unwanted behaviors (Weinstein & Novodvorsky, 2011), and planning instruction are regarded as dimensions addressed in various studies. This situation, in turn, serves as evidence that classroom management is a multidimensional and intricate structure (Martin & Sass, 2010).

In Evertson and Emmer's (2013) classification of the dimensions of classroom management, several dimensions stand out. These include establishing the physical arrangement of the classroom, classroom rules and procedures, procedures for managing student assignment, lesson planning and implementation processes, fostering a positive classroom climate, managing collaborative learning groups, communication skills, managing problematic behaviors, sustaining appropriate student behaviors, and managing students with special needs. Furthermore, this classification is considered one of the most comprehensive classifications made in the field of classroom management by Dulay (2017). There seem to be overlapping and distinct dimensions in the concept of classroom management. However, regardless of the overlap or differentiation of definitions and dimensions related to classroom management, there is an evident point of focus. This point of focus lies in the behaviors of teachers and their impact on students' learning (Dulay, 2017). In other words, every skill a teacher displays with the aim of facilitating permanent and effective learning for students, from the moment they step into the classroom until they conclude the lesson and exit the door.

Classroom management is a pivotal component at the heart of effective instruction (Kunter et al., 2013). As future educators, it is crucial for teacher candidates to enhance their classroom management skills. Research reveals that novice teachers often feel unprepared to manage their classrooms due to inadequate pre-service training (Junker et al., 2021; Pierson, 2021), underscoring the imperative for education faculties to equip teacher candidates adequately to proficiently manage classrooms comprising diverse learning needs in today's educational landscape (Oliver & Reschly, 2007). The skill of classroom management stands as a cornerstone for effective teaching, and during their undergraduate studies, teacher candidates acquiring these skills and becoming well-equipped becomes paramount (Kwok, 2021). This is because classroom management proficiency aids teachers in effectively overseeing their classes and enhancing students' academic achievements (Slater & Main, 2020).

The contemporary teacher education system should transcend equipping teacher candidates solely with professional knowledge and skills while preparing them for the teaching profession. In addition, teacher candidates should be prepared to anticipate challenges they may encounter in their classroom experiences during their professional careers and possess the skills to overcome these challenges. In this regard, feeling uncertain and inadequate when facing potential problems in the realm of classroom management has been evidenced by various studies (Flores & Day, 2006; Marais, 2016; Pierson, 2021). Therefore, it is important to analyze the perspectives of teacher candidates before entering the profession to comprehend classroom dynamics, establish effective communication with students, and generate effective solutions for potential issues.

In this regard, the digital storytelling method employed in this study can be regarded as an effective learning tool to enhance teacher candidates' classroom management skills. Digital stories serve as a technology application that enables teachers to use technology more effectively in their classrooms while providing students with the opportunity to create their own scenarios by combining video, images, music, storytelling, and sound effects using various media technologies (Robin, 2008). The use of digital stories is defined both as an "effective teaching tool for teachers" and an "effective learning tool for students" (Robin, 2006). Furthermore, the utilization of digital storytelling in education offers various benefits, including enabling innovative learning opportunities (Rahiem, 2021), promoting critical thinking, reflective thinking, and empathy among students (Beck & Neil, 2021), facilitating the establishment of connections between prior learning experiences (Kim et al., 2021), encouraging collaboration (Kolano & Sanczyk, 2021; Norkutė et al., 2020), enhancing decision-making processes, and fostering active student engagement in the learning process (Norkutė et al., 2020; Robin, 2008).

Furthermore, Kolano and Sanczyk's (2021) study with teacher candidates reveals that digital storytelling assists students in understanding what challenges they might face in the future and how they can effectively sustain their professions. This finding constitutes one of the main starting points of this study. In this study as well, an alternative learning opportunity has been provided to teacher candidates, allowing them to learn how to analyze classroom management issues through digital stories and develop solution strategies. Thus, it is expected that teacher candidates will better comprehend the challenges they encounter as they enter the profession and subsequently develop effective solution strategies. In light of all this information, the purpose of the study is to investigate the perspectives of teacher candidates regarding the potential problems they may encounter in classroom management when they start their profession, along with the solution strategies they formulate for these problems, through the medium of digital stories. Additionally, the study aims to uncover the experiences they undergo during the process of creating digital stories.

# METHOD

# **Research Design**

The study was conducted to examine the potential problems that teacher candidates may encounter when they start their profession and the problem-solving strategies they create for these problems through digital stories and to reveal their experiences in the process of creating digital stories. Within the scope of the study, the teacher candidates were asked to find a potential classroom management problem that they may encounter when they start their profession and narrate their solutions to this problem through digital stories. The study was conducted during the spring semester of the 2021-2022 academic year and was designed as a case study to gain in-depth insights into the phenomenon under investigation. A case study design was chosen to facilitate an in-depth exploration of the feelings, thoughts, and experiences of teacher candidates in the digital story creation process. A case study is an in-depth investigation of a particular project, policy, institution, program, or system from multiple perspectives (Simons, 2009).

#### Participants

The participants of the study consisted of 70 pre-school teacher candidates (57 female, 13 male) who are junior and senior in the Faculty of Education at a public university in Turkey. The participants who could supply the thorough information and were willing to participate were chosen to accomplish the study's aim and respond to the research questions (Bernard, 2002; Creswell & Plano Clark, 2011). This group of teacher candidates were selected because they were taking the classroom management course and were able to engage in the creation of digital stories as a means to reflect on their professional challenges.

# **Data Collection**

The data collection process occurred in several stages to ensure rigor and depth in capturing participants' experiences and problem-solving strategies in the digital stories. In this study, the teacher candidates were instructed to identify a potential issue with classroom management that they could face in the future and narrate their solutions to this problem through digital stories. The stories were required in the digital format as the final project of the classroom management course. Digital stories created by teacher candidates were used as the first data collection tool. Preservice teachers were given adequate time and resources to produce their digital stories in a group of 4 to 6 students. Creation of digital stories allowed participants to synthesize their understanding of challenges and solutions into multimedia-rich narratives.

In addition to the digital stories, a questionnaire consisting of three open-ended questions prepared by the researchers were used as the second data collection tool. In the questionnaire, the teacher candidates were asked

about the detailed explanation of the classroom management problem and its solutions, personal contribution of the project to, and professional contribution of the project.

# **Data Analysis**

Four steps of analysis were performed on the data: data coding, themes finding, codes and themes arrangement, and interpretation of the results (Yildirim & Simsek, 2016). Data analysis started with watching the digital stories prepared by the teacher candidates and reading their answers to the questionnaire. The data were coded by the two researchers. The researchers came together and compared the coding, and this process continued until a consensus was reached. After the coding process, themes were formed by bringing together the codes that were related to each other. Data were described according to themes and codes, and direct quotations were included to interpret the results. To maintain anonymity and protect the teacher candidates' identities, pseudonyms were used. The findings obtained as a result of the analyzes were divided into three categories: (i) classroom management problems that teacher candidates focus on in their digital stories, (ii) problem-solving strategies that teacher candidates emphasize in their digital stories, (iii) experiences during the process of creating digital stories.

# Validity and Reliability

In this section, the measures taken to establish the validity and reliability of our phenomenological investigation on teacher candidates' experiences, challenges, and problem-solving strategies were discussed. Validity refers to the degree to which a research study accurately measures or assesses what it intends to while reliability refers to the consistency, stability, and repeatability of research findings (Yıldırım & Şimşek, 2016). In the study, a comprehensive explication of researcher roles, the participants of the study, the data collection instruments, and data analysis strategies were provided in detail to ensure external validity. To enhance construct validity, a multi-method approach involving digital stories of teacher candidates and their answers to the questionnaire were employed. This triangulation of data sources allowed for a more comprehensive understanding of participants' perspectives, supporting the accuracy of the findings. Data collection and analysis were continued until reaching a point of saturation, where no new themes or insights emerged from the data to ensure that the interpretations accurately reflected the participants' experiences. To balance the bias, positive and negative statements of the participants were included objectively and supported by direct quotations. Both the coding of data and the creation of themes were made by the collaborative involvement of researchers to enhance the consistency and reliability of the findings.

# RESULTS

The findings obtained as a result of the analyses conducted within the scope of the research have been categorized under three distinct themes: (i) classroom management problems that teacher candidates focus on their digital stories, (ii) problem-solving strategies that teacher candidates emphasize in their digital stories, and (iii) experiences during the process of creating digital stories. These themes are presented below.

# **Classroom Management Problems that Teacher Candidates Focus on Their Digital Stories**

The theme of classroom management challenges that teacher candidates prioritize in their digital stories comprises three distinct categories: (i) student-related issues, (ii) teacher-related issues, and (iii) family-related issues. The examination of teacher candidates' digital stories reveals their anticipation of encountering various challenges. Among the problems highlighted in the digital stories of teacher candidates, student-related issues take precedence. Studentrelated issues are further divided into two categories: (i) disruptive behaviors within the classroom environment and (ii) disruptions to the instructional process.

#### Student-related issues

When examining disruptive behaviors affecting classroom atmosphere in students' digital stories, conflicts among students and unauthorized conversations during lessons emerge as prominent issues. In the digital story of S3, the altercation between two students during break time is addressed, highlighting how such incidents adversely affect classroom discipline. Similarly, in the digital story of S31, the story revolves around a conflict between two students, Ahmet and Mehmet, illustrating how this incident had a negative impact on both fellow students and the class teacher. Conversations among students during instructional time can also evolve into a classroom management problem. The digital stories of S60 and S43 feature instances where students constantly move about during class, engaging in unauthorized conversations, thereby disturbing their peers and disrupting classroom order. Likewise, the digital story of S20 draws attention to this issue in the following manner:

"Over time, while conducting lessons, Teacher Elif noticed an issue within her classroom. During instructional sessions, she observed students Halil and Mert engaging in continuous conversations without seeking permission and attempting to divert the class from the subject matter. Initially, Teacher Elif turned a blind eye to this situation; however, gradually, she began to feel increasingly uncomfortable with the ongoing scenario."

Bullying and anger management issues are among the student-related problems highlighted by teacher candidates in their digital stories, negatively impacting classroom environment. Upon examining the digital story of S53, the story of Ali, a student subjected to peer bullying due to his short stature, depicts his gradual detachment from school as a recognized concern. In the digital story of S31, emphasis is placed on a student grappling with anger management issues, illustrating their growing isolation from peers over time. Similarly, in the narrative of S25, an inability to manage anger within the classroom setting is addressed, elucidating how the disruption of classroom order unfolds. The digital story of S46 articulates the situation of Ali, who contends with anger management issues, in the following manner:

"In the preschool classroom of Teacher Nazlı, there is a student named Ali who grapples with anger issues, displays a tendency to harm his peers, and struggles to achieve compromise. Ali consistently engages in both physical and verbal aggression towards his classmates within the classroom, showing a disregard for his teacher's admonitions."



Figure 1. Screenshots depicting student-generated disruptions to classroom order in students' digital stories.

Digital stories prepared by teacher candidates also encompass behaviors that disrupt the instructional process. S55, for instance, has crafted a digital story addressing the intention of some students to divert the lesson, causing a lack of engagement. This narrative underscores how such disinterested behaviors not only distract fellow students but also divert the teacher's attention, as exemplified in the story of Teacher Aysun.

"Teacher Aysun begins to explain the topics of the day in her Turkish language class. While she is presenting the

subject matter, she notices Ufuk and Remzi, seated at the back, engaging in a conversation amongst themselves. Disturbed by this distraction, Teacher Aysun endeavors to resume the lesson, but her efforts prove futile."

Another topic found in the digital stories of teacher candidates is absenteeism and tardiness to class. For instance, S18 addresses the behavior of Ahmet, a student who enters the classroom fifteen minutes after the lesson has begun, in their digital story. Similarly, in the digital story of S60, a student who arrives late to class and disrupts the focus of their peers, consequently interfering with the flow of the lesson, is depicted. Additionally, S10's digital story narrates the experiences of Ömer, a student who consistently exhibits absenteeism within the classroom.



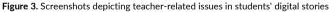
Figure 2. Screenshots illustrating student-related disruptions to the instructional process in students' digital stories

# Teacher-related issues

Upon analyzing the digital stories of teacher candidates, it becomes evident that teachers' display of authoritarian behavior within the classroom can lead to certain issues concerning classroom management. In the narrative presented by S38, Sevil, the teacher, maintains a stern attitude towards her students, resulting in their disinterest in mathematics lessons. This situation progressively escalates into a substantial problem over time. In the digital story of S57, Mürvet, the teacher, reprimands her student harshly and imposes penalties without investigating the underlying reasons for the problematic behavior. This narrative underscores how such actions intensify the frequency and severity of the student's problematic conduct. On the other hand, S65's digital story revolves around Merih, the teacher, who fails to establish an effective learning environment suitable for all students, discussing the following:

"In the exemplified scenario, the issue at hand is the lack of differentiated instruction by Merih, the mathematics teacher, catering to her students' varying skill levels. Consequently, students find the lessons challenging and even struggle to comprehend the subject matter. As a result, feelings of dissatisfaction, hopelessness, and disinterest towards mathematics manifest among the students. As Merih continues with a uniform teaching approach, this situation exacerbates, gradually causing students to develop an aversion towards mathematics."





#### Family-related issues

Another issue prevalent in the digital stories prepared by teacher candidates is family-related problems. Family-related issues comprise two distinct categories: (i) divorce and (ii) parental neglect. Among the family-related problems depicted

in the digital stories of teacher candidates, parental divorce takes precedence. Fragmentation within the family negatively affects the student and can manifest in unfavorable behaviors as a reaction. Participant S5 succinctly summarizes this situation in their digital story:

"Ali is a student whose parents have recently divorced. Throughout this process, he feels a lack of affection from his family, and due to the adverse effects of the divorce on his family, he seeks to express his reaction to these circumstances. As a result, Ali exhibits behaviors such as pulling his classmates' hair, hitting them, disturbing them while they play, and disrupting the classroom order."

Another family-related issue depicted in the digital stories of teacher candidates is parental neglect. In their digital story, S11 addresses the adaptation issues of a child who does not receive sufficient attention within the family. They explain this situation as follows:

"...we contemplated the issue of adaptation that arises in children when they do not receive sufficient attention and affection within their families. Specifically, we considered situations where parents become preoccupied with their own concerns and are unable to fulfill the child's expectations. In the context of our narrative, the child resorts to exhibiting aggressive behaviors in the classroom as an attempt to gain attention when they do not receive the expected attention from their family."

S7, in their digital story, features Ali as a student whose sibling has recently been born. Following the birth of his sibling, Ali perceives neglect from his parents, feeling that he isn't receiving adequate attention. As a response to this situation, he manifests his feelings in the classroom by forgetting his school supplies and homework at home, frequently standing up during lessons, disturbing his peers, and disrupting the class flow.

# Problem-solving Strategies that Teacher Candidates Emphasize in Their Digital stories

The theme of problem-solving strategies emphasized by teacher candidates in their digital stories comprises four distinct categories: (i) communication and relationship-centered strategies, (ii) education strategies and interaction-focused strategies, (iii) observation and evaluation-centered strategies, and (iv) discipline and rule-oriented strategies.

#### Communication and relationship-centered strategies

The communication and relationship dimension stands out among the problem-solving strategies found in teacher candidates' digital stories. In the digital story presented by S1, Deniz, the teacher, adopts a friendly approach towards her student to address an issue, thereby enhancing the student's sense of trust and fostering positive classroom relationships. On the other hand, in the digital story of S65, it is highlighted that Merih, the teacher, can overcome classroom issues by establishing a more amicable communication with the students, despite her initial stern demeanor. Another strategy within the communication and relationship category is the use of appropriate language. In their digital story, S44 underscores the significance of employing self-expression while addressing negative classroom situations. They narrate Ayşe's teacher story as follows:

"Kids, when I give you free time, there are no issues in the initial minutes; you play wonderfully. However, after a while, disagreements arise among you every time you play. This situation saddens me greatly, and we should find a solution for this."

Another solution strategy focused on in digital stories is conducting one-on-one discussions with students for

problem resolution. In the digital story addressing the story of Nazlı, a teacher dealing with a student who struggles with anger management issues and perpetuates physical and verbal aggression towards peers (S46), it is highlighted that Nazlı, in order to overcome this issue, intends to have a one-on-one conversation with Ali to understand the reasons behind his anger. Similarly, in the digital story featuring Eda, a teacher who notices Ahmet arriving late to class and displaying negative behaviors (S44), the individual conversation with the student is portrayed as follows:

"When the classroom emptied, Teacher Eda promptly approached Ahmet and calmly inquired, 'Ahmet, I would like to know why you were late to class. Can you explain?' Ahmet looked at the teacher and sadly replied, 'Teacher, my parents had an argument at home in the morning, so they dropped me off at school late. Because I was upset about this situation, I didn't respond to you and didn't want to share this in front of my classmates."

Teacher candidates also incorporate collaboration strategies in solving the problems they focus on in their digital stories. In collaboration strategies, teacher-parent collaboration takes center stage. In the digital story of S7, which features Ali, a student who forgets his school supplies and homework at home, constantly stands up during lessons, disturbs his peers, and disrupts the class flow, Teacher Sezen aims to understand the reasons behind Ali's behaviors, in the following manner:

"...for the resolution of the issue, a face-to-face meeting was conducted with Ali's family. Through this process, both Ali's parents and the teacher were able to understand the underlying reasons for his problematic behavior, facilitating a comprehensive understanding of the situation. The teacher-parent interaction began with initial communication over the phone, followed by a face-to-face meeting, resulting in the successful resolution of the situation."

In the digital story of S39, which focuses on the collaborative problem-solving strategy between teachers and parents, the class teacher Selma, employs a strategy where she observes and discovers the problematic behavior of a student. By not reflecting the issue to the class, Selma engages in a conversation with the student's family to clarify the situation and achieve a resolution.

Another adopted strategy for problem resolution is teacher-guidance service collaboration. In the digital story of S19, Eda teacher observes the status of her student and collaborates with the school's guidance service and communicates with the student's family to address the student's emotional needs. On the other hand, S5 describes the process of teacher Elif, who wants to produce solutions for the behavioral problems of her student named Ali in her digital story, as follows:

"...Elif teacher decides to first have a discussion with Ali's pyschological counselor. Elif teacher collaborates with Ali's guidance counselor to initiate the problem-solving process. Through cooperation between Elif teacher and the guidance counselor, they come to the conclusion that Ali's display of these behaviors might be stemming from his parents' recent divorce."



#### Figure 4. Screenshots of communication and relationship-centered strategies in students' digital stories

#### Education strategies and interaction-focused strategies

The other problem-solving strategy that teacher candidates focus on in their digital stories is education strategies and interaction-focused strategies. These strategies consist of components such as awareness of student characteristics, increasing classroom engagement, adapting to student characteristics, and involving students in the process of generating solutions. For instance, in the digital story of S57, the importance of addressing problematic behaviors while considering students' developmental stages is emphasized. Mürvet, the teacher, highlights that her intervention with a high school student was not appropriate. Recognizing that each student possesses distinct characteristics the foundation of a student-centered approach.

In teacher candidates' digital stories, it was found that involving students in the process of generating solutions and utilizing various teaching methods are considered problem-solving strategies. In the digital story of S40, which features Dilan, a teacher who actively engages her students in the solution-generating process for addressing a classroom issue, it is highlighted that this approach leads to a positive transformation of negative behaviors. For example, in S20's digital story, the use of drama technique by Elif teacher to find a solution to behavior of students named Halil and Mert, who disturbed their friends and disrupted the classroom order by conversing without permission, created an awareness in the classroom. Similarly, S27 portrays a different method in their digital story, focusing on Teacher Merih, and the problem-solving story as follows:

"Merih teacher employs a scaffolded instructional method supported by technology in her lessons to identify the individual shortcomings of each student. In the following days, she continues to teach her lessons using various methods and techniques effectively. At the end of the term, the class's average grade shows a significant increase that brings great satisfaction to Merih teacher."



Figure 5. Screenshots of educational strategies and interaction-focused strategies in students' digital stories

#### Observation and evaluation-centered strategies

Within the problem-solving strategies that teacher candidates focus on in their digital stories, observation and evaluation-centered strategies highlight aspects such as understanding the problem and observational skills. In the digital story of S53, Ali, a student who is shorter than his peers, is constantly mocked by them, leading to peer bullying over time. Ali's behaviors within the classroom begin to change and are noticed by his teacher. Through classroom observation, the teacher recognizes that Ali is experiencing peer bullying and decides to take steps to address this issue. In the digital story of S5, Elif teacher pursues the following approach to solve a problem:

"Initially, Elif teacher observes whether Ali's behavior is an isolated incident or a recurring pattern, and assesses the intensity of his behavior. While conducting observations, she takes notes."

Among the problem-solving strategies that teacher candidates focus on, understanding the problem indicates the necessity of delving deeper to comprehend the underlying reasons behind students' undesirable behaviors. This is because an emerging problem is merely the visible tip of the iceberg. Grasping the underlying causes necessitates a conscious effort on the part of teachers. In the digital story of S39, Selma teacher's approach to addressing a problem that arises within the classroom is as follows:

"... Selma teacher's approach involved getting to know the student and delving into the source of the problem, addressing the student using 'I' statements. From this perspective, when dealing with behavioral issues arising within the classroom, it is crucial to first identify the underlying causes of the problems and systematically intervene in the behavior."



Figure 6. Screenshots of observation and evaluation-centered strategies in students' digital stories

### Discipline and rule-oriented strategies

In terms of discipline and rule-oriented strategies emphasized in the digital stories of teacher candidates, the first one is the reminder of classroom rules. Regularly reminding students of classroom rules is important not only for reinforcing expected behaviors but also for maintaining a safe and orderly environment within the class. In Story 31, the teacher addresses the inappropriate behavior of students engaging in a fight by explaining the unacceptability of such actions and reminding them of the classroom rules, aiming to raise awareness among the students. In the digital story of S55, the issue arises from two students engaging in unauthorized conversations, disrupting the instructional process. The solution strategy implemented for this problem is presented as follows in the story:

"Aysun teacher, using a tolerant and constructive tone, asks Remzi and Ufuk about the reason behind their conversation. She explains to them that they can share this issue with her. Afterward, she reminds them within the framework of classroom rules that it's important to listen carefully to the teacher during lessons and to refrain from talking without permission."

The teacher in S40's story effectively employs the strategy of alerting students when faced with negative behaviors, thereby maintaining classroom discipline and encouraging positive conduct. As a problem-solving approach, the teacher communicates awareness of the undesirable behaviors to the student and issues a warning. In the digital story, the teacher expresses the following sentiment:

"Regrettably, these behaviors of yours did not escape my notice. I observed some of the actions you engaged in today and unfortunately this situation has been the most challenging for me. Acting as though you are alone in the classroom is highly inappropriate. Our classroom is a shared space, and we should all take care of it, keep it clean, and maintain its order. Playing with a ball inside the classroom is not permissible."



Figure 7. Screenshots of discipline and rule-oriented strategies in students' digital stories

#### Teacher Candidates' Experiences in the Process of Creating Digital Stories

The theme of the experiences of teacher candidates in creating digital stories are categorized into three distinct dimensions: (i) professional knowledge, (ii) professional skills, and (iii) attitudes and values. These categories have been constructed by evaluating the general competencies of the teaching profession as outlined in the General Abilities for Teaching Profession (MoNE, 2017).

#### Professional knowledge

It has been found that the creation of digital stories by teacher candidates regarding potential issues in classroom management and the problem-solving strategies they devise for these issues contributes to their professional development when they begin their teaching careers. Teacher candidates have expressed that the process of creating digital stories within the context of classroom management enhances their awareness of the diversity and complexity of problems encountered within the classroom. S5, for instance, articulates the acquisition of awareness regarding potential classroom issues in the following manner:

"While contemplating a topic for our assignment, I realized the multitude of potential issues that can arise within the classroom. It became evident that I was undecided about which one to select."

In addition to recognizing potential issues related to classroom management, teacher candidates have also engaged in discussions with their peers to brainstorm possible solutions for these problems. S34 and S52 succinctly summarize this situation as follows:

"While working on the assignment, we researched potential issues we might encounter in the classroom, which helped us develop a preliminary understanding of the profession. Collaborating on this assignment with multiple teacher candidates particularly benefited us in gaining diverse perspectives and solutions."

"In terms of professional contribution, I particularly enhanced my understanding of the methods to be employed in classroom management. I acquired the ability to generate solutions for classroom management and potential issues that may arise in the classroom."

The discussions within the groups regarding potential issues in the classroom and the review of problem-solving strategies have demonstrated the enhancement of the teacher candidates' skills in problem identification and analysis. Especially, comprehending the reasons behind a problem and evaluating potential solutions collectively with group peers facilitated the teacher candidates' contemplation upon various classroom management strategies and techniques. This process empowered them to refine their classroom management strategies and implement them within the context of a practical case study. When reflecting on the professional contribution gained from the case study, S37 expressed the following sentiments:

"As an early childhood education teacher candidate, this case study has provided me with valuable insights on how to regain control in a similar situation without portraying an unfavorable image to the children or instilling fear in them. It has equipped me with the understanding of how to manage such circumstances effectively in my future professional journey."

S58 mentioned how this project has contributed to her future role as a teacher by prompting her to contemplate the potential challenges within classroom management and encouraging her to devise solutions for these issues. This experience has provided her with a platform to enhance her problem-solving skills and develop effective strategies to address various situations that may arise in her teaching career.

"Creating a digital story based on a classroom management problem allowed me to envision and even experience to some extent the process of contemplating the challenges I might encounter in the future when I am assigned to a teaching position. This exercise facilitated my ability to think about these potential problems and work on finding solutions for them."

S53, on the other hand, stated the professional contribution of the case study they covered in their digital stories with the following words:

"Before completing this assignment, I had often contemplated how I would handle a bullying situation within the classroom once I became a teacher. However, I lacked a definite solution in my mind. Through this assignment, I have now solidified a specific strategy that I will employ if I encounter such a situation in the future."

In addition, facilitating their contemplation on various classroom management strategies and techniques, along with the sharing of real examples and scenarios related to classroom management issues within the group, has enhanced the teacher candidates' ability to connect theoretical knowledge to practical application. S12 and S44 have expressed the following regarding the professional contribution of this aspect.

"As I contemplated potential problems and solutions that could arise within the classroom, I felt more empowered on the path towards becoming an educator. This is because, in my teaching career, numerous challenges will emerge, much like the problem we chose to address. In such situations, this experience has significantly contributed to my ability to approach incidents and find solutions. Reflecting on the problem led us to identify multiple problems and solutions, akin to a brainstorming session. In a sense, it was a rehearsal for the future."

"During the creation process of the narrative, I truly imagined having my own classroom and experiencing the events depicted in the story. I pondered and envisioned what I would do if such a problem were to arise in the future. It prompted me to ask myself, 'What would you do?' This experience acted as a sort of professional rehearsal for me, allowing me to simulate how I might handle such situations in my teaching career."

# Professional skill

Teacher candidates have indicated that the use of technology within the scope of classroom management course also contributes to their professional skills. The process of creating digital stories has equipped teacher candidates with the ability to incorporate technology in education. For instance, S9 expressed an understanding of how to approach students with digital tools in modern classrooms, stating the following.

"In this process, learning to create digital stories will enable me to utilize technology in the future and deliver lessons

to my students in an engaging and effective manner, ensuring their interest and productivity."

S39 highlights the significance of incorporating technology in education and keeping up with it, as a result of the increasing digital transformation and evolution of learning methods in today's educational environment.

"I realized that with the constant advancement of technology, there is an ongoing cycle of change in education. Throughout my professional career, I must constantly adapt to this change and recognize the significance of selfimprovement in all aspects."

Creating a digital story entails organizing its content and managing time effectively. In this regard, the process of creating digital stories has provided teacher candidates with professional skills. S3 elaborates on this topic as follows:

"It's a truly labor-intensive assignment. Every second needs to be woven like a fabric, with factors such as sound, visuals, and plot progressing in parallel. It requires careful attention to ensure a fair and well-executed outcome. Of course, I believe it has contributed to my skills, but as I mentioned, this program is quite demanding, and achieving a well-crafted result will take a considerable amount of time. Setting the timing for seconds, ensuring the alignment of sounds, and placing visuals created panic and stress due to their intricate nature."

The created digital stories have also aided teacher candidates in assessing their own skill levels and recognizing areas for development. The process of creating digital stories has provided teacher candidates with an opportunity to evaluate their own abilities and competencies. S53, one of the teacher candidates, stated that by reviewing her own work, she was able to determine what she could achieve and in which areas further improvement was needed:

"Although I was aware of the existence of programs for creating animations, I had never attempted to create a digital story with animation before. Thanks to this assignment, I had the opportunity to experience it, and I truly enjoyed the process. In the future, I plan to create a digital story using a similar program in my own classroom. Witnessing the enjoyment of using this program has motivated me to explore similar programs in my spare time."

The process of creating digital stories has also assisted teacher candidates in evaluating and reviewing their instructional approaches. It has provided them with the opportunity to reflect on how they can utilize the experiences gained from these practices to create more effective learning experiences for their students in their future careers. As expressed by S4:

"In today's world, we have access to information about every topic through the Internet. However, sometimes the provided information is not tailored to the level of understanding of a preschool-aged child. Thanks to this assignment we have completed, in the future, if I cannot find suitable content for explaining a topic, I can create my own content using this application, as I mentioned."

# Attitudes and values

The fact that the digital story design was carried out as a group assignment has also contributed to the attitudes and values aspect of the teaching profession general competencies (MoNE, 2017) of teacher candidates. Teacher candidates have expressed that completing this project as a team has equipped them with skills in teamwork and collaboration. S4 summarized this as follows:

"Thanks to this assignment, we learned to collaborate with our peers. Initially, we all tried to understand the project. Then, we decided who could handle which aspects and tasks, and based on that, we divided the responsibilities among ourselves."

S5 has expressed that through group interactions, they were able to enhance their social skills and allowed them to engage with a diverse circle of peers. Similarly, S6 stated that participating in group activities enabled them to form connections with different classmates and improve their social competencies.

"Because of the assignment, I got to know a different group and worked on the project together. I had the experience of collaborating with a new group and also had positive interactions in terms of friendship."

"Due to the group assignment, my interactions with my friends improved, leading to the development of my social relationships."

Group work requires effective collaboration with individuals possessing diverse skills. As a result, it facilitates the enhancement of individuals' collaboration and teamwork skills. S7, who believes that group work has contributed to them individually, summarizes this situation as follows:

"I realized that I could work effectively with everyone by dividing tasks and working together towards a common goal through proper communication. Before this group project, we didn't know each other well."

In addition to the contribution of group work to them, the students also talked about the difficulties they experienced while doing group work. S8 stated the problems they experienced in the group:

"Throughout the process, we encountered some unfortunate incidents. Our group members left us without any explanation, and two of us struggled to complete the assignment on our own."

It was also stated that there were some problems among the group members during the digital story creation process by a very few of the teacher candidates. However, it has been found that these problems also have personal contributions to teacher candidates. S11, who said that the problems in group work contributed to him personally:

"Although I encountered some difficulties with my group members during this process, I believe I have gained valuable experiences from these challenges. I also take pride in fulfilling my individual responsibilities in a timely manner."

The process of creating digital stories has also revealed its contribution to teacher candidates' higher cognitive thinking processes such as problem-solving and creative thinking. As highlighted by S19, the process of digital story creation has facilitated the critical analysis of classroom management issues.

"In this process, I believe my problem-solving skills have improved. Learning the algorithms of applications and generating new alternative paths has also greatly contributed to enhancing my critical thinking abilities."

Similarly, S27 also mentioned that preparing a digital story about classroom management issues encouraged them to think more deeply about classroom management problems and establish connections among different factors.

"I believe our problem-solving skills have improved, because of this assignment. In my opinion, this assignment promoted multidimensional thinking. Identifying problems and solutions in the story, transforming them into animation, and reading the story had various benefits for us."

# **DISCUSSION AND CONCLUSION**

In this study, the opinions of teacher candidates regarding potential issues they might encounter in classroom management as they begin their profession and the problem-solving strategies they devise for these issues were examined through the medium of digital stories. Additionally, efforts were made to uncover the experiences they underwent during the process of creating digital stories. In this context, the study resulted in three distinct themes: (i) the classroom management issues that teacher candidates focus on in their digital stories, (ii) the problem-solving strategies that teacher candidates emphasized in their digital stories, and (iii) the experiences during the process of creating digital stories.

Reinke et al. (2011) emphasize that effective classroom management is one of the major challenges new teachers face when entering the profession, and Bromfield (2006) underscores that this concern also exists among teacher candidates. An examination of teacher candidates' digital stories similarly reveals that they anticipate encountering various challenges in the field of classroom management. These stories indicate that teacher candidates frequently highlight student-related issues. Student-related problems also reflect teacher candidates' contemplation on how they will address diverse student needs in the future and manage student behaviors effectively. Within the digital stories, conflicts among students and unauthorized conversations during lessons emerge as disruptive behaviors to classroom order. Similarly, in some studies, unauthorized student conversations during lessons have been identified as among the challenges teachers face in classroom management (Kırbaş & Atay, 2017; Şanlı, 2019).

Bullying and anger control issues are also among the student-related problems depicted in teacher candidates' digital stories. Both behaviors can negatively impact classroom dynamics and the learning environment. The behavior of a student who struggles to control their anger can divert the attention of other students and make it challenging for the teacher to continue the lesson. Moreover, angry students may tend to disregard classroom rules, complicating the teacher's effective classroom management. Peer bullying, which prevents students from feeling safe and comfortable in the classroom, can also hinder their learning motivation. Both behaviors are categorized as disruptive unwanted student behaviors by Yaraş and Turan (2021). It is important for teachers to develop appropriate strategies to deal with such behaviors. Furthermore, teachers' implementation of effective classroom management significantly reduces the likelihood of fostering persistent bullying behaviors in students (Vahedi et al., 2016).

In the digital stories of teacher candidates, students' lack of interest in the lesson, tardiness, and absenteeism are portrayed as behaviors that disrupt the teaching process. There is a reciprocal interaction between lack of interest in the lesson and effective classroom management. Effective classroom management has the potential to enhance students' interest in the lesson, whereas lack of interest in the lesson can complicate the teacher's classroom management. Lack of interest in the lesson is also identified as one of the classroom management problems that teachers encounter in the study by Sadık and Aslan (2015). It is crucial to note, as emphasized by Evertson and Emmer (2012), that these behaviors should not permeate the entire class and should not escalate to a level that obstructs learning.

Tardiness and absenteeism, once again, can alter classroom dynamics, the learning environment, and the behavior of other students. The late entry of tardy and absent students into the classroom can disrupt the flow of the lesson and lead to a distraction of students' attention, causing interruptions in classroom interactions. In the study by Yaraş and Turan (2021), similar to the findings of this study, absenteeism and frequent tardiness emerge as the most commonly encountered undesirable behaviors by teachers. Similarly, Çam Aktaş (2016) demonstrates that ensuring students' regular attendance is perceived as one of the challenges teacher candidates anticipate in their professional lives. Effective classroom management plays a critical role in reducing absenteeism and improving students' learning outcomes. To mitigate and prevent absenteeism, collaborative efforts with stakeholders should be prioritized to develop plans targeting at-risk students (Akkuş & Çınkır, 2022).

Upon examining the digital stories of teacher candidates, it can be observed that teachers' display of a strict attitude within the classroom and their inability to create a learning environment where effective learning can occur for all students lead to certain classroom management issues. In a study aiming to identify undesirable teacher behaviors from the perspective of teacher candidates, it is noted that teachers tend to adopt an authoritarian stance and behave harshly towards students while attempting to establish classroom management. Additionally, they are seen to create a competitive environment by employing traditional approaches in their lessons (Ateş et al., 2019). On the other hand, it is evident that certain problems, such as divorce and parental neglect, which negatively affect students, can lead to issues in classroom management. The indifference of parents towards their children's activities in school is reflected onto the children themselves. Children may become disinterested and unmotivated towards their studies, which can pose a challenge in the classroom environment (Sadık & Aslan, 2015). Similarly, Talayhan et al. (2022) express that parental negligence and situations like parental separation can contribute to behavioral problems. They highlight that the family plays a fundamental role in the formation of an individual's attitudes, values, and habits. Thus, the skills, values, and attitudes that students acquire within their families shape their classroom behaviors and learning experiences, directly influencing classroom management.

The fundamental goal of classroom management is to enable effective teaching for the teacher and effective learning for the students. Considering the significance of classroom management skills for teachers, it becomes evident that classroom management courses within teacher education programs hold great importance for future educators (Stough et al., 2015). While Özay Köse (2010) asserts in their study that teacher candidates generally hold a positive view of classroom management, it is also recognized that an actual classroom setting is the most effective way to acquire classroom management skills (Mahon et al., 2010). Consequently, the diversity of issues in teacher candidates' digital stories related to classroom management is an expected outcome of this study.

In the problem-solving strategies presented in teacher candidates' digital stories, communication and relationshipfocused strategies stand out. As all activities within the classroom occur within the context of communication patterns between teachers and students, classroom communication becomes a crucial variable in classroom management. Chandra (2015) emphasizes that teachers establishing strong relationships with students create an environment where each member of the class expresses their feelings and enjoys working together, and this communication also brings about academic achievement. In this context, the use of "I" language and conducting one-on-one discussions for problem-solving contribute to building trust between students and teachers, fostering a positive learning environment. On the other hand, collaboration is also a strategy highlighted in digital stories concerning classroom management. Teacher candidates have evaluated collaboration between the family and guidance services as an effective strategy for overcoming problems by considering elements such as creating a supportive environment, assessing situations with a holistic perspective, and intervening early in negative situations. Studies also indicate that when teachers collaborate with students' families, the increased support leads to higher academic achievements. In other words, effective collaboration between school and family holds critical importance in achieving positive outcomes (Savaş, 2012).

Classroom management is a multidimensional concept that goes beyond addressing discipline issues and also involves creating engaging environments for students' learning. In this context, classroom management strategies serve as tools to assist teachers in establishing such an environment (Korpershoek et al., 2016). Furthermore, the teacher's behaviors, attitudes, and strategies within the classroom are crucial factors in classroom management. An effective classroom management skillset allows a teacher, equipped with knowledge and expertise, to utilize various teaching methods, classroom resources, and learning objectives in an effective manner (Çakmak et al., 2008). In this regard, the strategies highlighted in teacher candidates' digital stories, such as being aware of student characteristics and enhancing classroom participation, can also be characterized as instruction-focused strategies. According to Doğan et al. (2014), the instructional strategies, methods, and techniques employed by the teacher during lessons, along with students' characteristics and motivation levels, are among the factors influencing classroom management.

In the problem-solving strategies that teacher candidates emphasize in their digital stories, observation and evaluation-focused strategies highlight dimensions such as understanding the problem and observation skills. These dimensions are closely related to Kounin's concept of "withitness" in classroom management. "Withitness" refers to the teacher's ability to understand, be aware of, and quickly respond to events, students' behaviors, and learning situations within the classroom. Having the skill of "withitness" means the teacher can monitor classroom dynamics, show sensitivity to students, and consequently ensure effective classroom management (Kounin, 1970). In the digital stories of teacher candidates, it is evident that teachers are skilled observers in the classroom, comprehending what is happening and striving to minimize issues.

Among the problem-solving strategies that teacher candidates emphasize in their digital stories, the discipline and rule-focused strategies include the reminder of classroom rules. Establishing clear and explicit rules within the classroom is essential in defining the boundaries of behaviors. In situations where rules are vague and inconsistent, students may not know which behaviors are acceptable and which are not (Sieberer-Nagler, 2015). Therefore, the establishment of rules is important to regulate students' behaviors within the classroom, create a positive learning environment, and ensure effective collaboration for everyone. Moreover, classroom rules are considered an integral part of effective classroom management. Additionally, teachers can maintain classroom management through issuing warnings. When giving warnings, it is crucial to explain in detail what the student did wrong and remind them of the violated rule (Alter & Haydon, 2017).

When examining the experiences of teacher candidates in the process of creating digital stories, it can be observed that the creation of digital stories encouraged teacher candidates to engage deeply with the classroom management problems and their solutions. For teacher candidates, this reflective engagement facilitated an awareness regarding the general teaching skills such as professional knowledge, professional skills, and attitudes and values (MoNE, 2017). Through the process of creating digital stories, teacher candidates were encouraged to carefully examine problems they may encounter in their classrooms in the future, which helped them better understand the professional world they were about to step into. Thus, the study demonstrated how using digital stories, as demonstrated by our study, provided opportunities for reflective learning (Moon, 1999) and creative learning (Kim & Li, 2021) enhancing the ability of teacher candidates to critically reflect on their professional growth (Thompson Long & Hall, 2018).

The process of creating digital storytelling involves sense-making and narrative construction by nature (Robin, 2008). As teacher candidates constructed narratives around their anticipated classroom management challenges, they were engaged in a cognitive process that required them to synthesize, organize, and structure their thoughts regarding their future classrooms. This experience helped them develop a holistic view of the challenges they might face. The

experience was found to give teacher candidates a meaningful authentic scenario as the teacher candidates' motivation was sparked by a dynamic and interactive process of creating digital stories in a rich multimedia classroom (Hew & Brush, 2007; Jonassen, 2013). In addition, the creation of digital stories served as a platform for teacher candidates to develop and showcase a range of professional skills. Firstly, the use of digital storytelling required teacher candidates develop technological literacy skills. As teacher candidates used various multimedia tools and platforms to create their digital stories, they had to acquire and apply digital skills that are becoming increasingly important in future's educational settings.

The creating of digital stories fostered communication and narrative construction skills of teacher candidates. The teacher candidates were required to create digital stories in groups, it enabled them to be aware of diverse perspectives as each member brings their unique insights, experiences, and skills to the collaborative process. The diversity in groups leaded teacher candidates to a more comprehensive understanding of the classroom management challenges and solutions. In addition, working on the digital stories in groups encouraged the cultivation of effective communication and teamwork skills. Thus, teacher candidates' self-efficacy views were impacted by the collaborative completion of digital stories because they felt capable of mastering the challenging work and anticipated to do well (Pintrich, 1999).

The influence of digital story creation on teacher candidates' professional knowledge and skills was intricately intertwined with personal development (MoNE, 2017). In a digital story generation process, students get the chance to pick, portray, and highlight elements in a digital story that are important to them and to include personal connections into the narrative (Nelson, 2006). Digital stories were found to have an educational value on the academic achievement, critical thinking, and learning motivation of students (Yang & Wu, 2012). Similarly, the creation of digital stories encouraged critical thinking, creativity, and problem-solving skills of teacher candidates. Looking at the role of learner affect, the current study also found digital storytelling process to have an impact on teacher candidates' professional development as a teacher. The act of translating challenges into narratives prompted self-reflection, potentially leading to a deeper understanding of their motivations, values, and aspirations as future educators.

In conclusion, digital storytelling can be considered as a potent educational, reflective, and transformational tool in teacher education (Austen, 2021; Çıralı Sarıca & Usluel, 2022). In other words, the integration of digital storytelling as a potent educational and reflective tool in teacher education has significant implications for classroom management. Effective classroom management is a cornerstone of successful teaching, and it encompasses a wide range of skills, including establishing a positive classroom environment, fostering student engagement, and managing student behavior. The findings of this study suggest that digital storytelling can play a pivotal role in enhancing these aspects of classroom management.

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