

World Journal on Educational Technology: Current Issues



Volume 13, Issue 4, (2021) 980-993

www.wj-et.eu

Evaluating creative drama studies in virtual museums with teacher opinions

- **Laura Umralieva** a*, Master Senior Lecturer South Kazakhstan State Pedagogikal Universiti, Kazakhstan, Shumkent https://orcig/0000-0002-7176-9971
- **Medeubek Tanirbergenov** b, Khoja Akhmet Yassawi Internafional Kazakh Turkish University, Kazakhstan, Turkestan https://orcid.org/0000-0002-4705-76-08
- **Kuandyk Yeralin**^c, Khoja Akhmet Yassawi Internafional Kazakh Turkish University, Kazakhstan, Turkestan https://orsid.org/0000-0002-1669-0101
- **Dauletkhan Bolysbaev**^d, M.Auezov South Kazakhstan University, Shymkent, Kazakhstan https://orcid.org/0000-0002-5943-006X
- **Dzhakipbekova Makhabbat** ^e, M. Auezov South Kazakhstan University, Shymkent, Kazakhstan https://orcid.org/0000-0002-5943-006X
- Saimbetova Zhanar ^f, South Kazakhstan State Pedagogical University, Shymkent, Kazakhstan https://orcid.org/0000-0003-2866-4311

Suggested Citation:

Umralieva, L., Tanirbergenov, M., Yeralin, K., Bolysbaev, D., Makhabbat, D., & Zhanar, S., (2021). Evaluating creative drama studies in virtual museums with teacher opinions. *World Journal on Educational Technology: Current Issues.* 13(4), 980-993. https://doi.org/10.18844/wjet.v13i4.6286

Received from July 23, 2021; revised from August 29, 2021; accepted from October 25, 2021 Selection and peer review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey. ©2021 United World Center of Research Innovation and Publication. All rights reserved.

Abstract

The aim of this research is to evaluate creative drama studies in virtual museums with teacher opinions in order to ensure the revival of national cultural values through art. Qualitative research method was used in the study. The data were collected by the semi-structured interview form prepared by the researcher. The study involved 25 elementary school classroom teachers working in various primary schools in Nur-Sultan, Kazakhstan, in the 2020-2021 academic year. As a result of the research, it was revealed that teachers found themselves inadequate in virtual museums and creative drama, but considered the use of these applications in education extremely positive. In-service training programs to be prepared for teachers to gain competence in the field of creative drama in the virtual museum will enable them to use this method more effectively in education, which they find effective in learning.

Keywords: Creative drama, national cultural values, teacher opinion, virtual museum.

^{* *} ADDRESS FOR CORRESPONDENCE: Laura Umralieva, South Kazakhstan State Pedagogikal Universiti, Shumkent, Kazakhstan E-mail address: lauraumralieva@mail.ru

1. Introduction

We live in an age where art has unifying power and states, educational institutions and cultural organizations focus on raising people useful to society with this awareness (Afshar and Terwiel, 2019). Educational systems, which have a mission to educate individuals with useful and human qualities in today's world, have demonstrated a relationship between the learning of cultural values and academic success (Elci and Uzunboylu, 2019; Bagila et al., 2019). Reviving national cultural values; in a way that ensures the realization of permanent learning in the student; It is possible to perform creative drama training in the virtual museum.

1.1. Theoretical and conceptual framework

It is only possible to go on a journey to understand the cultural accumulation of societies and the unexplored aspects of civilizations in the historical process. To open the mysterious doors of the past that will contribute to different dimensions of education; museums are the only way to make a historical, cultural and artistic journey. Museums illuminate the dark walls of the past in an artistic way, while at the same time being an effective way to structure the future and pass on accumulation and experience to later generations (Karaosmanoglu, 2017; Tashkenbayevna et al., 2018).

The most important strategic task of education in Kazakhstan is to provide international qualifications to students while maintaining educational traditions (Kubieva et al.,2021). Over the past two decades, many countries have spent a significant amount of public resources providing educational institutions with information and communication technology tools such as computers, interactive boards, network connectivity and software (Haelermans and De Witte, 2012). In a world of rapidly developing technology, countries are devoting a significant budget to the field of information technology to improve technological opportunities to improve the quality of education from preschool to graduate school (Laborda, Uzunboylu and Ross, 2016). In addition, although the coronavirus (COVID-19) pandemic has negative consequences in education as a virus affecting the world, technological developments in general are reshaping the whole world (Ulgener et al., 2020). Since the effective use of information technologies in creating creative activities will positively affect the quality of education, it is of great importance that teachers are trained in this field and researchers turn to this field (Loveless, 2002). The transfer of national cultural heritage to the learning environment using technology has become a necessity of our age (Caballero and Aguilera, 2019). One of the most effective ways to do this is to take advantage of virtual museums.

Museums are considered as important places to provide permanent learning as alternative educational environments while providing us with information about what happened in the historical process through concrete finds. Many information presented to children with the traditional understanding of education in schools becomes more meaningful for children through educational studies with museums (Akyol and Akyol, 2017).

In today's world, it is clear that museums now have a role beyond strengthening ties with the past or endearing art in the face of a naturally developing and changing society and the concept of "new education". Now, the face of museums has changed from the static understanding of classical museums looking at society from a distance to the concept of living contemporary museums, which are designed as cultural units using new presentation and expression methods (Sar and Sagkol, 2013).

Virtual museums on the Internet have a history of about ten years. Compared to the classical museum concept, this period can be considered as a very short time. Therefore, the virtual museum still lacks a generally accepted definition and even a built-in term to refer to it. Depending on the backgrounds of the practitioners and researchers working in this field, it is called online museum,

electronic museum, hyper museum, digital museum, cyber museum or Web museum. Whatever its name, the idea behind this phenomenon is to build a digital extension of the museum on the internet, a museum without walls (Schweibenz, 2004).

In contrast to the traditional understanding, individuals have the opportunity to experience different disciplines and alternative learning methods because they interact with the collections in the museum. Therefore, it is important to use life-centered learning processes in museums and museums within the scope of school lessons. Creative drama is one of the interactive methods that can be used in these processes (Lin, 2017). Creative drama; it is a group work performed using improvisation, role playing and similar theater or drama techniques. In this group study, individuals are understood and revived in playful processes in which a life, an idea, an event, sometimes a concrete concept or behavior are reviewed through the rearrangement of old cognitive patterns (Sahan, 2005).

The use of creative drama in education is a student-oriented process in which experiential learning can be supported and developed within any curriculum. It helps students develop different thinking skills, creative and cognitive thinking skills and promotes the development of oral and written communication skills (Annarella, 1992). During the Covid-19 Pandemic, which affected the whole world, online education became a mandatory form of widespread education. The effective use of virtual museums, which we can define as one of the different learning environments, through creative drama method will make an important contribution to the permanentization of learning.

1.2. Related research

McLeod and Kilpatrick (2001) stated that museums offer students unique exploration opportunities in mathematics, art, science and social studies courses, and that museums should be used in education. The definition of museums as such a powerful learning environment is due to the fact that museums, unlike schools, can form emotional bonds with the past, cultural elements and the accumulation that people create (Taylor and Neill, 2008).

Marty, (2008) have expressed an extremely growing interest in digitizing museums through the use of information and communication technologies in recent years. They also stated that the virtual museum platform can be successfully used to improve educational programs and spread cultural understanding by combining presentations with interactive games and guided tours. In their work, Walczak, Cellary and White (2006) pointed out that virtual museums will enable students of all ages to access numerous works scattered across different and remote locations, interact with and learn about them. Aladag, Akkaya and Sensoz (2014) evaluated the use of virtual museums in social studies according to teacher opinions. As a result of the study, social studies teachers stated that they consider the virtual museum to be an important teaching material because it offers students the opportunity to see museums that are not available to visit, but that problems are encountered during its use. Yildirim and Tahiroglu (2012) evaluated the impact of museum trips in a virtual environment on the attitudes of primary school students towards social studies. In the study, it was concluded that the activities supported by the Primary 5th grade Social Studies course and virtual museum trips had a positive effect on the attitudes of the students towards the Social Studies course.

Karagianni and Papadopoulos (2019) stated the importance of recognizing the museum environment, researching and exploring the museum, creating dramatic environments, evaluating the museum experience and presenting the experience related to the museum. In his work, Peacock (2012) described the link between museum education and art therapy as an innovative partnership and touched on the impact of collaboration between both disciplines on learning.

Barlas-Bozkus (2014) examined the increasing role of virtual museums in international cultural collaborations, which have become educational institutions. In this research, it was revealed that the presentation of objects in museums on an international platform thanks to the use of spaces and archives of virtual museums adds a new dimension to intercultural communication and that learning in virtual museums is limitless.

Karaosmanoglu (2017) in his study on creative drama and the experience of learning in the museum, describes the pre-application museum perception as non-permanent, quickly forgotten, looked at, not frequently visited, where information is read and learned, requiring an effort to understand. After the application, they defined it as an effective place in learning, a place where lives belonging to different civilizations are found, permanent learning takes place, and includes different branches of art. Wang (2014) also emphasized the importance of the use of drama in museums in the reconstruction of cultural identities. Similarly, Ruso and Topdal (2014) noted the importance of teaching using drama methods in museums and emphasized the contribution of effective and diverse use of museums in education to education (Karasheva et al., 2021).

Research in the field has generally focused on the importance of using museums as educational environments and the contribution to learning that this can be done using the creative drama method. However, during the Covid-19 Pandemic, where all teaching activities are carried out online, the realization of learning activities through online museums and these museums has become an extremely important subject area. Virtual museums are important tools that can be used when the possibility of physically going to the museum is not possible for various reasons. For this reason, creative drama activities in virtual museums that allow the revival of national cultural values through art are seen as important in terms of meeting the learning needs of the period we are going through.

1.3. Purpose of the research

The aim of this research is to present teacher opinions on the realization of drama education in the virtual museum, where it is possible to revive national cultural values through art and is supported by the use of technology.

In accordance with the purpose of the research, the following questions were sought for answers;

- 1. What are the teachers' views on the use of virtual museums and creative drama in education?
- 2. What are the teachers' views on functional use of virtual museums?
- 3. What are the teachers' views on the student success and motivation of creative drama studies in the virtual museum?

2. Method and Materials

This section contains information about the research model, participants, data collection tools, data collection process and analysis of data.

2.1. Research method

In this study, qualitative research approach was used. Qualitative research; to detail the research by using texts rather than numbers (Creswell,2017). Qualitative research processes are applied to make sense of the specific situations and experiences of the participants. In this process, the opinions

of the research participants are tried to be defined, resolved and interpreted by the researchers (Liamputtong and Ezzy, 2005). In this research, qualitative research method was used, which allows participants to make situational determination with their opinions and has an interpretive quality.

2.2. Participants

Convenience sampling was used from the purposive sample methods to determine the working group. The easily accessible sample is more often preferred by researchers because participants can be reached more easily (Lune and Berg, 2017). The working group of the study is 25 elementary school classroom teachers working in various primary schools in Nur-Sultan, Kazakhstan, in the 2020-2021 academic year.

2.3. Data collection tools

The data were collected by the semi-structured interview form prepared by the researcher in accordance with the purpose and sub-purposes of the research. Literature was reviewed during the creation of a semi-structured interview form. Then, the opinions of 3 elementary school teachers were taken to check the scope validity (level, applicability and clarity of the data collection tool) and the structure consistency.

In line with expert opinions, the final form of the semi-structured interview form has been created. The semi-structured interview form consists of 3 sections. In the first part, there are 4 closed-ended questions about the demographic characteristics of the participants, in the second part there are 4 closed-ended questions about the virtual museum practices of the participants, and in the third part there are 4 open-ended questions about the participants' views based on teaching in the virtual museum through drama method. The semi-structured interview form prepared for the research is given in Annex-1.

2.4. Data collection process

The semi-structured interview form prepared for the research was sent via e-mail to classroom teachers who wished to participate voluntarily in the research. In the interview form prepared to collect data, teachers were asked questions of different sizes and detailed data was tried to be obtained based on the opinions stated by the teachers.

2.5. Data analysis

In the research, the data was created gradually using a strategy of short-form auditing (Reed, Procter and Murray, 1996). Descriptive statistics (f, %) for the first and second part data of the semi-structured interview form created for the sub-objectives of the research; and descriptive analysis were used for the data of open-ended (unstructured) questions in the third part. A list of codes was prepared for descriptive analysis before the data was encoded based on the theoretical framework. The second stage of descriptive analysis is the coding in line with the sub-questions.

Taking into account the similarities and differences of the data by the researcher, the specified codes were counted and classified. In order to verify the reliability of the codes obtained as a result of the analysis, two experts examined it. As a result of the examination, it was concluded that the codes and classifications created were reliable. Raw data obtained from the research's data collection tool is stored. In the presentation of the findings, direct excerpts detailing the participant's opinions are included. In this study, the opinions of the participants were not given on the basis of confidentiality T1, T2, T3... is presented in code.

3. Results

In this section, information about the questions in the semi-structured interview form is given.

Table 1 contains a breakdown of the demographic characteristics (gender and professional experience) of the teachers who participated in the study.

Table 1: Distribution of teachers' gender and professional experience

Professional experience	Gender		Sum
	Female	Male	
0-5 Years	-	1	1
6-10 Years	3	6	9
11-15 Years	9	4	13
16 Years and above	2	-	2
Sum	14	11	25

When Table 1 is examined, it is seen that 14 of the 25 teachers who participated in the study voluntarily were women and 11 were men. The vast majority of teachers who participated in the study have 11-15 years of experience. It is seen that women with 0-5 years of experience and male teachers with 16 years or more of experience are not among the study participants.

Table 2 contains findings on teachers' use of virtual museums and creative drama in education.

Table 2: Teachers' use of virtual museums and creative drama in education

	Yes		No	
Questions	F	%	F	%
1. Have you ever had your students take a virtual	2	8	23	92
museum trip?				
2. Do you use creative drama as a teaching method in	6	24	19	76
your lessons?				
3. Would you consider using the virtual museum app in	25	100	-	-
your lessons?				
4. Do you find yourself sufficient to teach creative	3	12	22	88
drama in a virtual museum?				

When the findings in Table 2 were evaluated, it was observed that 92% of teachers did not make their students travel to virtual museums. 76% of teachers stated that they do not use creative drama as a teaching method in their courses.

All of the teachers have stated that they intend to use the virtual museum application in their lessons. In addition, 88% of teachers stated that they did not find themselves sufficient to teach creative drama in the virtual museum. When the findings are evaluated, it is seen that teachers are weak in the practice of virtual museums and creative drama.

Table 3 provided teachers' views on functional use of virtual museums in primary schools.

Table 3: Teachers' views on functional use of virtual museums

Categories	Participant Opinions	F	%
Convenience in the planning phase	T2; I think it's easier than the preparations to go to the museum. T6; Although the use of virtual museums in education is not widespread, it is easier to plan.	22	88
Convenience during the application phase	T21; I believe that organizing and determining the schedule is more practical than organizing a classic museum trip. T13; I think it is very functional in terms of providing permanent learning in many subjects in students during the online education process. T14; I think the virtual museum event can be applied more easily than museum trips.	17	68
Convenience during the evaluation phase	T20; It is a great convenience that allows the student to benefit from museums during the online education process. T4; At the end of the virtual museum trip, learning can be reinforced by applying a Q&A method. T11; After the virtual museum trip, I think students can immediately be asked for a feedback on what they have learned in the app. T19; Students can share their experiences after the virtual museum application, and a quick and instant assessment of what they have learned can be made.	11	44

Table 3 provided teachers' views on functional use of virtual museums. Teacher opinions are collected in three categories regarding the functionality of virtual museums: convenience during the planning phase, convenience in the implementation phase and convenience in the evaluation phase. 88% of teachers found virtual museums functional in terms of convenience in the planning phase. While 68% of teachers mentioned the ease of implementation of virtual museums, 44% noted the ease of evaluation.

Table 4 contains teachers' views on the effects of creative drama on student success and motivation in the virtual museum.

Table 4. : Teachers' views on the impact of creative drama work on student success and motivation in the virtual museum

Categories	Participant Opinions	F	%
	T4; A more permanent learning can take		
	place, as it will allow students to learn by doing		
	it.		

Increasing the permanence of	T9; I think it's an effective way of teaching	23	92
learning	learning. Students will not forget the		
	information they learned during the application		
	T15; Students will play an active role both		
	in preparation and participation, they have an		
	experience they will never forget with the		
	drama event in the virtual museum. This makes		
	learning permanent.		
	T6; I think creative drama in a virtual		
	museum allows cultural heritage to be learned		
	while having fun.		
Understanding cultural heritage	T22; I think it is a method that allows	19	76
awareness in a fun and artistic way	students to understand cultural motifs through		
	art. Creative drama event in the virtual		
	museum is a great opportunity for students to		
	become aware of cultural elements.		
	T25; A cultural, artistic and extremely fun		
	experience for students.		
	T1; Students will be more motivated for		
	the lesson as the drama event in the virtual		
	museum will make the subject interesting.		
Increase the student's motivation	T19; I think students will participate		
towards the course and increase	enthusiastically in such an application. It will	15	60
their success	also positively affect the success of the		
	discriminating course.		
	T24; I believe that such an education will		
	inspire enthusiasm among students. There is		
	always success at the end of every work done		
	with enthusiasm.		

In Table 4, teachers' views on the impact of creative drama work on student success and motivation in the virtual museum are categorized. In the virtual museum, the effects of creative drama studies on the student were collected in three classrooms in line with teacher opinions, increasing the permanence of learning, understanding cultural heritage awareness in a fun and artistic way, and increasing the student's motivation towards the course and increasing its success. 92% of teachers stated that creative drama studies in the virtual museum will increase the permanence of learning. 76% of teachers mentioned the importance of understanding cultural heritage awareness in a fun and artistic way. 60% of teachers stated that creative drama in the virtual museum will increase the student's motivation for the lesson and increase their success. As can be seen from the table, all teachers have taken a positive attitude regarding the impact of creative drama work on the student in the virtual museum.

4. Discussions

The findings of the study revealed that teachers do not have sufficient experience in the use of virtual museums and creative drama in education. However, all teachers have stated that they can practice creative drama activities in their lessons in the virtual museum. Demirel (2020) similarly found that the self-sufficiency of class education teacher candidates for educational practices in museums was low and stated that the self-proficiency levels in the processing of courses in museums improved positively after the training given. Islek and Danju (2019) also examined the impact of museum education practices carried out in virtual teaching environments on the opinions of teacher candidates. After four weeks of training, it was determined that the teacher candidates believed that

an active teaching process could be established with virtual museum applications and that learning the social studies course could be more easily embodied. Erem (2017) also pointed to the inadequacy of teacher candidates in this field and the need to include museum education in educational programs in his research, in which he evaluated student views on the necessity of the museum education course in teacher training programs (Agranovich et al., 2019).

According to the findings of teachers' views on functional use of virtual museums, it was concluded that teachers found virtual museum applications practical in terms of planning, implementation and evaluation. According to Bowen (2000), one of the reasons for preferring the virtual museum application is; virtual museum visits are easy.

Teachers' views on the effect of creative drama in the virtual museum on student success and motivation are positive. The majority of the teachers stated that creative drama activities in the virtual museum were effective in increasing the permanence of learning. In his study, Karaosmanoglu (2017) dealt with the experiment of learning in the museum with creative drama. As a result of the research, he stated that the students realized a more permanent learning with the drama activity in the museum, which is a learning style based on experience. In addition, they determined that the students' experiences with drama in the museum were more fun, life-oriented and permanent than their previous museum experiences.

Teachers claimed that with creative drama activities in the virtual museum, students could grasp the awareness of cultural heritage in an entertaining and artistic way. Gheorghiu and Stefan (2018) also mentioned the importance of virtual museums in the formation of cultural identity in the digital age. Bulut and Uzun (2021) suggested a workshop for virtual museums and creative drama in their study and stated that drama activities in virtual museums would enrich the learning process in transferring cultural heritage items to students through art.

In addition, increasing the motivation of students towards the lesson and increasing their success was expressed as the contribution of creative drama activities in virtual museums. In their study, Fokides and Sfakianou (2017) evaluated the use of virtual museums in primary schools in art education, they revealed that the success of students who received education in virtual museums was higher than those who did not receive education in virtual museums. In his study, Karaosmanoglu (2017) dealt with the experiment of learning in the museum with creative drama. As a result of the research, he stated that the students realized a more permanent learning with the drama activity in the museum, which is a learning style based on experience. In addition, they determined that the students' experiences with drama in the museum were more fun, life-oriented and permanent than their previous museum experiences. Callaway et al. (2012) aimed to provide museum visitors with a built-in, mobile museum system that offers an hour of creative drama. In their study, the positive effect of the application on the participants was evaluated.

Research in the field mostly covers the educational use of museums. While creative drama practices in museums are still a new research area, creative drama practices in virtual museums are an area that has become widespread in recent years and where extremely limited research has been conducted (Yesnazar et al., 2020). Research findings and studies in the field reveal that teachers do not have full competence in this field, but they are warmly interested in creative drama applications in the virtual museum in education .

5. Conclusion

In this study, teachers' perspectives on drama practices in the virtual museum were evaluated in order to revive national cultural values through art. Both the technology age we live in and the Covid-

19 Pandemic process we are in have made the use of technology in education an important requirement. In this direction, the opinions of primary school teachers, who constitute the study group of the research, about virtual museum and creative drama practices were taken. It was concluded that the majority of the teachers did not use virtual museum and creative drama applications in their classes, but all of them were positive about using these applications. Teachers find themselves inadequate for the application of creative drama in the virtual museum. In addition, teachers have demonstrated that making functional use of virtual museums is practical in the planning, implementation and evaluation phases. They stated that creative drama studies in virtual museums will increase student success and motivation. Although the teachers viewed the creative drama studies positively in the virtual museum, their inexperience in this field appears to be the reason why they did not do these practices.

6. Recommendations

As a result of the research, it has emerged that teachers should receive training on how to do creative drama in the virtual museum. It should organize an in-service training program for teachers.

Spreading the use of creative drama in virtual museums for educational purposes in primary schools will be possible by giving this training to teacher candidates during their undergraduate education. For this purpose, creative drama studies in virtual museums should be added to teacher training programs.

Studies should be carried out to create different learning environments through art by multiplying activities or situations in which students will develop a sense of belonging to national cultural values.

References

- Afshar, V., & Terwiel, C. (2019). Art for peace. *Global Journal of Arts Education*, *9*(2), 63-74. https://doi.org/10.18844/gjae.v9i2.4417
- Agranovich, Y., Amirova, A., Ageyeva, L., Lebedeva, L., Aldibekova, S., & Uaidullakyzy, E. (2019). The Formation of Self-Organizational Skills of Student's Academic Activity on the Basis of 'Time Management'Technology. *International Journal of Emerging Technologies in Learning (IJET)*, 14(22), 95-110. https://www.learntechlib.org/p/217144/
- Akyol, A. A., & Akyol, A. K. (2017). Drama applications in museums and archaeological sites. *Journal of Creative Drama*, 12(2), 105-126. https://dergipark.org.tr/en/pub/ydrama/issue/60246/876526
- Aladag, E., Akkaya, D., & Sensoz, G. (2014). Evaluation of the use of virtual museums in social studies lesson according to teacher opinions. *Trakya University Journal of Social Sciences*, *16*(2), 199-217. https://dergipark.org.tr/en/download/article-file/321373
- Annarella, L. A. (1992). Creative Drama in the Classroom. https://files.eric.ed.gov/fulltext/ED391206.pdf
- Bagila, S., Kok, A., Zhumabaeva, A., Suleimenova, Z., Riskulbekova, A., & Uaidullakyzy, E. (2019). Teaching Primary School Pupils Through Audio-Visual Means. *International Journal of Emerging Technologies in Learning (IJET)*, 14(22), 122-140

- Umralieva, L., Tanirbergenov, M., Yeralin, K., Bolysbaev, D., Makhabbat, D., & Zhanar, S., (2021). Evaluating creative drama studies in virtual museums with teacher opinions. *World Journal on Educational Technology: Current Issues.* 13(4), 980-993. https://doi.org/10.18844/wjet.v13i4.6286
- Bowen, J. (2000). The virtual museum. *Museum International*, *52*(1), 4-7. https://doi.org/10.1111/1468-0033.00236
- Bozkus, S. (2014). Development of virtual museums in Turkey within the framework of culture and art communication. *The Journal of Academic Social Science Studies*, *26*, 329-344. http://dx.doi.org/10.9761/JASSS2408
- Bulut, P., & Uzun, E. B. (2021). A workshop proposal for virtual museums and creative drama: The museum is coming to the classroom!. *Journal of Creative Drama*, 16(1), 131-156. https://dergipark.org.tr/en/download/article-file/1579220
- Caballero, P. D. F., & Aguilera, F. J. G. (2019). Evaluation for QR codes in environmental museums. *Global Journal of Information Technology: Emerging Technologies*, *9*(2), 29-32. https://doi.org/10.18844/gjit.v9i2.4268
- Callaway, C., Stock, O., Dekoven, E., Noy, K., Citron, Y., & Dobrin, Y. (2012). Mobile drama in an instrumented museum: inducing group conversation via coordinated narratives. *New Review of Hypermedia and Multimedia*, 18(1-2), 37-61. https://doi.org/10.1080/13614568.2012.617844
- Creswell, J. W., & Sozbilir, M. (2017). *Introduction to mixed methods research*. Pegem Academy.https://www.pegem.net/dosyalar/dokuman/2752021095414karma%20y%C3%B6ntem.pdf
- Demirel, I. N. (2020). Self-efficacy of classroom education teacher candidates towards educational practices in museums. *Bolu Abant Izzet Baysal University Faculty of Education Journal, 20* (1), 585-604. https://dergipark.org.tr/en/download/article-file/996145
- Elci, E., & Uzunboylu, H. (2019). The development of a universal and cultural values scale for values education. *South African Journal of Education*, 40(1), S1-S8. https://doi.org/10.15700/saje.v40ns1a1850
- Erem, E. (2017). Investigation of Student Opinions on the Necessity of the Elective Museum Education Course in the Preschool Education Curriculum. *Journal of Creative Drama*, 12(2), 31-42. https://dergipark.org.tr/en/download/article-file/1563481
- Fokides, E., & Sfakianou, M. (2017). Virtual museums in arts education. Results of a pilot project in primary school settings. *Asian Research Journal of Arts & Social Sciences*, 1-10. https://www.journalarjass.com/index.php/ARJASS/article/view/11164/20195
- Gheorghiu, D., & Stefan, L. (2018). Virtual museums: dealing with cultural identity in the digital age. In *The International Scientific Conference eLearning and Software for Education* (Vol. 4, pp. 463-470). " Carol I" National Defence University. https://www.proquest.com/openview/d5264fc0539fb884dd5d36fcf755271e/1?pq-origsite=gscholar&cbl=1876338
- Haelermans, C., & De Witte, K. (2012). The role of innovations in secondary school performance—Evidence from a conditional efficiency model. *European Journal of Operational Research*, 223(2), 541-549. https://doi.org/10.1016/j.ejor.2012.06.030
- Islek, D., & Danju, I. (2019). The Effect of Museum Education Practices Carried out on Virtual Teaching Environments on Prospective Teachers' Views. *Revista de Cercetare si Interventie Sociala*, 67, 114. https://www.ceeol.com/search/article-detail?id=819424
- Karagianni, A. L., & Papadopoulos, S. (2019). Museum experience through inquiry drama. *Drama Research*, *10*(1), 2-22. http://www.nationaldrama.org.uk/journal/wp-content/uploads/sites/2/DR10-Article-2.pdf

- Umralieva, L., Tanirbergenov, M., Yeralin, K., Bolysbaev, D., Makhabbat, D., & Zhanar, S., (2021). Evaluating creative drama studies in virtual museums with teacher opinions. World Journal on Educational Technology: Current Issues. 13(4), 980-993. https://doi.org/10.18844/wjet.v13i4.6286
- Karaosmanoglu, G. (2017). Learning experience in the museum with creative drama: The example of Istanbul archeology museums. *Journal of Creative Drama*, 12(2), 43-62. https://dergipark.org.tr/en/pub/ydrama/issue/60246/876496
- Karasheva, Z., Amirova, A., Ageyeva, L., Jazdykbayeva, M., Uaidullakyzy, E. (2021). Preparation of future specialists for the formation of educational communication skills for elementary school children. World Journal on Educational Technology: Current Issuesthis link is disabled, 2021, 13(3), cτp. 467–484 . https://www.un-pub.eu/ojs/index.php/wjet/article/view/5954
- Kubieva, V., Sagiyeva, A., Salimgerey, Z., & Baiseitova, M. (2021). Multilingualism is a trend in the development of modern Kazakhstan. *Global Journal of Sociology: Current Issues*, 11(1), 40-44. https://doi.org/10.18844/gjs.v11i1.5480
- Laborda, J. G., Uzunboylu, H., & Ross, S. (2016). Future Trends in Computing Technology in Education J. UCS Special Issue. *Journal of Universal Computer Science*, 22(1), 1-3. http://jucs.org/jucs.22 1/future trends in computing/jucs 22 01 0001 0003 editorial.pdf
- Liamputtong, P., & Ezzy, D. (2005). *Qualitative research methods. Second*. Melbourne: Oxford university press. https://doi.org/10.1016/B978-0-12-799943-2.00010-0
- Lin, M. C. (2017). Facing the challenges of glocalisation of drama education in museum projects in Taiwan. *Research in Drama Education: The Journal of Applied Theatre and Performance*, 22(4), 519-522. https://doi.org/10.1080/13569783.2017.1366261
- Loveless, A. (2002). *Literature review in creativity, new technologies and learning*. A NESTA Futurelab Research report. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.959.4458&rep=rep1&type=pdf
- Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences*. Pearson. http://law.gtu.ge/wp-content/uploads/2017/02/Berg-B.-Lune-H.-2012.-Qualitative-Research-Methods-for-the-Social-Sciences.pdf
- Marty, P. F. (2008). Museum websites and museum visitors: digital museum resources and their use. *Museum Management and Curatorship*, 23(1), 81-99. https://doi.org/10.1080/09647770701865410
- McLeod, J., & Kilpatrick, K. M. (2001). Exploring science at the museum. *Educational Leadership*, *58*(7), 59-63. https://eric.ed.gov/?id=EJ626299
- Peacock, K. (2012). Museum education and art therapy: Exploring an innovative partnership. *Art Therapy*, 29(3), 133-137. https://www.tandfonline.com/doi/abs/10.1080/07421656.2012.701604
- Reed, J., Procter, S., & Murray, S. (1996). A sampling strategy for qualitative research. *Nurse Researcher*, *3*(4), 52-68. https://doi.org/10.7748/nr.3.4.52.s6
- Ruso, L., & Topdal, E. B. (2014). The use of museums for educational purposes using drama method. *Procedia-Social and Behavioral Sciences*, 141, 628-632. https://www.sciencedirect.com/science/article/pii/S1877042814035344
- SAHAN, M. (2005). Museum and education. *Turkish Journal of Educational Sciences*, *3*(4), 487-501. https://dergipark.org.tr/en/download/article-file/256386
- Sar, E., & Sagkol, T. (2013). On the necessity of museum education course in education faculties. *HAYEF Journal of Education*, 10(2), 83-90. https://dergipark.org.tr/en/download/article-file/93178

- Umralieva, L., Tanirbergenov, M., Yeralin, K., Bolysbaev, D., Makhabbat, D., & Zhanar, S., (2021). Evaluating creative drama studies in virtual museums with teacher opinions. *World Journal on Educational Technology: Current Issues.* 13(4), 980-993. https://doi.org/10.18844/wjet.v13i4.6286
- Schweibenz, W. (2004). Virtual museums. *The Development of Virtual Museums, ICOM News Magazine*, *3*(3).https://www.researchgate.net/profile/Werner-Schweibenz/publication/240296250_The_Development_of_Virtual_Museums/links/5862304c08aeb_f17d3950d65/The-Development-of-Virtual-Museums.pdf
- Tashkenbayevna, N., Kenesbaev, S. M., Zhailauova, M. K., Elmira, U., Nurzhanova, S. A., & Stambekova, A. S. (2018). Possibilities of the Subject 'Information and Communication Technologies' in Accustoming Primary School Students to Research Activities. *International Journal of Interactive Mobile Technologies* (iJIM), 12(6), 35-46. https://core.ac.uk/download/pdf/270196599.pdf
- Taylor, E. W., & Neill, A. C. (2008). Museum education: A nonformal education perspective. *Journal of Museum Education*, *33*(1), 23-32. https://doi.org/10.1080/10598650.2008.11510584
- Ulgener, P., Minalay, H., Ture, A., Tugutlu, U., & Harper, M. G. (2020). Examining the relationship between academic procrastination behaviours and problematic Internet usage of high school students during the COVID-19 pandemic period. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 10(3), 142-156. https://doi.org/10.18844/gigc.v10i3.5549
- Walczak, K., Cellary, W., & White, M. (2006). Virtual museum exbibitions. *Computer*, *39*(3), 93-95. https://doi.org/10.1109/MC.2006.108
- Wang, W. J. (2014). Using process drama in museum theatre educational projects to reconstruct postcolonial cultural identities in Hong Kong, Singapore and Taiwan. *Research in drama education: The journal of applied theatre and performance*, 19(1), 39-50. https://www.tandfonline.com/doi/abs/10.1080/13569783.2013.872433
- Yesnazar, A., Japbarov, A., Zhorabekova, A., Nuralieva, A., Elmira U. (2020). Determination of primary school children's speech skills in interdisciplinary communication in learning environments. World Journal on Educational Technology: Current Issues, 2020, 12(4), ctp. 373-388
- Yildirim, T., & Tahiroglu, M. (2012). The effect of virtual museum visits on primary school students' attitudes towards social studies course. *Electronic Journal of Social Sciences*, *11*(39), 104-114. https://dergipark.org.tr/en/download/article-file/70337

Appendix 1. Teacher Interview Form Regarding Creative Drama Application in Virtual Museum

Part 1 - Persona	al Information			
Gender:	Female ()		Male ()	
Experience:	1-5 Years ()	6-10 Years (11-15 Years ()	16 Years + (

This form was prepared in order to get the opinions of primary school teachers about the application of creative drama in the virtual museum. It is of great importance that you give sincere answers to the questions in order for the research to reach its purpose. Thank you in advance for your interest and contribution.

Part 2	Yes	No		
1. Have you ever had your students take a virtual museum tour?				
2. Do you use creative drama as a teaching method in your lessons?				
3. Would you consider using the virtual museum application in your lessons?				
3. Would you consider teaching a lesson using the creative drama method in a virtual museum?				
4. Do you find yourself competent to teach with the creative drama method in the virtual museum?				
Part 3				
What are your suggestions for functional use of virtual museums in primary schools?				
What can be the effects of creative drama studies in the virtual museum on student success and motivation?				