

## ***Digital Storytelling for Better Language Learning in a Post Pandemic World***

Naoko Kasami, J. F. Oberlin University, Japan

WorldCALL 2023 – CALL in Critical Times  
Conference Proceedings

### **Abstract**

The purpose of this research is to compare digital storytelling (DST) in a remote course, held in the spring term of 2022 during the pandemic, with that of a traditional face to face (F2F) course, held in the fall term of 2019 before the pandemic, in terms of student learning motivation. The findings suggest how to conduct DST for more effective language learning in F2F courses, by utilizing what was learned through remote learning. This study reports how DST assignments were perceived by students in the remote learning course in 2022 by comparing them with the result of an F2F course held in 2019. In both courses, the study goal was to acquire skills and knowledge to present ideas and messages effectively with the use of ICT (Information and Communications Technology) and English. There were two main assignments in both courses: storytelling (ST) as the midterm assignment and DST as the final assignment. The participants' department (ICT-related major) and English proficiency level (basic or intermediate level) are similar, and conditions were almost identical in both courses except for the course styles; F2F and remote learning. Thirty students enrolled in each course, and of these, 16 students in the F2F course in 2019, and 20 students in the remote learning course in 2022 answered all the questionnaires (pre, midterm and post), had taken two tests (midterm and final), and agreed to participate in this research. Although the results of this study cannot be generalized due to the small sample sizes, it can be said that DST in remote classes was received positively in terms of learning motivation in general by most students. The results suggest that DST with optional Zoom support meetings and recorded video materials could become effective aids in future F2F courses. The changes in educational methods brought about by the COVID-19 pandemic could become a good opportunity for better education in the future. Future F2F courses would be better than traditional F2F courses by integrating what has been learned during the pandemic.

Keywords: Digital Storytelling, Face-to-Face (F2F), Remote Learning, Motivation

## 1. Introduction

Though the COVID-19 pandemic triggered changes to our educational systems, some changes have brought about positive impacts on our learning and teaching. While welcoming the return to face-to-face (F2F) learning, this study aims to seek more effective F2F learning approaches than before the pandemic.

The purpose of this research is to compare digital storytelling (DST) in a remote course, held in the spring term of 2022 during the pandemic, with that of a traditional F2F course, held in the Fall term of 2019 before the pandemic, in terms of student learning motivation. The findings suggest how to conduct DST for more effective language learning in F2F courses, by utilizing what was learned through remote learning (Figure 1).

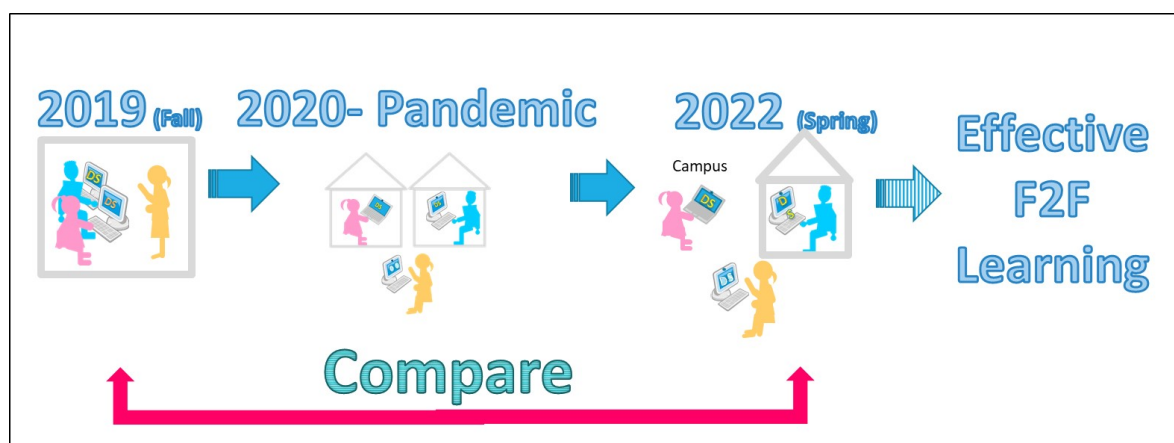


Figure 1: Seeking better learning

This study reports how DST assignments were perceived by students in the remote learning course in 2022 by comparing them with the result of an F2F course held in 2019 using the following research questions:

- RQ1: What were the impacts of ST and DST assignments on students' motivation in F2F and remote courses?
- RQ2: What were the pros and cons of the courses from the perspective of students in the remote learning environments?
- RQ3: What changes have occurred in student comments about DS courses before and after the pandemic?

## 2. Method

### *Participants*

In the spring term of 2022, two courses were conducted with 90-minute synchronous Zoom meetings held approximately every two weeks, and additionally, a few optional support meetings were held on Zoom for students who sought individual support. The teaching materials (PDF and video) were shared on the learning management system (LMS). The courses were conducted in a similar manner to the courses held in the spring term of 2021, whose detailed information was reported in previous studies (Kasami, 2022). One of two classes, selected from the results of the pre-questionnaire, with slightly lower and almost equal motivation levels to an F2F class held in the fall term of 2019 was selected for this research (Figure 2). This is because in order to evaluate the effectiveness of remote learning,

it is necessary to make other conditions (faculty, subject, etc.) consistent and comparable with the F2F classes.

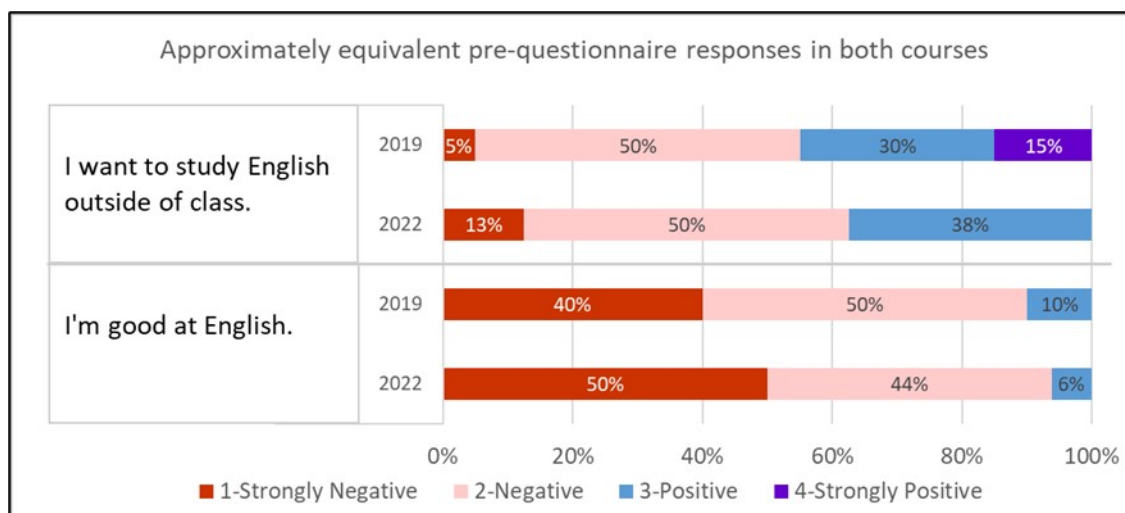


Figure 2: Approximately equivalent pre-questionnaire responses

The objects of this study are an F2F course held during the fall term of 2019 (September 2019 to January 2020), and a course in remote learning held during the spring term of 2022 (April to July 2022). In both courses, the study goal was to acquire skills and knowledge to present ideas and messages effectively with the use of ICT (Information and Communications Technology) and English. There were two main assignments in both courses: storytelling (ST) as the midterm assignment and DST as the final assignment. The participants' department (ICT-related major) and English proficiency level (basic or intermediate level) are similar, and conditions were almost identical in both courses except for the course styles; F2F and remote learning. Thirty students enrolled in each course, and of these, 16 students in the F2F course in 2019, and 20 students in the remote learning course in 2022 answered all the questionnaires (pre, midterm and post), had taken two tests (midterm and final), and agreed to participate in this research.

Like the previous study (Kasami, 2017), questionnaires were conducted using Google Forms and the three questionnaires (pre-, midterm- and post-) were employed to collect the necessary data. In both courses in 2019 and 2022, the students were asked to rate both ST and DST assignments with scores ranging from one to nine, where the greater numerical value represented a stronger motivating factor. The questionnaires were set according to sub-categorical items using a semantic differential scheme which asked the students to indicate their feelings about the assignments by selecting the degree of vagueness or clarity and other aspects on the scale. For example, the lowest score of 1 indicates that the assignment was too vague; a middle score of 5 indicates a neutral response, and the highest score of 9 indicates that the assignment was very clear. The question items used a semantic differential scheme that was in line with the study by Suzuki et al. (2004), which was based on Keller's ARCS motivational model (2010).

### 3. Results and Discussion

#### 3.1. Results

##### *ST and DST in F2F Learning in 2019 and Remote Learning in 2022*

In the case of ST, the average point of each category of ARCS was quite similar (the gap between the two average points was only 0.13), while in the case of DST, the average points of some categories of ARCS tended to be higher in 2022 compared with those from 2019 (Figure 3). In 2022, the highest average points among 12 subcategories were shown in R1 (Goal Orientation, 7.63), R2 (Motive Matching, 7.56), S2 (Extrinsic Rewards, 7.38), and S3 (Equity, 7.38). The greatest gap between the two courses were seen in the aspects of subcategories of R1 (Goal Orientation, 0.88), C1 (Learning Requirements, 0.84), and R2 (Motive Matching, 0.76).

ST: Storytelling			
ARCS	F2F-2019(n=20)	Remote-2022(n=16)	Gap
<b>Attention</b>			
A1 Perceptual Arousal	7.45	7.19	-0.26
A2 Inquiry Arousal	6.55	6.38	-0.18
A3 Variability	6.10	6.31	0.21
<b>Relevance</b>			
R1 Goal Orientation	6.65	6.31	-0.34
R2 Motive Matching	6.90	7.00	0.10
R3 Familiarity	5.85	6.25	0.40
<b>Confidence</b>			
C1 Learning Requirements	5.75	6.06	0.31
C2 Success Opportunities	6.35	5.88	-0.48
C3 Personal Control	5.45	5.81	0.36
<b>Satisfaction</b>			
S1 Intrinsic Reinforcement	5.65	5.88	0.23
S2 Extrinsic Rewards	6.00	6.50	0.50
S3 Equity	5.85	6.69	0.84
average	6.13	6.26	0.13

DST: Digital Storytelling			
ARCS	F2F-2019(n=20)	Remote-2022(n=16)	Gap
<b>Attention</b>			
A1 Perceptual Arousal	7.25	7.31	0.06
A2 Inquiry Arousal	6.30	7.00	0.70
A3 Variability	6.85	7.06	0.21
<b>Relevance</b>			
R1 Goal Orientation	6.75	7.63	0.88
R2 Motive Matching	6.80	7.56	0.76
R3 Familiarity	6.95	6.94	-0.01
<b>Confidence</b>			
C1 Learning Requirements	6.35	7.19	0.84
C2 Success Opportunities	6.45	6.69	0.24
C3 Personal Control	7.05	6.94	-0.11
<b>Satisfaction</b>			
S1 Intrinsic Reinforcement	6.40	6.44	0.04
S2 Extrinsic Rewards	7.45	7.38	-0.08
S3 Equity	7.25	7.38	0.13
average	6.77	7.11	0.33

Figure 3: ST and DST in F2F and remote courses

#### *Pros and Cons of the Remote Learning Course*

There were two open-ended questions presented in the remote course of 2022, “Q1: What could be improved in the remote course?” and “Q2: What points were preferable in the course?” As a result, there was one negative comment to Q1, and that was the font of the LMS was too small. In e-learning, students often need to look at their computer screens for long periods of time, so in order to reduce the burden on students as much as possible, it is necessary to aim to create screens that are easy to read, including using appropriate font sizes.

On the other hand, there were 10 positive comments from students to Q2 as follows:

**[Easy to understand explanation]**

“It was very helpful to have a detailed explanation of how to make a digital story.”  
(Student A)

“It was very helpful to have a clear explanation of what I needed to do.” (Student B)

“The class was easy to understand, and the explanation of the assignment was very detailed and easily understood. ” (Student C)

“The instructions were very thorough and easy to understand, and I was able to tackle the assignments smoothly. Thank you very much.” (Student D)

**[Learning at each student’s own pace]**

“By using both Zoom and recorded videos, it was good that I learned what I could do by myself at my own pace, and also, we had fun group sessions by participating in the class (on Zoom)” (Student E)

“I was able to learn English at my own pace.” (Student F)

**[Support]**

“It was good that the support was substantial.” (Student G)

“I’m glad the teacher was kind.” (Student H)

**[Other comments]**

“I felt that my vocabulary improved a little through e-learning materials.” (Student I)

“I was able to enjoy learning English, which I am not good at.” (Student J)

Similar comments were categorized. Out of the 10 responses, 4 comments were related to the ease of understanding the explanation. Additionally, two responses were about the benefit of allowing students to learn at their own pace. Additionally, two responses were related to providing support.

***Changes in Student Comments About DST Courses Before and After the Pandemic***

Since 2012, the DST courses have been run every year, and at the end of every term, a questionnaire survey has been conducted. The previous study showed that most students expressed positive views on DST assignments and considered movies and ICT both interesting and useful for English learning (Kasami, 2018). There were also some students who were less motivated, and the findings from these demotivated students’ comments revealed that it would be effective to provide (1) specific instruction with proper guidance of DST, (2) sufficient time to accomplish the assignment, and (3) technical support (Kasami, 2018).

The pandemic has forced teachers to offer remote learning, and student comments suggest that this change has improved three problems that needed improvement in the courses before the pandemic. As a result, the remote courses enabled the provision of proper guidance, sufficient time to accomplish the assignments at a pace of the student's own choosing, and individual support. Students in the remote course in 2022 had positive comments about the recorded video material, flexibility of learning anytime, anywhere at their own speed, and support given to the students with the use of Zoom throughout the course.

Although, when the courses were conducted remotely for the first time in 2020, there were problems that needed improvement, such as insufficient support and interactive learning opportunities (Kasami 2021), the changes caused by the pandemic have presented us with a unique opportunity to try new measures and innovations. This experience may be exploited in a positive manner as a means of creating more effective education in the future.

### **3.2. Discussion**

The recorded videos and materials allow students to choose when they learn more flexibly. When they experienced difficulties with creating their own digital stories, they could ask for help through optional Zoom meetings, by watching video manuals or reading FAQs. These seem to be related to the comparatively high average points in R1 (Goal Orientation) and R2 (Motive Matching) in the ARCS model.

People live in an era where anyone can watch and post videos on demand. It is inferred that there were many students who were good at editing videos and wanted to know how to edit them easily. Therefore, in today's internet society, it is easy for students to know how objectives are useful in their everyday lives (R1: Goal Orientation), and students' learning goals tend to match the students' motives (R2: Motive Matching).

In terms of the aspect of confidence, learning goals and criteria are clearly shown and shared on the LMS which became more frequently accessed in the remote courses. Therefore, students could manage expectations easily (C1: Learning Requirements). In addition, they received support so they could conduct their DST more confidently. It is inferred that these changes could result in positive comments about remote learning. These results seem different from Meşe & Sevilen's (2021) study which reported that EFL in remote learning had a negative impact on student motivation. At the same time, the findings in this study are in line with Yu & Zadorozhnyy's (2022) study which reports that creating videos improves students' learning in EFL.

### **4. Conclusions**

Although the results of this study cannot be generalized due to the small sample sizes, it can be said that DST in remote classes was received positively in terms of learning motivation in general by most students. The pandemic experience has enhanced the way students are motivated to learn in this study.

In the post-pandemic era, students can easily help each other with learning. They can enjoy conversations and interactive learning in F2F courses. In addition to this, the changes in educational methods brought about by the pandemic could become a good opportunity for better education in the future. Future F2F courses would be better than traditional F2F courses by integrating what has been learned during the pandemic.

Experiences of new learning styles during the pandemic have taught that some work might be done better remotely. In post-pandemic education, while F2F classes would be the standard, future education could be more practical and effective for students if we can flexibly choose the optimal learning style depending on the learning content, learning effects, and learner needs. Future F2F courses may be improved by incorporating the individual support and video materials that were popular in remote courses during the pandemic.

### **Acknowledgement**

I would like to thank Dr. Julian Lewis for his advice on my paper.

## References

- Kasami, N. (2017). The comparison of the impact of storytelling and digital storytelling assignments on students' motivations for learning. *EUROCALL 2017*, 177-183.
- Kasami, N. (2018). Advantages and disadvantages of digital storytelling assignments in EFL education in terms of learning motivation. *EUROCALL 2018*, 130-136.
- Kasami, N. (2021). Students' perceptions of digital storytelling in primarily asynchronous EFL classes at a Japanese university. *EUROCALL 2021*, 177-183.
- Kasami, N. (2022). Students' perceptions of digital storytelling in online EFL classes with Zoom at a Japanese university. *EUROCALL 2022*, 214-221.
- Keller, J. M. (2010). *Motivational design for learning and performance: the ARCS model approach*. Springer. <https://doi.org/10.1007/978-1-4419-1250-3>
- Meşe, E. & Sevilen, Ç. (2021). Factors influencing EFL students' motivation in online learning: A qualitative case study. *Journal of Educational Technology & Online Learning*, 4(1), 11-22.
- Suzuki, K., Nishibuchi, A., Yamamoto, M., & Keller, J. M. (2004). Development and evaluation of website to check instructional design based on the ARCS motivation model. *Information and Systems in Education*, 2(1), 63-69.
- Yu, B. & Zadorozhnyy, A. (2022). Developing students' linguistic and digital literacy skills through the use of multimedia presentations. *ReCALL* 34(1), 95-109.

**Contact email:** [naoko.kasami@gmail.com](mailto:naoko.kasami@gmail.com)