Enhancing English Vocabulary and Reading Skills through Digital Storytelling Method

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Abstract

The aim of this study is to investigate the impact of the digital storytelling method on the development of vocabulary and reading skills among students at an English preparatory school in Turkey. This study utilized an experimental design with a pre-test post-test control group and employed both quantitative and qualitative data collection methods leading to a mixed-method study. An achievement test was used to measure vocabulary and reading skills and semi-structured interviews were conducted to collect student views. Paired samples and independent samples t-tests were used to analyze the quantitative data, while content analysis was used to analyze the qualitative data. The results indicated a significant difference in vocabulary and reading skills development in favor of the experimental group. The students in the experimental group expressed satisfaction with the process, noting its usefulness in promoting active use of English language skills and the efficacy of Google and Microsoft tools for digital story creation, file sharing, and communication. Students not only found the application innovative and attractive but also suggested its use as an alternative assessment to traditional exams. These findings indicate that digital storytelling is an effective tool for improving vocabulary, reading skills, and promoting language competencies among students.

Keywords: English language teaching, digital storytelling, reading skills, vocabulary

Dijital Hikâye Anlatımı Yöntemi ile İngilizce Kelime Bilgisi ve Okuma Becerilerinin Geliştirilmesi

Özet

Bu çalışmanın amacı, dijital hikâye anlatımı yönteminin Türkiye'de bir İngilizce hazırlık okulundaki öğrencilerin kelime dağarcığı ve okuma becerilerinin gelişimine etkisini araştırmaktır. Bu çalışmada ön-test son-test kontrol gruplu deneysel desen kullanılmış ve hem nicel hem de nitel veri toplama yöntemleri kullanılarak karma yöntem çalışmasına gidilmiştir. Kelime dağarcığı ve okuma becerilerini ölçmek için başarı testi kullanılmış ve öğrenci görüşlerini almak için yarı yapılandırılmış görüşmeler yapılmıştır. Nicel verilerin analizinde bağımlı ve bağımsız örneklem t-testleri, nitel verilerin analizinde ise içerik analizi kullanılmıştır. Sonuçlar, kelime dağarcığı ve okuma becerileri gelişiminde deney grubu lehine anlamlı bir fark olduğunu göstermiştir. Deney grubundaki öğrenciler, süreçten memnun olduklarını ifade ederek, bunun İngilizce dil becerilerinin aktif kullanımını teşvik etmedeki yararlılığına ve dijital hikâye oluşturma, dosya paylaşımı ve iletişim için Google ve Microsoft araçlarının etkinliğine dikkat çekmiştir. Öğrenciler uygulamayı yenilikçi ve çekici bulmanın yanı sıra geleneksel sınavlara alternatif bir değerlendirme olarak kullanılmasını önerdiler. Bu bulgular dijital hikâye anlatımının öğrencilerin kelime dağarcığını, okuma becerilerini ve dil yeterliliklerini geliştirmek için etkili bir araç olduğunu göstermektedir.

Anahtar Sözcükler: İngiliz dili öğretimi, dijital hikâye anlatımı, okuma becerileri, kelime

1. Introduction

Digital storytelling, in its simplest definition, is the art of creating stories using various media mediums. Digital storytelling (DST hereafter) allows computer users to become creative storytellers through traditional processes such as choosing a topic, conducting research, writing a script, developing an interesting story, etc. The resulting material is then combined with multimedia elements such as computer-based graphics, audio recording, text, video clips, and music (Robin, 2008; Lambert, 2010). DST is a useful app for content creation and helps eliminate the technological challenges that prevent teachers from being creative in their lessons (Robin, 2008). In this sense, digital storytelling has become widespread today because it has served as a bridge connecting the past and the present; It has become an important tool to combine the long-standing desire for storytelling with today's technology and skills. Digital storytelling has become especially appealing to today's youth by combining stories with computers, cameras, voice recorders, scanners, audio and music files, etc.

Digital storytelling originated in the late 20th century at the StoryCenter, where artists aimed to make art accessible to everyone. They created powerful stories on important topics such as health, hope, and political conflict. The San Francisco Center for Digital Media, which later became the Center for Digital Storytelling, moved to Berkeley in 1998. Now known as Story Center, it has trained over 15,000 people and led hundreds of workshops where people share their personal stories. This work has changed the way community activists, educators, health and human services agencies, businesses, and artists view the power of personal voice in creating change. (*Our Story, StoryCenter*, n. d.).

The use of online media is crucial for DST, and therefore, students require an electronic device and internet connection to access digital content. Additionally, they need a program compatible with their device, making hardware and software prerequisites. Lack of these requirements may cause disruptions in the process. It is also essential for students to have basic knowledge of using these tools. However, since today's young people are digital natives, meeting these requirements is unlikely to pose significant challenges. In Turkey, as per the 2022 TÜİK news release, around 94.1% of households have access to the internet, indicating that the devices with internet access are at least 94.1% as well (*Household Information Technologies (IT) Usage Survey*, 2022). This increase in internet access rates has led to significant changes in the way we transmit information. The way we communicate with our students is just as crucial as the content we provide them, and in today's culture, capturing students' attention requires speaking at their frequency of listening and according to their interest (Dreon et al., 2011).

Digital story is a powerful educational tool that speaks to digital natives and connects them to the curriculum. Many educators have emphasized the importance of student-generated digital video projects (Berge & Shewbridge, 2004; Kearney & Schuck, 2005). The DST method serves as a bridge between academic studies and the internet environment where students spend most of their time. According to Robin (2008), DST is a powerful technological tool for the 21st-century classroom that is closely related to teachers and students as a learning and teaching tool.

The significance of this research lies in the provision of an alternative approach to enhancing students' English vocabulary and reading skills, taking into account the demands of the digital age in the 21st century, where internet and computer-assisted teaching have become ubiquitous. The study's results are expected to aid teachers in their quest for methods to invigorate the learning process.

The aim of this study is to investigate the effect of digital storytelling method on the development of students' vocabulary and reading skills. Additionally, this study aims to collect feedback from students in the experimental group regarding their experience with the DST method. The DST in English teaching is suggested to have a positive impact on the learning and teaching process, and increase student motivation which is a vital factor that affects success in the classroom to a great extent. By engaging students in the teaching and learning process and encouraging them to take responsibility, the DST method potentially develops students' language competencies. The findings of this study provide valuable insights for teachers seeking innovative ways to improve the learning experience for their students.

1.1. Literature Review

In the literature, there is a great body of research directly or indirectly related to the present study. DST is a method that has been shown to positively impact core language learning skills; listening, reading, writing,

and speaking as well as vocabulary, grammar. There are also studies that involve DST as a method that can improve cognitive and transcognitive skills, increase motivation and self-confidence, and foster a sense of community and sharing among students.

An action study conducted by Tanrıkulu (2020) suggests that DST positively affects the development of listening skills, supports learning, and increases student motivation. Similarly, Chiew et al. (2019) found that DST has positive effects on vocabulary learning, especially with implicit learning and increased motivation and interest. Nnakwe (2019) examined the quantitative and causal effects of digital storytelling on the academic performance of English Language and Literature students and concluded that digital storytelling improves students' reading comprehension and verbal communication skills.

Beck and Sitzman (2019) identified that DST is an attention-grabbing and thought-provoking method that induces thinking and promotes sharing among students. Hava (2019) found that DST promotes students' self-confidence and improves reading, writing, and speaking skills.

Yearta et al. (2018) highlight the importance of using one's own voice in the learning process, and it is suggested that digital storytelling increases the participation of students in ongoing, collective discussions and that students learn from each other while listening and interacting with their friends. Nassim (2018) also emphasizes the usefulness of DST as a tool for language learners in reading and vocabulary, as well as its technical and artistic aspects. Tajeri et al. (2017) and Enokida (2016) demonstrate that DST is a useful tool for improving primarily writing and analytical reading skills along with other skills.

Morgan (2012) points out the changes that excessive exposure to technology has created in education and the power of sharing a story among each other. Malin (2010) used digital video to reinforce students' reading skills and found that it improved comprehension and critical analysis skills in a joyful way.

However, not all studies have found significant differences in students' achievements or attitudes towards DST. Hung et al. (2012) found that while project-based learning using DST increased motivation and problem-solving skills, it did not result in significant differences in achievements or attitudes.

Overall, the literature suggests that DST can be an effective method for improving language learning skills and fostering a sense of community and sharing among students. In this study, the researcher examines the effect of DST on the vocabulary and reading skills of students in an English preparatory school at a foundation university.

2. Method

2.1. Research Design

In this study, pre-test and post-test experimental design with control group was used. In addition, a semi-structured interview was applied to obtain the opinions of the experimental group students about DST. Therefore, this present study is a mixed-method research. Creswell (2017) defines mixed-method research as a research method in which the researcher collects both quantitative data and qualitative data to understand research problems and integrates them, then draws conclusions by taking advantage of this situation. The research pattern is given schematically in Table 1 below.

Table 1.

Pattern of the Research

Group	Pre-test	Intervention	Intervention	Post-test	Semi-structured interview
Experiment Group	Reading skills and vocabulary test	1st story presentation with DST method	2nd story presentation with DST method	Reading skills and vocabulary test	Implementation of a semi-structured interview form

Control Group	Reading skills and vocabulary test	1st story presentation with the method recommended in the relevant training program	2nd story presentation with the method proposed in the relevant training program	Reading skills and vocabulary test	-

As can be seen in Table 1, reading skills and vocabulary achievement test were applied to the experimental and control groups as a pre-test at the beginning of the study. Then, while the control group made a story presentation twice with the method recommended in the relevant training program, the experimental group made a story presentation twice with the DST method. After this process, the same achievement test was applied as the post-test in order to measure whether there was a significant difference between the success of the experimental and control group students. After the post-test, the opinions of the experimental group students about DST were obtained by performing a semi-structured interview form. The research problems are as follows:

1. Is there a significant difference between the success of the students in the experimental group class where the DST method was applied and the students in the control group class where the method proposed in the relevant training program was applied in terms of their vocabulary development?
2. Is there a significant difference between the success of the students in the experimental group class where the DST method was applied and the students in the control group class where the method proposed in the relevant training program was applied in terms of reading skills development?
3. What are the opinions of the experimental group students on the DST method?

2.2. Participants

The students who participated in the study were selected among the preparatory school students studying at a foundation university in Türkiye. In total, 42 students participated in the study; 21 students in the control group and 21 students in the experimental group. The experimental and control groups were randomly assigned to the groups among the two equivalent classes based on the results of the achievement test. The study was carried out by the researcher himself.

2.3. Data Collection

In this study, two data collection tools were used. The first of these tools is the achievement test applied to the control and experimental groups. The second is the semi-structured interview form applied to the experimental group students. The achievement test included 35 questions based on reading skills and 35 questions based on vocabulary. It was piloted among 273 students and necessary changes have been made by collecting expert opinions. The researcher used the Kuder Richardson (KR-20) formula for the reliability analysis of the test items. This formula also gives the Cronbach Alpha value of the test. Substance analysis is a prerequisite for the use of this formula, and the analysis values have been determined in advance. According to the KR-20 formula, values with a reliability coefficient between .70 and 1 are considered reasonable. The KR-20 formula showed a score of 0.74 for the vocabulary test and 0.79 for the reading skills test, so it was decided that the achievement tests were suitable for use in the classroom. Expert opinion was also consulted for the reliability of the interview form. Research triangulation was carried out with three peer experts who was informed about the DST method but were independent of the study and the reliability of the data was ensured. The level of consensus among the three experts on the reliability of the semi-structured form was found to be 97.2%.

Given that both control and experimental groups were equivalent, DST method was applied to the experimental group twice in ten weeks in order to ensure that the study time was sufficient and results were more reliable. The same process was applied in the control group with the method recommended in the relevant training program (traditional method). The experimental group students were expected to present a story in the classroom through a digital story video whereas the control group students were expected to present a story in the classroom in a traditional sense using the same content without a video and accompanying features. The weekly lesson plans can be found below.

Table 2.

Experimental and Control Group Weekly Lesson Plans

Week	Experimental Group	Control Group
Week 1	DST presentation training + week allotted for reading the first book	Presentation training + week allotted for reading the first book
Week 2	DST presentation training + week allotted for reading the first book	Presentation training + week allotted for reading the first book
Week 3	DST presentation training + week allotted for reading the first book	Presentation training + week allotted for reading the first book
Week 4	Book review for vocabulary study and reading comprehension	Book review for vocabulary study and reading comprehension
Week 5	1st story presentation with DST method	1st story presentation with traditional method
Week 6	Feedback + week allotted for the reading of the second book	Feedback + week allotted for the reading of the second book
Week 7	Feedback + week allotted for the reading of the second book	Feedback + week allotted for the reading of the second book
Week 8	Feedback + week allotted for the reading of the second book	Feedback + week allotted for the reading of the second book
Week 9	Book review for vocabulary study and reading comprehension	Book review for vocabulary study and reading comprehension
Week 10	2nd story presentation with DST method	2nd story presentation with traditional method

As can be seen in Table 2, the study lasted a total of 10 weeks. For the study, the experimental and control group students were first asked to read the books assigned to them. The books were selected and supplied by the researcher in accordance with the levels of the students to help provide content for the presentations and students were given a total of three weeks to read the book. During this period, the researcher provided presentation training to both groups, although the experimental group also had DST training. In the 5th and 10th weeks, the experimental group students made a story presentation with the DST method, while the control group students made a story presentation with the method recommended in the relevant training program. The weekly procedures for the experiment and control groups are detailed in Table 3 below.

Table 3.

Procedures for the Experimental and Control Group

Week	Experimental Group	Control Group
1	• Explanation of the topic and outcomes	• Explanation of the topic and outcomes
1, 2, 3	• Reading the first books at A2-B1 levels • DST and presentation training	• Reading the first books at A2-B1 levels • Presentation training
4	• Vocabulary study for the books • Completion of the book review form	• Vocabulary practice for the books • Completion of the book review form
5	• Story presentation with DST method	• Story presentation with the method recommended in the relevant program
6, 7, 8	• Reading the second books at levels A2-B1 • Receiving feedback	• Reading the second books at levels A2-B1 • Receiving feedback

9	• Vocabulary study for the books • Completion of the book review form	• Vocabulary study for the books • Completion of the book review form
10	• Story presentation with DST method and receiving feedback	• Story presentation with the traditional method and receiving feedback

As in Table 3, after the explanation of the topic and outcomes, both the experimental and control groups read graded readers (A2-B1 level), had presentation trainings, studied vocabulary and filled in book review forms. Both groups were expected to present the process they experienced by narrating it. For story presentations, the experimental group used DST, while the control group used the method recommended in the relevant training program (traditional method). The process was repeated twice and feedback was provided to the students each time.

In order to prevent the experimental group students from having problems storing the end product they created, digital stories, the researcher opened a Google Drive account and shared it with the students; Thus, at the specified time, the targeted content was collected in a common folder to which everyone had access. At the same time, Google Classroom was used for communication during the experiment including announcements, questions and answers. Especially the mobile version of this application attracted students because of the notifications and the ease of use.

2.4. Data Analysis

The obtained quantitative data from the achievement test was analyzed by using a statistical program. In order to determine whether there was a significant difference between the reading skills and vocabulary achievements of the groups, the test results within the experimental and control groups were determined by the dependent sample t-test. Independent sample t-test was also used to determine whether there was a significant difference between the total achievements of the two groups. On the other hand, content analysis was performed on the qualitative data collected by semi-structured interview form and the findings obtained were analyzed descriptively. The interviews with the students were transcribed and the content analysis of the interviews was made with the help of a software. The validity and reliability of the themes created were ensured through peer evaluation and expert opinions.

3. Findings

Before the analysis of the data obtained from the subjects, the normality test was performed as a prerequisite for the paired samples t-test and independent sample t-test. As the participants were less than 30 in each group, Shapiro-Wilk normality test was preferred as also suggested by Gürbüz and Şahin (2015) and presented in Table 4.

Table 4.

Shapiro-Wilk Normality Test Results

Tests	Groups	N	p
Vocabulary pre-test	Experimental Group	21	,080
	Control Group	21	,214
Vocabulary post-test	Experimental Group	21	,078
	Control Group	21	,340
Reading pre-test	Experimental Group	21	,052
	Control Group	21	,217
Reading post-test	Experimental Group	21	,071
	Control Group	21	,073

Since the data obtained from all the tests applied were higher than 0.05, it was concluded that the distribution did not show a significant difference from the normal distribution. Therefore, an independent sample (t) test was performed to test whether there was a significant difference between the control group and the experimental group in terms of the level of vocabulary before the experimental procedure. The independent sample (t) test result is given in Table 5 below.

Table 5.

T-test Results for Experiment and Control Group Vocabulary Pre-test

Test	Groups	N	SD	$\bar{X}$	s	t	p
Vocabulary Pre-test	Experimental Group	21	40	68.29	9,376	1,438	,158
	Control Group	21		63,52	11,92		

According to the data in Table 5, it can be said that there is no significant difference between the pre-test success scores for vocabulary success at the level of 0.05 significance. Therefore, paired samples t-test was performed to determine whether the intervention applied within the scope of the study led to a statistically significant difference in vocabulary area within the groups. First, the vocabulary pre- and post-test of the experimental group were compared (Table 6).

Table 6.

T-test Results on the Vocabulary Success of the Experimental Group

Test	Experimental Group					
	N	SD	$\bar{X}$	s	t	p
Vocabulary Pre-test	21	40	68,29	9,376	-12,281	,000
Vocabulary Post-test	21		87,48	7,174		

According to Table 6, it can be said that there is a significant difference between the vocabulary pretest and post-test success scores of the experimental group at the level of 0.05 significance. The following Table 7 shows a comparison of the control group's vocabulary pre-test vs. post-test.

Table 7.

T-test Results on the Vocabulary Success of the Control Group

Test	Control Group					
	N	SD	$\bar{X}$	s	t	p
Vocabulary Pre-test	21	40	63,52	11,92	-13,329	,000
Vocabulary Post-test	21		81,42	9,43		

According to the data, it can be said that there is a significant difference between the vocabulary pretest and post-test success scores of the control group at the level of 0.05 significance. After the experimental procedure, an independent sample t-test was performed to determine whether there was a statistically significant difference in vocabulary success between the experimental group and the control group. The independent sample t-test result is given in Table 8 below.

Table 8.

T-test Results for Experimental and Control Group Vocabulary

Test	Groups	N	SD	$\bar{X}$	s	t	p
Vocabulary Post-test	Experimental Group	21	40	87,48	7,174	2,339	,024
	Control Group	21		81,43	9,43		

Based on the data in Table 8, it can be said that there is a significant difference between the post-test scores for the development of vocabulary at the level of 0.05 significance in favor of the experimental group. According to this result, it can be said that the DST method significantly increases the success related to vocabulary.

An independent sample t-test was performed to determine whether there was a significant difference between the experimental group and the control group in terms of the level of reading skills before the intervention. Below is the independent sample t-test in Table 9.

Table 9.

T-test Results for Experiment and Control Group Reading Pre-test

Test	Groups	N	SD	$\bar{X}$	s	t	p
Reading Pre-test	Experimental Group	21	40	80,00	9,803	1,901	,065
	Control Group	21		72,80	14,324		

According to Table 9, it can be said that there is no significant difference between the pre-test success scores for reading skills success at the level of 0.05 significance. Hence, paired samples t-test was performed to determine whether the intervention applied within the scope of the study led to a statistically significant difference in reading skills success within the groups. First, the pre-test of the reading skills of the experimental group and the post-test were compared (Table 10).

Table 10.

T-test Results on the Reading Skills of the Experimental Group

Test	Experimental Group					
	N	SD	$\bar{X}$	s	t	p
Reading Pre-test	21	40	80,00	9,803	-5,595	,002
Reading Post-test	21		89,10	8,608		

According to Table 10, it can be said that there is a significant difference between the reading skills pre-test and post-test success scores of the experimental group at the level of 0.05 significance which means there is a significant increase in the reading success of the experimental group after the experimental procedure. Table 11 below shows a comparison of the control group's pre-test and post-test reading skills scores.

Table 11.

T-test results for the Reading Skills of the Control Group

Test	Control Group					
	N	SD	$\bar{X}$	s	t	p
Reading Pre-test	21	40	72,80	14,32	-1,37	,186
Reading Post-test	21		76,85	16,79		

According to Table 11, there was no statistically significant difference between the pretest and posttest success scores of the control group's reading skills at the level of 0.05 significance. Therefore, it cannot be said that there was a significant increase in the reading success of the control group. An independent sample t-test was performed to determine whether there was a statistically significant difference in reading skills between the experimental group and the control group after the experimental procedure (Table 12).

Table 12.

T-test Results on Reading Skills of the Experimental and Control Group

Tests	Groups	N	$\bar{X}$	SD	t	p
Reading Post-test	Experimental Group	21	89,10	8,608	2,972	,005
	Control Group	21	76,89	16,79		

As suggested in Table 12, it can be said that there is a significant difference between the post-test scores for reading skills at the level of 0.05 significance in favor of the experimental group. According to this result, it can be said that the DST method significantly increases reading skills success.

In order to find out the opinions of the experimental group students on DST, content analysis was performed on the qualitative data collected by semi-structured interview form and the findings obtained were analyzed descriptively. Based on the results obtained from the qualitative data analysis, the topics reflecting the perspectives, opinions and experiences of the experimental group students were divided into themes and supported by student opinions. Below are listed the themes obtained as a result of the analysis of qualitative data in Table 13. The themes and patterns found in the DST method were explained with the support of quotations from the participants.

Table 13.

Themes Drawn from Semi-Structured Conversations

Themes Extracted as a Result of Descriptive Analysis

• Most used language skills
  ○ Reading
  ○ Vocabulary
  ○ Grammar
• Contributions to language learning
  ○ Reading
  ○ Vocabulary
  ○ Producing content in English (digital story)
• Strengths
  ○ Alternative assessment
  ○ Use of all skills
  ○ Innovative application
• The convenience of the applications used
  ○ Google Classroom
  ○ Google Drive
  ○ Microsoft PowerPoint
• Student Advice
  ○ Reviews of digital stories
  ○ DST in different areas

As can be seen in Table 13, the most commonly used language skills in DST are reading (71%), vocabulary (67%) and grammar (43%). Students suggest that DST contributes to their English language learning:

> S6: *We both learn new words and look at the grammar used in the book, improve our reading and emphasize our research skills a little. It affects all of them.*
>
> S20: *My ability to form sentences has improved and so has my vocabulary. I have used the words in the book and since I had to know the meaning to use them, I also learned the meaning.*

Students also mentioned some strengths of DST and regarded it as an innovative practice that can be used as an alternative assessment, where language skills are actively used:

> S6: *I think it has contributed to all of our skills.*
>
> S24: *I heard about this practice for the first time here. It's definitely innovative and it contributes to our development. I find it very useful because I think it's about improving the skills that we will use in the future in reading, presentation, and in everyday life, rather than just measuring our abilities through testing.*

Furthermore, the practicality of Google and Microsoft products used during the application is among the student opinions:

> S1: *I didn't have a hard time with Classroom and Google Drive […], it was nice.*
>
> S2: *PhotoStory combines both audios pictures automatically, so it was very helpful.*
>
> S21: *Google Drive saves lives. Notifications remind me that the task is due the next day, do it tonight, do it now. It's very good.*

Students also stated that it could be useful to write reviews on digital stories and at the same time digital stories could be used in different areas.

> S16: *We can write reviews on our friends' videos.*
>
> S19: *I think the digital story shouldn't be limited to the book, it's not just the book that influences language. I learned most of my English by playing games or watching TV series.*

Overall, students were engaged in English language learning in various ways through the DST and shared their experiences. Based on their views, it was observed that it contributed to their English language skills as an innovative tool which activates every core skill. Additionally, it was stated that the tools used in the study were convenient. Finally, students provided suggestions such as writing reviews on videos and using the DST in different contexts.

4. Discussion and Conclusion

When students utilize computer-aided learning and create digital videos on different subjects through the use of the DST, it encourages them to conduct research. By researching and studying the topics they are passionate about, they are able to create content that is both informative and engaging. This process inevitably enhances their vocabulary skills as they strive to articulate their thoughts and ideas in a foreign language and research and guidance provided to them enables improvements on reading skills. However, it has been observed that the positive influences of DST are not limited to vocabulary and reading skills.

Studies have shown that the DST method has a positive effect on students' language competencies. Chiew et al. (2019) found that the DST method increased vocabulary knowledge and positively affected English learning processes for English as foreign language learners. Students who continued their studies while preparing digital stories improved their vocabulary development by working to use the right words. In addition, research by Hava (2019), Malin (2010), McLellan (2008), and Robin (2016) found that DST encourages students to use all language skills actively, making it a versatile method that can be used for foreign language teaching. The use of DST also improves students' self-confidence (Hava, 2019) and problem-solving skills (Hung et al., 2012).

According to the present study, DST improves students' vocabulary and reading skills and there are studies that conclude a similar result (Nassim, 2018; Morgan 2012), but the contributions are not limited to these skills. For instance, Tajeri et al. (2017) also state that DST encouraged participants to search, find, learn and teach various words to each other, creating an interactive learning environment that motivated students. Yearta et al. (2018) emphasized the importance of storytelling and using DST as an effective method for students to express themselves and improve language skills. Alan Hung's (2019) study showed that DST significantly increased basic language skills among university students. Also in Lee's (2014) study on the development of content knowledge and speaking skills with digital stories, it was found that students' success in English language skills increased when they prepared digital stories as a community using their own voices. Therefore, the DST method can be used as an effective tool to improve students' English vocabulary and general language skills.

The present research involved distributing graded English readers to students and asking them to read and evaluate these books. Students then used the information they gained from the reading phase to create digital stories. This approach motivated students and enabled them to work on their reading skills both directly and indirectly. Malin (2010) also recognized that students often struggle to engage with texts they read. To address this, the researcher used the DST method as a support for reading and had students create critical digital videos about the texts they read. Results from her study showed that the digital story approach allowed students to enjoy reading more and supported the development of critical analysis skills. Enokida (2016) also conducted a study that spanned two years and demonstrated that the combination of reading and DST significantly improved students' analytical reading skills, as well as other English skills. Nnakwe's (2019) doctoral thesis also examined the effects of DST on the academic performance of English Language and Literature students and found that DST improved students' reading comprehension skills. This research supports the idea that the DST method can be an effective tool to improve students' reading skills.

The data obtained from the semi-structured interviews showed that DST is a comprehensive approach that contributes to the learning process as a whole as it activates all the core language skills. Several researchers

have also pointed out that DST is effective in developing the four basic language skills: reading, writing, speaking, and listening (Lee, 2014; Nishioka, 2016; Tsou et al., 2006). In foreign language teaching, the use of DST encourages students to engage in English to prepare videos and exchange ideas with their peers.

Students suggest that DST is an innovative teaching practice that goes beyond traditional methods. They have expressed that traditional test measurements do not fully reflect their success and find that DST practices are more effective in measuring their progress because they are integrated throughout the learning process. Beck and Sitzman (2019) also suggest that DST may be preferred in teaching as it is attention-grabbing, activates emotions, and makes a difference. In English teaching, the use of DST offers students the opportunity to use the language as they would in the real world.

Another feedback that students provided was about the computer-based tools they used to make their digital videos. Simple and practical tools allow students to pay more attention to the content. For this reason, Microsoft PhotoStory and Microsoft PowerPoint were mainly used in this research for ease of use and access to prepare digital stories. Hung et al. (2012, p. 238) also benefited from tools in their research because of the ease of use. Students regarded these applications user friendly and hence were able to create their videos. In another study, Alqahtani (2019) also benefited from Google cloud applications and concluded that the use of them increased the success of the students. The opinions of current research participants are in parallel with this study and have revealed positive impressions.

Providing the necessary conditions for the success of DST application will significantly affect the efficiency obtained from the application. First of all, for the DST application, which requires multimedia use, individuals need a device such as a smartphone or computer to conduct research and practice. Then individuals should be given training and given sufficient time. An individual who is acquainted with DST should have a roadmap with them and needs a guide to consult in the first place. Keeping the process under supervision will pave the way for efficient work. Individuals should also be provided with the necessary technical support. Taalas et al. (2018) discussed the advantages and disadvantages of DST in foreign language teaching. According to his research, while most students are motivated to learn with DST, some students have seen a decrease in motivation. The reasons for this decline have been cited as issues such as not providing adequate guidance to students, not devoting enough time to practice and lack of technical support. Given these circumstances, the results will be more satisfactory. As a result, student feedback on the application of the DST method was positive, and students argued that the use of the DST method in teaching English could be used as an effective tool to improve English skills. Finally, it was also reached that the use of DST is not limited to language learning and teaching. According to Ioannidis et al. (2013) and Robin (2016), DST can be used in various disciplines such as health and art, making it a useful tool to develop skills and knowledge in different areas.

5. Implications for Further Research

Enabling students to choose a topic they are passionate about to prepare a digital story will contribute to the quality of the process. In addition, providing the necessary support for the implementation of the DST method can promote the development of the core skills of English. To create digital stories, Microsoft PhotoStory 3 software, which is an accessible, free and easy interface program, is recommended. Microsoft PowerPoint application, which is widely used today and is on almost every computer, can also be used for this practice. Both programs require guidance to be provided to students. Using a cloud account such as Google Drive or OneDrive would make sure the access to all collected content whenever and wherever. Communication with students is very important for the smooth running of the process. Google Classroom, one of the tools to be used for this purpose, will provide great convenience. With Google Classroom, a virtual classroom can be created, necessary guidance videos, worksheets, etc. can be uploaded to the system, or an assignment can be assigned to the student and a deadline can be specified. Alternatively, the Remind app can be used (https://www.remind.com/).

Furthermore, students can also be asked to write reviews on digital storytelling videos. In this way, the use of digital content can be increased and students can benefit more from this process for their English development. The DST method can serve as an alternative assessment approach for students, replacing traditional exams with fixed schedules and locations. This process-based assessment may help students feel more at ease and have a positive impact on their language development. DST allows students to explore and practice all the necessary skills for language learning. However, some factors should be considered when evaluating the DST approach. Firstly, the application of DST could be divided into three stages:

preparation, application, and production. Adequate time should be allotted for each stage. Secondly, the scoring rubric for each stage should be determined beforehand and clearly communicated to the students. The DST method has shown promising results in language learning, but its potential benefits can extend beyond this field. For instance, DST can be applied to other disciplines to enhance critical thinking, creativity, and collaborative skills. By integrating DST into their teaching practices, educators can provide students with opportunities to explore and understand complex concepts in a more engaging and interactive way. Therefore, it is worth considering the potential of DST as a valuable tool for teaching and learning in various disciplines.

It should be kept in mind that this is a small-scale study conducted at a foundation university in Türkiye with a control and experimental group, each consisting of 22 students in 10 weeks. In order to obtain more reliable and generalizable data, it is recommended to plan future studies with larger sample sizes and longer durations.

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Note on Ethical Issues

The author confirms that the study does not need ethics committee approval according to the research integrity rules in their country (Date of Confirmation: 29/04/2023).