

Effects of Peer Learning on Pupils' Learning Performance and Creativity in English Writing Skills using Digital Storytelling

Caryn Ting, Nurbiha A Shukor*

School of Education, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

*Corresponding author: nurbiha@utm.my

Article history: Received: 31 January 2022 Received in revised form: 30 June 2022 Accepted: 31 August 2022 Published online: 25 December 2022

Abstract

Unlimited access to tools can empower learning to greater heights including language learning. Digital storytelling is one of the tools for English Language learning and is widely utilized for better writing skills and learning performance. However, it can also instill creativity in writing which many studies have not explored especially when pupils learn collaboratively to produce a story. This study investigates the effects of peer learning on pupils' learning performance and creativity in English Writing Skills using digital storytelling. It applied pre-experimental study design in which the same group was given the peer learning treatment using digital storytelling. Participants were 31 pupils aged 11 to 12 years old purposely selected as the samples. This study found that peer learning in digital storytelling has significant effect on pupils' learning performance in terms of word choice, sentence fluency and conventions and also creativity in writing skills particularly in terms of idea and organisation.

Keywords: Digital storytelling, peer learning, English, writing skills, creativity and learning performance

Abstrak

Akses tanpa had kepada alatan boleh memperkasakan pembelajaran ke tahap yang lebih tinggi termasuk pembelajaran bahasa. Penceritaan digital ialah salah satu alat untuk pembelajaran Bahasa Inggeris dan digunakan secara meluas untuk kemahiran menulis dan prestasi pembelajaran yang lebih baik. Walau bagaimanapun, ia juga dapat menyemai kreativiti dalam penulisan yang banyak kajian belum diterokai terutamanya apabila murid belajar secara kolaboratif untuk menghasilkan sesebuah cerita. Kajian ini menyiasat keberkesanan pembelajaran rakan sebaya terhadap prestasi pembelajaran dan kreativiti murid dalam kemahiran menulis Bahasa Inggeris menggunakan penceritaan digital. Ia menggunakan reka bentuk kajian pra-eksperimen di mana kumpulan yang sama diberi rawatan pembelajaran rakan sebaya menggunakan penceritaan digital. Responden yang terlibat adalah 31 orang murid berumur 11 hingga 12 tahun yang dipilih sebagai sampel melalui persampelan bertujuan. Kajian ini mendapati bahawa pembelajaran rakan sebaya dalam penceritaan digital mempunyai kesan yang signifikan terhadap prestasi pembelajaran dari segi pemilihan perkataan, kelancaran ayat dan konvensyen penulisan dan juga kreativiti dalam kemahiran menulis khususnya dari segi idea dan organisasi.

Kata kunci: Penceritaan digital, pembelajaran rakan sebaya, Bahasa Inggeris, kemahiran menulis, kreativiti dan prestasi pembelajaran

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1.0 INTRODUCTION

Hashim, Yunus and Embi (2016) emphasised that pupils have unlimited access of resources and tools that can facilitate and expedite language learning. In recent years, purposeful integrated technologies have been used to both assist and enhance language learning as encapsulated by studies in language teaching. American Council on the Teaching of Foreign Languages (ACTFL) reported in 2017 that technology is being integrated in the lessons regardless of subjects or disciplines, to support language learners as they use the target language appropriately to accomplish authentic tasks (Kessler, 2018). Hence, these approaches of incorporating technology in language learning across the curricula are proven to bring lots of benefits to the pupils in particular, strengthening their learning engagement, facilitating and providing an organised, wholesome learning experience for all involved, be it the pupils, educators or stakeholders (Hashim et al., 2016; Kessler, 2018).

With all the various cutting-edge technological tools, one of the many exciting web tools that can be utilised to teach language skills is digital storytelling (DST). DST has proven time and again that it is very beneficial for pupils and many studies have validated that DST is a suitable tool for language learning skills; writing, specifically (Hapsari, Seniwegasari and Fauzi, 2016; Zakaria et al., 2016; Rashid, Yunus and Wahi, 2019). Sarica and Usluel (2016) found that DST is able to meet the individual needs of various pupils such as communication and self-expression and is able to facilitate the teaching and learning as well as greatly enhancing the pupils' skills through DST's integration of multi-media and storytelling. Thus, this is aligned with the aim of the blueprint in which learning is able to be personalised and catered, to the needs of the pupils, something that the current learning system seems to be lacking (MOE, 2015).

Although using DST for language learning is beneficial, many are not known about how DST can be integrated efficiently in the teaching and learning, by employing an engaging learning environment rather than acting as a technological tool for learning. For example,

Thang, Mahmud and Tng (2015) stated that a technological learning tool did not necessarily enhance learning because the effectiveness of technology integration in education depends largely on its ability in engaging and motivating the pupils to learn. Sukovic (2014) added that meaningful activities that allow pupils to construct their own knowledge in various ways will ensure engagement in learning, thus ensuring successful and efficient technological tool learning integration. Hence, exploration on how to use DST with a suitable pedagogy is still scarce and demands further research study.

■2.0 LITERATURE REVIEW

English Language Writing Skills

The writing skill is a complex skill to be acquired, what more by primary school pupils in acquiring the English language writing skills. The Ministry of Education (2016) revealed that at least 23 per cent of the Primary 6 pupils who sat for the Ujian Pencapaian Sekolah Rendah (UPSR) or Malaysian Primary School Achievement Test, had failed the English language writing paper. As a result, writing is painted as an arduous process and the conventional approach to teaching the pupils to write in the English language, is met with uphill challenges, because the pupils are demotivated and are easily bored (Siti et al., 2016). More worrying, the pupils in Malaysia view the English language as a “killer” subject (Veloo et al., 2016). A study by Sia and Chua (2016) also revealed a disheartening result, in which, the poor performance in English is due to the negativity that the pupils feel towards English, and thus, resent the English language learning.

Furthermore, Saat et al. (2005) added that the pupils’ English language writing has always been problematic and challenging. They stressed that this is especially critical for rural pupils as these pupils often have limited access or environment or resources that are supportive of the English language, other than, in the schools. This comes to show that the rural pupils’ only access to the English language, is when they are in the schools and they grow up, surrounded by environments of limited English usage. According to Mohd Sofi and Gomez (2003), teachers have always been burdened by exam-oriented instruction, which focuses only on achieving percentages, schools’ ranking and rating as well as striving to achieve the most numbers of A’s in the examinations. Therefore, the teachers are forced and burdened to carry out extra classes after school, against their wishes, to drill and drive the pupils to achieve more A’s in the examination.

Musa et al. (2012) specified in their research that the teaching of writing skills are emphasised in the primary schools and pupils are taught to master grammatical rules as these items are tested in the school as well as in the national examinations. So, devastatingly, the teaching and learning of the English writing is seen as a subject learning that focuses heavily on the language mechanics that serves to fulfill the demands of an exam oriented education system (Musa et al., 2012), rather than permeating fun in learning and allowing the pupils to make connections to real life communicative settings (Mat and Yunus, 2014).

Therefore, often, the focus is only on forms and accuracy of the pupils’ language learning (Musa et al., 2012). The pupils’ language outputs or performances become very important, so much, that the pupils learn only the mechanics, structures and grammatical rules of the target language and nothing more (Hussin, Nooreiny, and D’Cruz, 2000). Thus, Hassan (2012) reported in his study that found that teachers drill the pupils with continuous grammatical exercises and practices especially at the primary school level (Musa et al., 2012). In other words, many teachers are more interested in training the pupils on how to read and write well in addition to teaching the pupils to master the grammar components of the language as these aspects are commonly and mainly tested in the examinations. Hence, learning the English language writing becomes very rigid and loses the fun in the language learning acquisition process (Hapsari, 2016).

Fortunately, the conventional, rigid and exam focussed way of learning English, is revised and revamped by the Ministry of Education (2015) with the induction of the Common European Framework of Reference or CEFR to break away from the traditional way of English instruction. This is so that an opportunity is created, to learn English with the latest technology, holistically which focuses on a wide range of skills especially the communicative aspects of the language. Ismail (2007) documented that the English language writing skills can be greatly developed when there is acknowledgement of the learning interest of the pupils. So, this is where digital storytelling (DST) can be effectively employed as DST interests the pupils to learn English in a fun and creative way while at the same time also develop and enhance their writing skills.

Creativity in English Language Writing Skills

Digital storytelling allows intricate weaving of personal experiences with creativity and collaboration (Nordmark and Milrad, 2011). Thus, this is able to create a stronger impact on the pupils’ learning. DST is known to have the capability to be able to blend and develop multiple literacies (Yearta, Helf, & Harris 2018). As pupils use DST, they learn to use various media while at the same time acquiring skills such as narrating, collecting and arranging texts as well as conceiving digital stories from personal experiences. Therefore, DST is helpful to cultivate interactivity between individuals and encourage cooperation between users as it allows culmination of complex and abstract elements of personal experiences to transpire and be evident (Nam, 2017).

All these reaffirm and reassure that DST is an appropriate approach that allows pupils to amalgamate creativity in the language learning (Ohler, 2013). Many implementations of DST activities would be able to showcase this creativity synthesis in English language writing. A study disclosed that the pupils’ creativity in writing could be measured through their abilities to produce certain ideas when they write. Another research, Elola and Oskoz (2017), presented that creativity in producing ideas in writing, can be observed through fluency, flexibility, originality and elaboration. On the other hand, Soleimani and Najafgholian (2014) argued in his research that independent factors such as ideas and fluency, problem sensitivity and originality, are vital points to assessing creativity in writing. Therefore, it can be concluded that there is a significant correlation between language learning performance and creativity in writing test scores (Nosratinia and Mojri, 2014).

Needless to say, creativity in writing promotes learning and DST is a powerful technology pedagogical tool that allows creativity in writing to take place and permeate in spite of the opposing viewpoints as to how creativity in writing can emerge and be measured.

Nevertheless, these studies concluded an important point which is, there is a strong correlation between creativity and learning performance and the opposing viewpoints present in studies, must be seriously deliberated and weighed upon in this present study. It is also a quandary as to how peer learning will also give rise to creativity in crafting digital stories and learning performance. The former, however, is not really documented in other studies, and thus, becomes the focal point of research in this study.

Learning English Language using Digital Storytelling

Yearta et al. (2015) affirmed that the use of DST has been found to improve the learning outcomes of the pupils. It allows English language pupils to activate their prior knowledge and develop far more interesting ideas as compared to the traditional way of learning the English language (Tompkins, 2015).. DST also enables and empowers the pupils to learn writing authentically. Pupils have full realisation that their work will be fully appreciated by an authentic or real audience. Through this, they are motivated to write as their work will be appreciated by real audience, made possible through DST, rather than producing writing only to obtain better grades (Graham and Harris, 2013). So, DST is able to improve the pupils' writing skills and make the pupils appreciate their learning experiences as it becomes more meaningful as DST provides the pupils an authentic learning context. Hence, this will encourage the pupils to spend more time in planning their writing and through this process, they will take up more active roles and become more invested in learning.

Adding on, DST can bridge the classroom to the outside world that can serve as advisors and mentors who can provide the pupils with increasing plethora of choices for their writing topics and develop varied decision-making abilities (Yearta et al., 2018). This means that through DST, the pupils are able to plan and gather related information. So, the pupils are constantly making decisions as they plan their digital stories as they work on their storyboards and drafts. This repetitive of planning, writing, creating and revising by the pupils to constantly evaluate and re-evaluate for the intended audience, is made possible by DST.

Learning English Language with Peers

Although many studies documented the success of digital storytelling to develop and improve the writing skills, there are still some areas that DST can be further improved. Digital storytelling does not entirely focus in learning in groups or peer learning. Little studies can be found that focus on implementing DST amongst groups or peers. Robin (2005) found that educators mostly used DST to support individual learning instead of group or peer learning. Additionally, Hafner and Miller (2011) stated that DST can be quite complex and challenging for pupils to independently combine multiple cognitions, such as gathering information, scriptwriting, communicate and evaluate. Pupils are also challenged by having to independently overcome affective obstacles to communicate with an audience. The pupils' grows anxious when their individual work is evaluated unfavourably. Dobao (2012) found that group writing contains significantly fewer errors compared to individual writing. The researcher further added that pupils working in groups, focus their attention on language more often. Therefore, this further emphasised the benefits of learning writing skills in groups or peers as opposed to individual learning.

Peer learning according to Storch (2013), refers to an activity where pupils have shared learning responsibilities. Other researchers examined peer interaction on a wider landscape to include the language, content, organisation that the pupils used on and off task (McDonough et al., 2016). Frequently, educators use peer collaborative writing as a summative assessment task to evaluate how well the pupils have achieved the learning objectives, scrutinising on the conventions and language use. Pupils work in pairs to write in the examinations and thus, the same grade was assigned to both pupils who collaboratively produced a text. Peer collaborative revision happens when the pupils compose individually but then have interaction with their peers to revise and edit their texts while peer collaborative prewriting is one of the most common collaborative English learning activities (Dobao, 2012). In collaborative prewriting, the pupils interact to generate ideas and plan, but write their texts individually or separately. So, this helps the pupils to generate and organise their ideas and set goals (Kellogg, 2008).

However, there are still some limitations and areas that are lacking in studies of using DST with peers. Chen et al. (2016) found that peer feedback may enhance storytelling. However, the study was conducted in a real classroom where the pupils already knew each other, thus, affecting how peer review might be influenced if the participants do not know each other in a small-scale investigation. In another study by Hafner and Miller (2011), they found that peer learning could promote good communication skills. Hence, this in turn is able to promote teamwork and lead to peer teaching. However, their study only highlighted the participants' experiences of using the DST with their peers and did not look into performances after using the DST or grading of their work. The study is also limited to participants who are in tertiary level of education who are able to conduct peer teaching and correction more readily unlike primary school pupils (Hafner and Miller, 2011).

Based on these literatures, most studies focused on effects of DST to individual learning performance in English Language but lacking on specific aspect of writing skills such as students' word choice, sentence fluency and conventions when they have to work with a friend. Similarly, when students were able to write creatively using DST, it is important to understand the extent to which DST can improve their creativity while working collaboratively.

■3.0 METHODOLOGY

This study is a pre-experimental study that employs one group pretest/posttest design to investigate the effect of peer learning on pupils' English Language writing skills and creativity using digital storytelling. Pupils' performance and creativity in English Language writing skills are the dependent variables in this study while peer learning using digital storytelling serves as the independent variable. Data were collected before and after peer learning sessions for the overall duration of 5 weeks. Qualitative data was also collected in interview sessions to support quantitative findings from the pre-experimental study.

The participants of the study consisted of 31 Year 6 pupils enrolled in a government primary school. The participants' ages ranged from 11 to 12 years old, with a mean of 11.52 years. A convenience sampling strategy was applied to define participants, since all

participants were enrolled in the same subject. No participants had created digital storytelling before or attended a course with assignments to create digital stories.

In Malaysia primary schools, Year 6 pupils have to attend English Language classes one hour per day for five days in a week. The curriculum used in teaching and learning English Language Year 6 in Malaysia primary school when data was collected was Kurikulum Standard Sekolah Rendah (KSSR) which includes teaching of writing, listening, speaking and reading. For this study, the learning session took place in a computer lab once in a week for 5 consecutive weeks. They were seated with a pair that had been randomly assigned to them by the teacher. A pair of pupils shared one computer in the computer lab.

Three instruments were used to collect data: (a) a performance test tasks conducted at the beginning and end, (b) the peer learning tasks conducted in the middle (c) a peer learning treatment conducted in the middle, and (d) an interview conducted at the end.

Performance Test Tasks for Writing and Creativity

This performance test was developed by the researcher and checked by three experts in order to collect data of the Year 6 pupils' performance. The test focused on pre and post-performance in writing and creativity, to identify participants' writing proficiency before and after and to identify the creativity of the pupils in ideas, regarding characters and story development and in organisation in which how well the plots of stories are organised and developed.

Peer Learning Tasks

The learning tasks were developed by researcher and checked by three experts in order to collect data on the Year 6 pupils' peer learning. The tasks focused on three digital stories based on their creativity and without a theme, conducted with their peers.

Peer Learning Treatment

The peer learning treatment was administered by the researcher before the pupils attempted the learning tasks. The peer learning treatment consisted of two pupils in a group. Each pupil in the peer group, was assigned a role, Role A and B, so as to ensure every pupil contributes collaboratively. The summary of their role is shown in Table 1.

Table 1 Details of Role A and Role B

Role A	Role B
Role A: revise and edit/ review and modify the digital story.	Role B: give feedback about the digital story.
Pupils A will:	Pupils B will:
<ul style="list-style-type: none"> • the suitability of the title of the story • the main character, problem and setting • the introduction of the story • the body of the story • the conclusion of the story • the conventions such as word choice, sentence structures and punctuations 	<ul style="list-style-type: none"> • comment on the suitability of the title of the story • give your opinion on the main character, problem and setting • talk about your satisfaction of the introduction of the story • tell about what you think of the body of the story • state if you like the conclusion of the story • comment on the conventions such as word choice, sentence structures and punctuations

Interview

The interview was used by the researcher at the end with the aim to learn the perspectives of the participants regarding digital storytelling, creativity, writing and English language.

4.0 RESULTS

Effects of peer learning on pupils' performance in English writing skills using digital storytelling

The pre-performance test and post-performance test are used to measure pupils' performance in English writing skills. The statistical analysis is performed by using the SPSS Program at 95% confidence level ($\alpha = 0.05$). To ensure the data are normally distributed, all data set undergone the Shapiro-Wilk Test and they were found normal ($p = 0.214$, $p > 0.05$) for pre-performance test score and ($p = 0.057$, $p > 0.05$) for post-performance test score (see Table 2).

Table 2 Mean scores of pre-performance test task and post-performance test tasks

	Pre-Performance Test Task Scores			Post-Performance Test Task Mean Scores		
	Mean	Minimum	Maximum	Mean	Minimum	Maximum
Word Choice	16.61	14	19	18.87	17	20
Sentence Fluency	16.97	14	19	19.23	18	20
Convention	17.90	16	20	19.45	18	20
Overall Mean	51.68			57.55		
Standard Deviation	2.400			1.567		

Using paired Samples t-Test it was found that there is a significant difference between the mean of the pre-performance test score with the post-performance test scores, $t(30) = 13.516$, $p = 0.000$ suggesting that there is effect of treatment towards post-performance test.

Figure 1 below shows the average scores of the English language writing skills pattern which can be observed among the peer learning groups based on the rubrics assessing the three aspects of writing, mainly the word choice, sentence fluency and conventions. It shows that there are increments in all aspects from the first learning task to the second and the third learning task with the most increments can be seen in the conventions aspects. The scores for conventions increased sharply from peer learning group task 1 to peer learning group task 2. This shows that peer learning has sharp increment and significant effect on conventions at the beginning of the administering of peer learning to the learning groups.

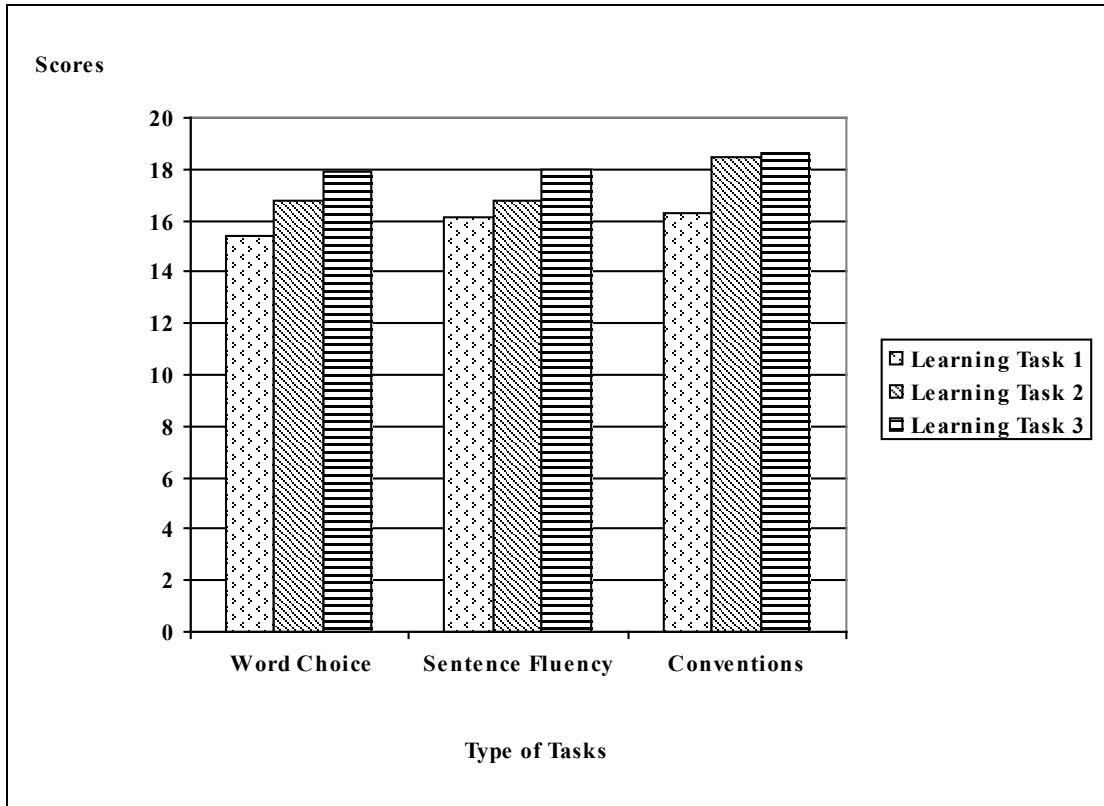


Figure 1 English language writing skills pattern among peer learning groups

Further investigation using Friedman Test found that there are significant differences for all the three aspects of writing skills, word choice ($p = 0.000, p < 0.05$), sentence fluency ($p = 0.000, p < 0.05$) and convention ($p = 0.000, p < 0.05$) respectively suggesting that peer learning have significantly improved the pupils’ English Language writing skills using digital storytelling (see Table 3).

Table 3 Summary of aspects in writing skills for three learning tasks

	Word Choice	Sentence Fluency	Convention
Chi-Square	24.458	16.362	27.339
df	2	2	2
Asymp. Sig.	0.000	0.000	0.000

The peers are helping to edit and revise the sentences in the story writing together as shown in Figure 2 which is a sample of a digital story detailing conventions as shown in Figure 2.



Figure 2 Screen capture of a page of a digital story entitled “Love Family”, showing conventions

Additionally, findings from the interview conducted with the peer groups also revealed that peer learning helped the pupils to be more aware of their convention mistakes.

P17: *My friend will check my spelling, grammar and punctuations and tell me if they are wrong.*

Adding on, the second highest score increment can be seen in the sentence fluency aspects. The pupils are able to write varied sentences and the sentences prove easy to read and are connected to one another with their peers as shown in Figure 3.

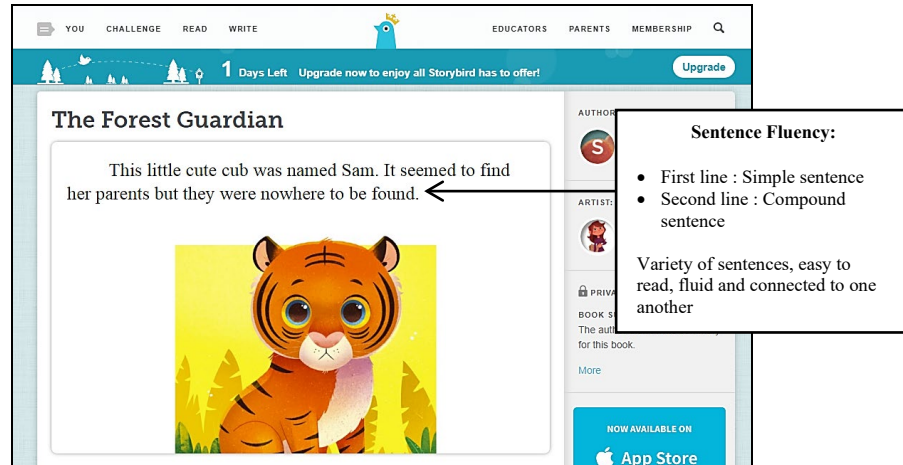


Figure 3 Screen capture of a page of a digital storybook entitled, “The Forest Guardian” showing sentence fluency

Interviews with the peer groups were also conducted at the end of the project to triangulate the data. Findings revealed that the pupils generally had favourable opinion of the DST project and were looking forward to using the DST. For example:

P10: *Can I do this with my friend? I don't want to do this alone.*

P18: *Teacher, when can I use Storybird again?*

They enjoyed working with their peers rather than be alone attempting the writing tasks in the DST and found that the experience was rewarding and in no way a disruption or interference into their leisure time.

P02: *I like to use Storybird with my friend.*

They also validated that working with their peers helped them to write better sentences. Their friends helped to find their mistakes and they share ideas on what to write.

P17: *My friend will check my spelling, grammar and punctuations and tell me if they are wrong.*

Effects of peer learning on pupils’ creativity in English writing skills using digital Storytelling

To ensure the data are normally distributed, all data set undergone the Shapiro-Wilk Test and they were found normal ($p = 0.538, p > 0.05$) for pre-performance test score and ($p = 0.224, p > 0.05$) for post-performance test score. Table 4 shows the mean scores for pre and post creativity test scores. Paired sample t-test shows significant difference between the mean of the pre-creativity test score with the post-creativity test scores, $t(30) = 8.545, p = 0.000$ suggesting that there is effect of treatment towards post-creativity test.

Table 4 Mean scores of pre-creativity test task and post-creativity test task

	Pre-Creativity Test Task Scores			Post-Creativity Test Task Mean Scores		
	Mean	Minimum	Maximum	Mean	Minimum	Maximum
Ideas	465	11	18	562	15	20
Organisation	486	11	19	570	16	20
Overall Mean	30.68			70.75		
Standard Deviation	3.370			2.883		

Figure 4 below shows the average scores of the creativity in English language writing pattern among the peer learning groups based on the rubrics assessing the two aspects of creativity in writing, mainly the ideas and organisation. There are increments in all aspects from the first learning task to the second and the third learning task. The scores for organisation aspect increased sharply from learning task 1 to learning task 2. This reveals that peer learning has sharp increment effect on organisation at the beginning of the administering of peer learning to the learning groups.

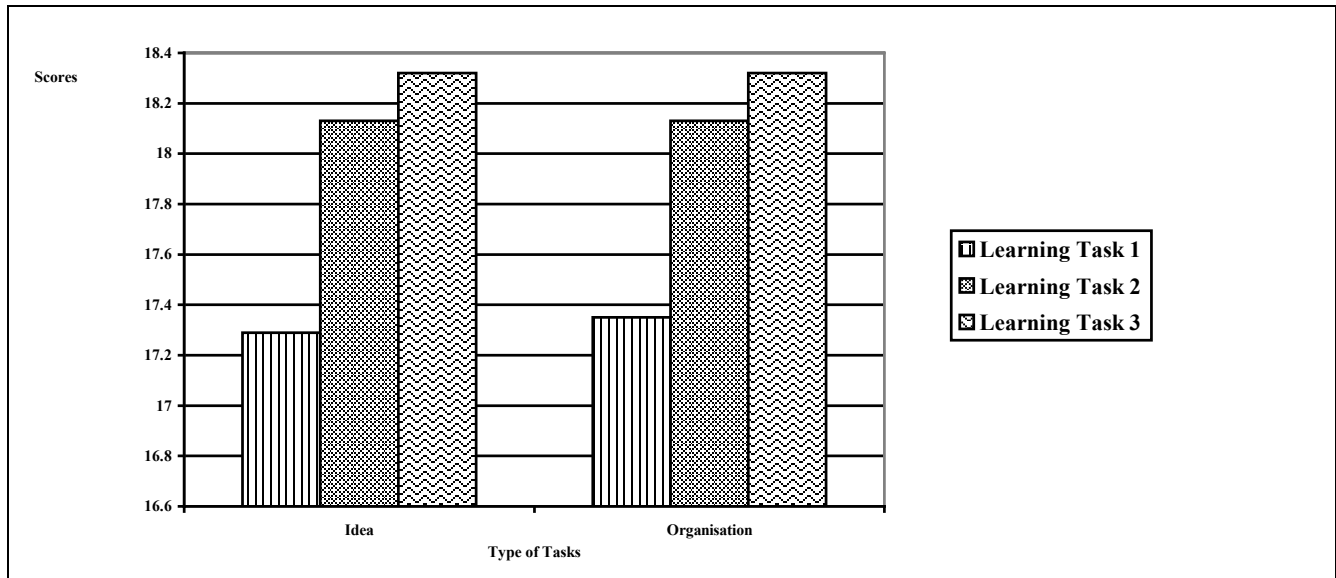


Figure 4 Creativity pattern among peer learning groups

Peers are found helping each other to give input on how to arrange their stories into three parts and they have vast differences in opinions from one another. This can also be substantiated through the findings from the interview conducted at the end of the project.

P10: *I can arrange my stories better with my friend's help. My friend gives me ideas where to put my ideas, like my intro, body and conclusion.*

Figure 5(a) details a good introduction or beginning of the organisation aspects in which it includes the name of the main character (King Sam), the setting (his land) and the problem is detailed in the second page of the story Secondly, Figure 5 (b), which is also considered as the beginning part of the story (*jealous because he had no friend*).

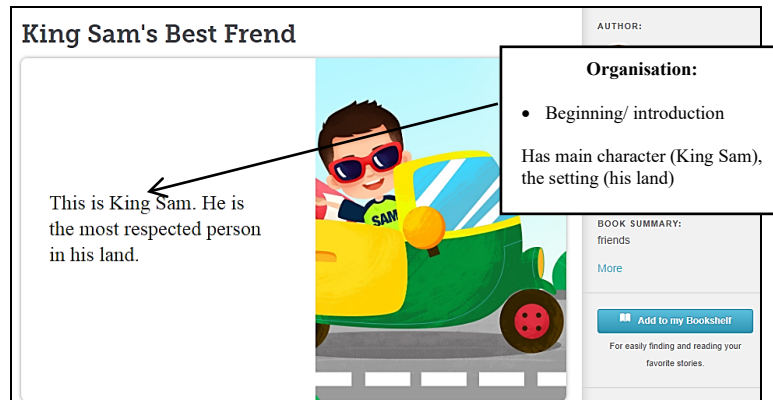


Figure 5 (a) Screen capture of a digital story entitled, “King Sam’s Best Friend”, showing good introduction or beginning of the story which consists of the main character and the setting

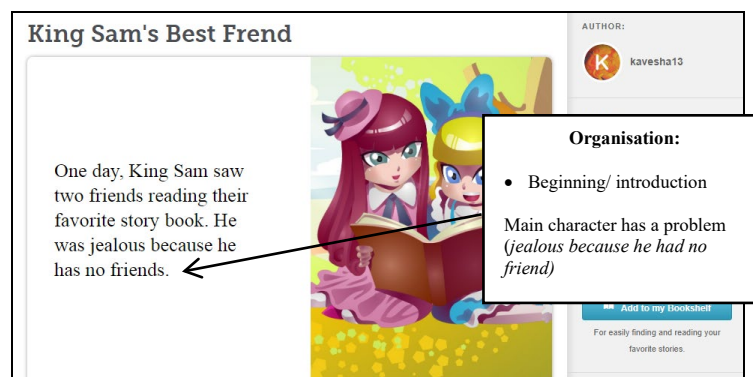


Figure 5 (b) Screen capture of a digital story entitled, “King Sam’s Best Friend”, showing good introduction or beginning of the story which consists of the problem faced by the main character

Figure 5 (c) below reveals a good body or middle of the story which chronicles how the main character tries to solve the problem (*ordered a royal servant to find him a friend*) while Figure 5 (d) shows a good end or conclusion which tells how the problem is solved (*his loyal servant was his best friend*).

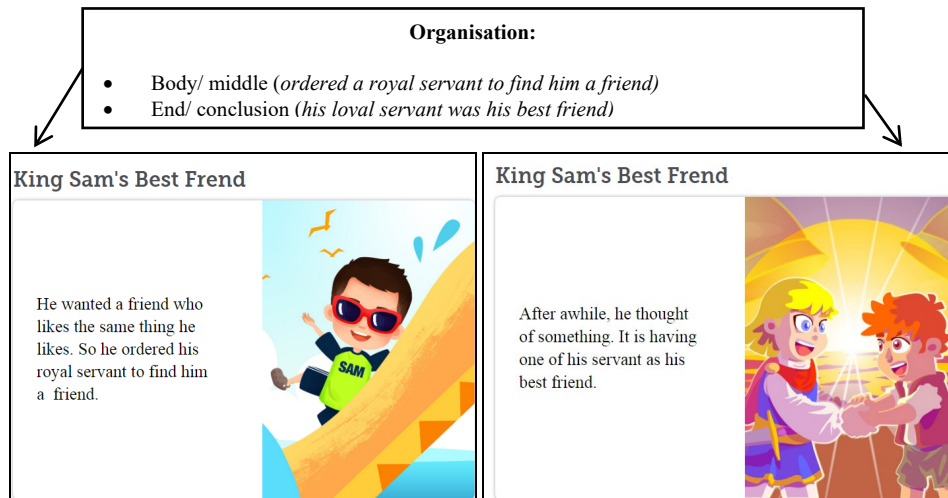


Figure 5 (c) and (d) Screen captures showing good body or middle and end or conclusion of the story which consists of the problem faced by the main character and how the problem is resolved at the end

Further investigation on whether there is a significance difference between the two aspects of creativity throughout the three learning tasks was carried out. there are significant differences for all the two aspects of creativity, ideas ($p = 0.043, p < 0.05$) and organisation ($p = 0.043, p < 0.05$) respectively. Thus, it can be concluded that peer learning have significantly improved the pupils’ creativity in English Language writing skills using digital storytelling.

Table 5 Summary of Aspects of Creativity for Three Learning Tasks

	Ideas	Organisation
Chi-Square	6.280	6.280
df	2	2
Asymp. Sig.	0.043	0.043

Table 5 shows the summary of the Friedman test descriptive statistics of the two aspects of creativity for the three learning tasks. The significant value of p is less than 0.05 indicating that there is a significant difference between Ideas and Organisation formation across three learning tasks.

Based on the interview P21 added that she initially wanted to write other stories but upon her friend’s suggestion, she decided to follow her friend’s suggestion.

P21: I think my friend help me to be more creative and write better stories.

After they had published their story, they received an expert review commending their story and they were very excited. Figure 6 shows a cover page of her book. They also added that they looked forward to the comments from expert review. The comments they received were very motivating to them. They even opened their account frequently to check on the reviews.

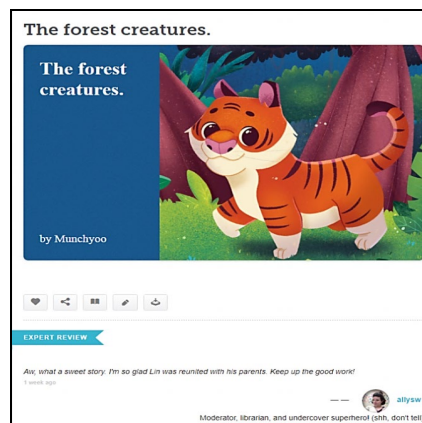


Figure 6 Screen captures of a cover page of a digital story entitled, “The Forest Creatures”, showing expert review on creativity

Therefore, from the analysis of the interview data, all the pupils agreed that they enjoyed writing with the friends more and they had better ideas and can write better and more creative sentences when they were writing with their peers. They also added that they enjoyed writing better using technology as compared to their paper and pencil in the classroom.

P22: I wish we can use this Storybird more in our class.

These positive responses could be attributed to the fact that these pupils are well versed in technology and hence appreciate the rare opportunity to use technology in the classroom whenever possible.

This study also has additional findings in which the pupils revealed that through DST and working with their peers, they begin to be fonder of the English language and to write more confidently in English. They also insisted that they begin to like English better.

P13: I like English better when I use Storybird and write with my friend. I feel more confident.

Overall, the pupils described that peer learning and DST have contributed to their creativity improvements in English language writing skills, have better ideas, organisation and better stories from comments and discussion with their peers.

■5.0 DISCUSSION AND RECOMMENDATION

Effects of Peer Learning on Pupils' Performance in English Language Writing Skills Using Digital Storytelling

The results of the study showed the most improvement in the aspects of word choice, followed by sentence fluency and lastly, conventions. In other words, the pupils who learned with peer learning approach significantly enhanced their word choice. They used strong nouns, verbs and also modifiers to portray, create clear, vivid pictures of the stories that they wrote. This is consistent with findings by Shih (2011) who stated that this is because they engage in peer learning activities such as self-reflecting, reviewing, observing and commenting, it results in improvements of their English language writing skills. Additionally, pupils who worked collaboratively using DST have the tendency to improve their vocabulary and construct complex sentence structures in their writings (Herrera, 2013; Zakaria, et. al., 2016).

Similar findings reveals that peer learning activities such as peer and self-revising allow the pupils to improve their organisation, grammar, sentence structure, content, vocabulary and spelling on the whole (Cao & Huang, 2019). The researchers reiterated that indeed the use of peer learning process is an efficient and continuous approach to enhancing the pupils' English writing skills. It is aligned with the social constructivist theory in which pupils who are involved in the learning process through collaboration with their peers, are able to construct meaningful knowledge and skills (Vygotsky, 1978). Thus, this also supports this study's findings that peer learning and technology are among the catalysts to improving the pupils' English language writing skills.

Furthermore, the pupils added that, because of this, they were more relaxed to complete the tasks assigned to them. They felt that having another person to help to check for mistakes, helped them to be calmer and were not as scared to try as compared to when they were alone. This was because with peer learning, they and their peers, both were held accountable for if the writing was not good. However, if they were alone, they were solely and wholly held accountable for the success or failure of the writing. This shows that peer learning or co-authorship aids the pupils through the learning struggles and anxieties through the sharing of the experiences of acceptance and rejection (Tanggaard and Wegener, 2018).

Finally, this study also revealed that the pupils had more confident to learn English and liked English better after using the digital storytelling and writing with their peers. A study by Saad et al (2014) also similarly reported that pupils would often associate the practice and use of English as a measurement of their success akin positive reinforcement which provides them the motivation to continue learning. Peer learning and digital storytelling allows the pupils to be more conscious of their word choices, sentence fluency and conventions, thus, improving their English language writing skills.

Effects of Peer Learning on Pupils' Creativity in English Language Writing Skills Using Digital Storytelling

The current study results showed that the significance was also reached in implementing the peer learning approach through digital storytelling, in terms of creativity. The pupils' creativity in their English language writing skills using DST was further analysed based on the rubric scoring guidelines. The two aspects of creativity that were looked into are the ideas and organisation. The results showed that the pupils had the most significant increment in the organisation aspect in terms of their scores. Their scores in the organisation aspects of their stories leaped starkly especially from the learning task 1 to learning task 2. This is because the pupils had differing opinions on ways to organise their stories at the beginning of the treatment and through peer learning process, they were able to discuss and made revision to their organisation based on the feedback received by their peers based on their assigned peer roles and thus improved tremendously in the second cycle of the treatment. Creativity stems from the collaboration process of exchanges of ideas among peers, understanding, communication and mutual, cooperative decision making. These would in turn stimulate their own creativity (Hong, 2013). This is also similar to a study that reported that effective feedback in peer learning is critical to enhancing creative writing and improving learning experience (Boud and Molloy, 2013).

Furthermore, the pupils were able to organise their stories into three parts clearly; beginning or introduction, middle or body and end or conclusion with the assistance from their peers. This is because the pupils were briefed beforehand especially on their peer roles, tasks and given manuals during one day familiarisation workshop. Their beginnings had the introduction of the main character, the setting and the problem that the main character faced while their middle told about how the main character tried to overcome the problem and the ending would tell about how the problem was resolved which must be consistent throughout.

The pictures or illustrations in the digital storytelling also help the pupils to have more ideas on to write and that their peers helped them to organise their stories and ideas by discussing to pick the suitable illustrations and what to add or include in the stories to achieve their goals for their stories. There must be an overall purpose of the story and that the authors must establish meaningful writing goals for

their stories and that consistency must be maintained till the ending of their stories (Lim & Noor, 2019). Thus, these are aspects of organisation and ideas in creativity which often go hand in hand, reflecting the criterion of clear story organisation and good plot development possessed by writers with good writing skills.

6.0 CONCLUSION

The use of digital storytelling for English Language learning is no longer new. However, with the suitable pedagogy such as peer learning, the effects of DST on English Language learning can be amplified. This study found that peer learning using DST could significantly improve pupils learning performance in writing skills in all three aspects; word choice, sentence fluency and conventions. This study also found that peer learning using DST improved pupils' creativity significantly in terms of organization of story in which they indicated the main character, the building up of the story and ending the story. More studies should investigate if there is a relationship between learning performance and creativity in using DST based on peer learning. It will be able to shed more light on how DST can be fully utilised for English Language learning.

Acknowledgement

The authors would like to thank Universiti Teknologi Malaysia (UTM) for their support in making the project possible. This work was supported by School of Education, Faculty of Social Sciences and Humanities, UTM.

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