Creative Writing: A Study Investigating Factors Influencing Creativity in Writing and their Outcomes

Stefanie Xinyi CHONG, Chien-Sing LEE, Junaidi ABDULLAH

Multimedia University, Malaysia stef.c85@gmail.com, cslee@mmu.edu.my, junaidi@mmu.edu.my

Abstract: Storytelling is a time-honoured tradition that is essential in connecting mankind together and communicating essential lessons via the story medium. In this study, we identify two elements – identity and interactivity – that inspire good storytelling and attempt to integrate them within a creative writing assignment study conducted with a group of 10-year old students. This article details how using these two elements can potentially increase the quality of creativity and language proficiency in creative writing assignments as well as increase the fun in writing a story.

Keywords: storytelling, creative writing, creativity, identity, interactivity, interactive storytelling

1. Introduction

Stories have a great impact on society. Roche [1] commented that narratives define humans, characterizing human actions as the basis of narrative history. Individuals relate to stories through their personal experiences and are able to connect with each other through shared experiences – reaffirming and sharing their identities. A key feature in engaging attention and entertaining viewers, Bolter and Joyce [2] pointed out that interactive fiction only requires two elements, i.e., episodes (which establish the story background and environment) and decision points (which link episodes together with a procedure on which link to follow). Consequently, we will focus on these two elements in the development of creative writing.

2. Study Methods

Our objective is to increase the quality of the written assignment itself by making it more creative. We hope to achieve this by investigating if:

- the element of identity could motivate students to immerse themselves in the character and story development.
- the element of interactivity would be able to motivate students to improve their creative writing by making storytelling fun.

Our study was conducted among over fifty Year 4 students from a school in Malaysia. First, the students were asked to colour and fill out the outline of a superhero. They were instructed to name their superheroes, add facial features, clothing details and colors, and write up a brief profile on their new superhero. This activity was designed to represent the element of identity by immersing them in creating their own superheroes.

The next activity was a story reading session from a 'choose-your-own-adventure' storybook. The book allowed readers to 'decide' the next course of action and followed up on the decision with the corresponding page. The story contained multiple endings, based

on the readers' 'decisions'. The interactivity element encouraged readers to choose their endings and further immerse themselves within the story.

Finally, students were instructed to use the general plot of the story along with their newly-created superheroes as the basis of their writing test. However they were given the freedom to decide the story's pacing and outcome to encourage creativity in their writing assignments. Students were encouraged to feature their characters unique traits and powers in their stories, in hopes to encourage creative and fresh story development ideas. The assignments were then graded by their teacher.

4. Results

The students' English teacher graded them on creativity, story development, clarity of ideas, and language skills. We used a paired sample *t*-test to analyse and compare the scores of the students before the treatment and after the treatment. We found no significant differences between the students' scores before and after the treatment (see Table 1). However, the mean scores displayed an increase in students' test scores after the treatment - a positive sign of the treatment's effectiveness.

Table 1 (Post-test - Pre-test assignment scores)

Tuble 1 (1 obt test 11e test ussignment scores)				
	Pre-test Results	Post-test Results		
Mean	65.56	69.22		
Standard Deviation	11.99	9.47d		
t – test	1.8576			
p – value	0.0728 > 0.05			

Students were divided into two groups, Better Academic Achievement Group (BAAG) and Poorer Academic Achievement Group (PAAG), according to their pre-test academic achievement results. When comparing the pre-test scores of both groups, the results are extremely significant (see Table 2). Upon comparing the post-test scores of both groups, the results are comparatively less though still significant. While BAAG displayed little change in test scores after treatment, PAAG displayed a very significant difference in post-test scores.

Table 2 - Post-test Scores - Pre-test Scores between Academic Achievement Groups

	Pre-test	Post-test Mean	t - test
	Mean (SD)	(SD)	
Better Academic Achievement Group ($N = 12$)	76.92 (5.838)	73.5 (8.028)	1.352
Poor Academic Achievement Group $(N = 20)$	58.75 (9.187)	66.60 (9.417)	-3.414
t – test	6.1274	2.0444	

5. Discussions

5.1 Investigating if the Identity element encourages immersive story development

While not all the students were explicit in developing their stories around their created superheroes, we believe that encouraging the students to create a superhero profile was able to motivate them to develop better stories. By establishing their characters

appearances and capabilities, the students adapted their characters to fit and flow into a given story situation. By investing themselves emotionally into a new identity, they were naturally more compelled to care about their characters' involvement in the story environment and the outcomes of the given situation [3]. As a result of introducing the element of identity into their writing, the students naturally progressed into deeper interactivity with the story.

5.2 Investigating if the interactivity element could improve creative writing by encouraging students to enjoy the storytelling process

Overall, students were excited while they were designing their superhero avatars and reading through the story booklet. When they were told that their decisions affected the story's outcome, it was a novel experience for them. From the data analysis in Table 2 above, we discovered that students of poorer academic achievements were able to score significantly better after going through the interactive treatment. These findings agree with Palaniappan's [4] research, which postulated that creativity might help compensate the lack of intelligence to enhance academic achievement levels. By allowing them the freedom to recreate the story in their own words and on their own terms, students were not confined by academic or society standards and were able to writer better and more creatively.

6. Conclusions and Future Research

The activity of writing stories produced significant results in inspiring and motivating the students to write creatively. While the literacy skills of the students did not improve noticeably, the implications of using storytelling elements in creative writing is worth looking into.

The teacher aiding us also suggested that students should be encouraged to outline their ideas. She suggested that student creativity and language skills would be greatly improved if they were encouraged to organize their ideas before writing their stories.

We intend to create a game prototype that will use the elements of identity and interactivity to encourage creative writing among students. We will design separate modules to teach the importance of settings descriptions, character development, and story outline. Based on the modules, students will then write new stories.

7. References

- [1] Roche, L. S. (2003). The Power of Stories (I): A Discussion of Why Stories are Powerful. *International Journal of Information Technology and Management, Vol. 2, No. 4*, 377-388.
- [2] Bolter, J., & Joyce, M. (1987). Hypertext and Creative Writing. *Proceedings of the ACM Conference on Hypertext*, pp. 41-50.
- [3] Gee, J. (2007). Good Video Games and Good Learning: Collected Essasys on Video Games, Learning, and Literacy. New York: Peter Lang Publishing Inc.
- [4] Palaniappan, A. (2007). Academic Achievement of Groups formed based on Creativity and Intelligence. *Proceedings of the 13th International Conference on Thinking Norrhoping*, (pp. 145-151). Sweden.