Assessing the Writing Task: Do Pictures Change What Students Write?

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Abstract—This article reports an empirical study which compared the effects of different writing tasks on the writing products of EFL students. This study recruited 50 students from two natural classes in a Chinese university. In the pre-test, they were given the same writing task with only textual instruction and no difference was found in their writing quality. In the test, one class was given graphic novel with textual information, while the other class was given the same graphic novel without textual information. It finds that the group given graphic novel performed better than the other group in terms of content richness, plot development, organization, and language accuracy. It concludes that graphic novel is a better way to scaffold EFL student's narrative writing and visual information should be included in EFL literacy curricula.

Index Terms-graphic novels, multimodality, visual literacy, EFL learners

I. INTRODUCTION

The last two decades have seen a surge in researches concerning incorporation of graphic novels into the English classroom (for example, see Versaci, 2001; Chute, 2008; Chun, 2009; Corners, 2012; Bakis, 2013; Brenna, 2013; Brown, 2013; Moris, 2015; Cornell, 2016; Cook & Kirchoff, 2017; Brown & Begoray, 2017) The scope of how graphic novels are discussed is impressive. For instance, some pedagogues believe that combining print-based literacy and digital communication has the potential to increase student engagement as well as understanding of complex texts (Weiner, 2010; Brown, 2013). Spiegel and his fellow researchers (2013) believe that comics is an intriguing genre for informal science education, for it can generate and sustain student's interest in Science learning. Moreover, literacy scholars have become increasingly interested in the multimodality of comics; most comics, particularly mainstream comics, consistently make use of images juxtaposed with text (usually in the form of speech balloons, captions, or sound effects). Harrison (2003) demonstrates how images and text work together to make meaning for readers/users. Connors (2015) argues that reading and producing graphic novels with the intention of mapping their multimodal design can heighten students' appreciation for the form's complexity. Kirchoff & Cook (2016) found that not only did students believe that multimodal composition positively influenced their writing, but they also demonstrated a better understanding of the roles audience and design played in their own composition processes. Given the inherent multimodality of comics, there may be an unstated assumption that graphic novel is appropriate for teaching multimodality.

Until recently, most research about incorporating graphic novels are conducted in K-12 classrooms, there is no research about how graphic novels will work in the EFL classrooms. In addition, they mainly adopted qualitative research method. This study aims to explore the efficiency of using graphic novels as writing prompts in comparison to the traditional text writing prompts in EFL college classrooms, hoping that it can provide some implications for EFL college English writing instruction.

The article is structured as follows. First, I provide a brief summary of research on writing studies using graphic novels as prompts. In the second part of the article, I present my study, starting with research questions, participants and a description of the writing prompts. I then describe the methods used to collect and analyze data, present and discuss the result obtained, and conclude the article with a summary and suggestion for future studies.

II. LITERATURE REVIEW

The literature review consists of two parts. The first part is concerned with the use of picture books as writing prompts and the second part focuses on the studies on writing assessment.

Some studies only talked about the efficacies of picture books in boosting students' understanding and thinking skills of learners without carrying out empirical studies. Bishop and Hickman (1992) explained that in picture books the illustrations are integral to understanding the story. Typically, they appear on each page and work with the prose to create a greater whole. Pantaleo (2008) believes that picture books have the "capacity to teach critical thinking skills,

visual literacy skills, and interpretive strategies" (p. 67). Picture books have the capacity to strengthen writing skills in developing writers and present an appealing context in which to teach writing strategies (Dorfman & Capelli, 2009; Saunders, 1999; Uccelli, Dobbs, & Scott, 2013).

Other studies which test the effectiveness of using picture books only involved students from elementary and secondary schools. Anderson-McElveen and Dierking (2000) used children's fiction and non-fiction children books as a teaching tool to support writing instruction. They conducted research to 50 kindergarten and fourth-grade students. The researcher read aloud one picture books to the two groups of students and lead the discussion of the writing technique of that book. Results showed that kindergarteners paid attention to special words, while the fourth grade paid attention to writing techniques. They suggested that writing teachers could create a list of target skills necessary for developing effective writing and then match children's literature books to those skills.

Pantaleo (2010) explored elementary students' understandings and responses to contemporary picturebooks with metafictive devices and examined how students used their knowledge of these metafictive devices to create their own print text. She discussed two children's work in depth besides the overall findings of the data. She maintained that in order to develop students' narrative competence, they need experience with diverse and complex narratives that demand particular cognitive skills for engagement, such as keeping track of numerous possibilities, and understanding that it is not always necessary to think in a straight line to make sense.

Premont and his fellow researchers (2017) investigated the efficacy of picture books in high school classroom in enhancing 10th grade struggling writers' word choice, sentence fluency, and conventions. They selected the highest, lowest, and average-performing students, forming altogether 12 participants. Premont examines multiple drafts of student writing, student reflections, scores on a writing self-efficacy scale, and entries in the teacher's reflective journal. They found that picture books as mentor texts can enhance secondary writing regardless of ability level, and they also increased student engagement. What remains unclear is if similar results can be attained at the College level.

In the field of language testing, research on the use of graphs in writing tests has emerged only recently (i.e. Katz, Xi, Kim, & Cheng, 2004; Xi, 2005), Li (2017) investigated the reliability and content validity of three parallel pictureprompt writing tasks of CET4. Nighty-five learners of English as a foreign language (EFL) were invited to perform the three tasks. The performance data from the different test forms were analyzed by using multifaceted Rasch measurement (MFRM). Two checklists were used to compare the tasks qualitatively in content. The results generally support the argument that the three writing tasks are parallel. Li's study is the most up to date study and can be regarded as a first attempt in Chinese college EFL learners. However, Li's study only involved only non-English major students, so it remains to be seen whether graphic novels can have similar effects on English major students. The second problem with Li's studies is that Li employed different graphic novel writing prompts to different groups of students. It did not explore the effects of different tasks on the same group of students. The third is that Li's writing prompts are generally argumentative. The need for language teachers and testers to conduct more empirical studies of narrative picture prompts has never been so acute, although "pictures should be appreciated as having great value for teaching and assessing anyone". (Bae & Lee, 2010, p.157)

The above review suggested that the field remains in need of additional research studies investigating the effects of using picture prompts for college-level EFL learners' writing. Most of the previous researches in this field adopt the qualitative research method. The present study attempts to fill this gap by adopting both quantitative and qualitative methods. It examines the effects of different writing prompts with one textual prompt and two different picture prompts. This study aims to address the following research question: Are there any differences between the textual writing prompt and graphic novel writing prompt in students' narrative writing? Are there any differences between graphic novel writing prompt with or without text?

III. METHODS

The current study adopted a quasi-experimental design with a pretest and test. The 50 participants were from two intact classes of third year English majors at a collage in China, and all were native Chinese. Of the participants, 46 were female, and ages range from 19 to 21. At the onset of the experiment, the participants' TEM-4 (Test for English Majors Band 4) scores were collected as a touch base score. The independent samples test shows the two classes' TEM-4 score has no significant difference (t=0.920, p=0.698). Thus we assume the two classes have the same English proficiency level. At the time of the examination, the participants have all taken English writing classes about narrative writing. Class one has 23 participants while Class two has 27 participants. The two tasks are framed around the theme of father and son. The task required the students to write two narrative essays of no less than 150 words. They were allotted 40 minutes for each task which they handwrote while being supervised by an instructor. The first task is to write an interesting story between one and one's father in no less than 150 words. All the participants have the same task in this round. This task was considered less complex because it asked students to write according to their own personal experience, and present their ideas in a narrative manner. Two months later, Class one has an in-class writing task with comic strips. Class two's writing task is slightly different from Class one's in that Class two's comic strips have English and Chinese texts while Class one's has not.

The research questions are as follows:

1. Is there a difference among the graphic novel writing prompt and textual writing prompt in terms of their effects on the overall writing scores and four component scores?

2. Will the comic strip with text produce better writing quality than that without?

IV. RATING SCALES

Students' writing products were scored using a narrative rating scale borrowed from the team of editors at Learning Express (2014) because this rating rubric offers greater insight into the development and content of narrative essays than could holistic ratings. The ratings consisted of assessments on a 6-point scale for each of 4 main components: content, development, organization and convention/language use. Content refers to the understanding and interpretation of the writing prompt. Development refers to the degree to which the main point or event is elaborated and explained by specific details, descriptions, and reactions. Organization means the clarity of the logical flow of ideas (coherence and cohesion). Convention examines the use of standard English. The overall score and four component scores were tallied separately and functioned as the dependent variables for the study.

Two experienced EFL writing teachers were responsible for scoring the essays, and a third rater was used to resolve disagreements. The Pearson correlation coefficients of the two rater's scores for the 4 tests ranged from .77, .78, .79, .83, respectively. The final scores were the average of the two raters' scores.

V. RESULTS AND DISCUSSION

The finding of the research is provided in the tables below. Class one's pretest will be labeled as A1. Class one's test will be labeled as A2. Class two's pretest will be labeled as B1. Class two's test will be labeled as B2. As can be seen from Table1, when t=10.123, p=0.000, p<0.05. The total score of Class one's pretest and test is significantly different. The total score of the test is significantly higher than that of the pretest.

		1	ABLE 1.			
	PAIRED S.	AMPLES TEST OF	THE TOTAL S	SCORE OF CLASS	SONE	
		Mean	Ν	t	р	
Pair 1	A1Total	17.1304	23	-10.123	.000	
Pair I	A2Total	21.1304	23	-10.125	.000	
		1	TABLE 2.			
	PAIRED SA	AMPLES TEST OF	THE TOTAL S	CORE OF CLASS	TWO	
		Mean	Ν	t	р	
Pair 2	B1Total	17.5556	27	-7.300	.000	
rali Z	B2Total	21.0185	27	-7.500	.000	

As can be seen from Table2, when t=7.300, p=0.000, p<0.05. The total score of Class two's pretest and test is significantly different. The total score of the test is significantly higher than that of the pretest.

By comparing the total score of A1 and B1 and that of A2 and B2, we can find that these two pairs have no significant difference. (See Table 3 t=0.703, p=0.486 and Table 4 t=0.232, p=0.817) This indicates that Class one and Class two are at the same English proficiency level. It also demonstrates that graphic novel with texts and that without text elicit the same narrative writing effect.

			TABLE 3.						
INDEPENDENT SAMPLES TEST OF THE TOTAL SCORE OF THE PRETEST OF CLASS ONE AND CLASS TWO									
	Class	Ν	Mean	t	р				
Total	A1	23	17.1304	703	.486				
Total	B1	27	17.5556	703	.+00				
			TABLE 4.						
INDEPENDEN	IT SAMPLES	TEST OF TH	E TOTAL SCORE OF T	HE POSTTEST	OF CLASS ONE AN	D CLASS TWO			
	Class	Ν	Mean	t	р				
Total	A2	23	21.1304	232	817				
TOTAL	B2	27	21.0185	.232	.017				

Independent samples test results provide strong evidence that the two forms of picture prompts produced equivalent results in terms of all the four subcomponent scores. (See Table5 t=0.265, p=0.792; Table 6 t=0.361, p=0.720; Table7 t=0.368, p=0.714; Table8 t=0.763, p=0.449)

			TABLE5.			
INDEPEND	ENT SAMPLE	ES TEST C	OF THE CONTENT OF TH	HE POSTTEST OF	CLASS A AND CLASS I	3
	CLASS	Ν	Mean	t	р	
CONTENT	A2	14	5.5357	.265	792	
CONTENT	B2	36	5 4861	.203	.192	

	CLASS	Ν	Mean	t	р
DEVELOPMENT	A2	23	5.3043	.361	.720
	B2	27	5.2407		

			TABLE7.				
INDEPENDENT SAMPLES TEST OF THE ORGANIZATION OF THE POSTTEST OF CLASS A AND CLASS B							
	CLASS	Ν	Mean	t	р		
ORGANIZATION	A2	23	5.1304	368	.714		
	B2	27	5.1852		./14		
			TABLE8.				
INDEPENDENT SAM	APLES TEST O	OF THE CO	ONVENTION OF	THE POSTTEST OF	CLASS A AND CLASS B		
	CLASS	Ν	Mean	t	р		
CONVENTION	A2	23	5.1957	7(2)	440		
CONVENTION	B2	27	5.0926	.763	.449		

Judging from Table 1 and Table 2, we can find that the graphic novel writing prompt will elicit better writing effect than textual narrative writing prompt. By comparing Table 3 and Table 4, we can find that graphic novel with texts and that without text elicit the same narrative writing effect.

VI. DISCUSSION

As is evident in Table 1 and Table 2, both Class one and Class two exhibit better writing results in the test with graphic novel prompts. The work of Hu and Bo (pseudonyms) is typical in showing the difference of the effect of different writing prompts. Hu is from Class one, and Bo is from Class two.

Hu

Academically, Hu's teachers described her as an "average" student. In her pretest, she described fishing with her dad when she was young. She offered a simple interpretation of the writing prompt. She liked to eat fish, so her father took her to go fishing. She mimicked how her father fished but cannot catch any. Her father told her to be patient and finally she got one fish. It's just one simple story between Hu and her father, but it's not an interesting story. The development of the story is not thorough enough. In this essay, Hu used a lot of simple sentences to express her ideas. Besides, there are some redundant sentences like "My father didn't need to work." She answered the prompt in an abbreviated manner. In the test, her writing prompt is to describe the graphic novel without text. She satisfied the writing prompt in a thoughtful manner. She used precise words and phrases, relevant descriptive details to develop the action, event and characters. For instance, she vividly described the father's psychological movement when his son didn't go back home. "After Son leaves home, his father sits on the sofa and takes out a newspaper, trying to calm down. Three hours later, he can't sit on the sofa in peace anymore. He falls in great anxiety and worry. He keeps asking himself whether Son will face danger. He hears the wind blowing outside. He worries Son may feel cold with little clothes on." In the test, Hu used several transitional sentences to make the story more coherent, like "After Son leaves home", "When the father is approaching the door of his house". The vivid language and a sense of engagement makes this piece of narration a successful one.

Bo

According to her teacher, Bo is also an "average" student in Class two. In her pretest, she describes a story about shopping with her parents when she was a kid. She complained that her mother loves shopping too much. Both her father and she felt bored. Then her father think of an idea to kill time when her mother shops: taking elevators up and down! Since the prompt is to write an interesting story between father and child, Bo's story between her father is not so interesting. She failed to satisfy the writing prompt. Also, she needs to develop her ideas thoroughly. In Bo's test, she provided a vivid picture between father and son. Bo says: "The wind blew, the leaves shook, he cried out Tom's name but got no reply. A vague illusion that Tom had been kidnapped struck him and made him more and more fear about his son's condition. Still no result, he went home, deeply disappointed." Besides the father's psychological development, Bo added the description of the environment to increase the father's anxiety in the story.

Noticeably, Class one and Class two's test results showed no significant difference in scores. Most students in Class two tend to use the same text in the graphic novels, like using "Bash" to describe the sound of broking the glass, or using "You are home, my son" as the end of the story. It shows graphic novels with text will help students retrieve words for their writing but at the same time it will limit students' imagination. When writing the graphic novel prompt with texts, students is likely to use what has been written on the graphic novel to make the story. Judging from the Class one's test, the ending part shows more variety: "I will not yell at you anymore, my son!", "Maybe he is too little to know how much his father loves him, but one day he will know.", "It gave him to understand that patience matters more than furious when treating a wrong-doing child.", "It is your parents that will forgive you unconditionally, no matter how many mistakes you make." "I'm sorry, son!".

So why do graphic novel prompts elicit better writing results? Because graphic novels as a form of multimodal text, require the reader to make sense of the structures of sequential art, including visual, spatial, and linguistic cues. (Meyer et Jim énez, 2017) Besides text and characters, graphic novels also include many other elements like color, frame, line, panel, etc. Multimodal texts require the reader not only to decode the written text but also to understand and decode the various modes of communication used in the composition of the text (Kress & van Leeuwen, 1996). Smetana (2010) notes the format of graphic novels (i.e., the weaving together of images and text) can help readers focus on vital information to make meaning from the text. Not only do graphic novels assist students in developing deeper understandings of and appreciations for literature and literary elements (Moeller, 2011; Schwarz, 2002), but they can also promote the development of transferable literacy skills that can be applied to other text types (Jacobs, 2007; Frey & Fisher, 2008).

Then why does the graphic novel prompt with text and without text elicit the same writing result? How come the combination of the graphic novel and the text did not make a greater effect? Bishop and Hickman (1992) explained that in picture books, the illustrations and prose are integral in understanding the story. But in our research, the graphic novel "father and son", the graphic has already formed a story. Even without the text explanation, readers can understand the idea. This could only be explained by the effect that graphic novels not only promote readers in-depth thinking and therefore the richness in writing content.

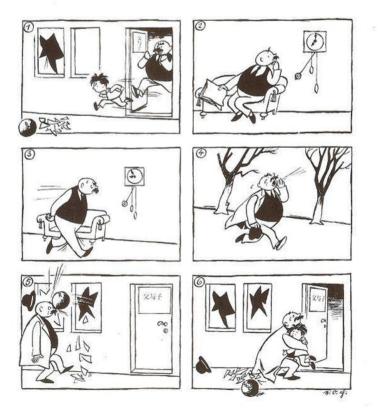
VII. CONCLUSION

As we have discussed, it is important to incorporate graphic novels into writing instruction because it can deepen students' thinking and enrich their writing. Graphic novels serve as a great site for sponsoring literacy development in students. (Frey & Fisher, 2008; Smetana, 2010). Another lesson we draw from this study is that in the research of writing instruction, qualitative methods must be combined with quantitative methods to reach a more generalizable and in-depth result. In the assessment of narrative writing, the analysis of plot development and content richness is more advisable than holistic rating rubrics.

Additional research is required to validate these results and to expand this study. A number of specific research questions emerged from the study, including the following. What kind of graphic novels is most suitable for Chinese college EFL learners writing test? Do graphic novels help develop students' critical reading abilities? How can we use graphic novels to teach other genres?

APPENDIX A. GRAPHIC NOVEL WRITING PROMPTS FOR CLASS ONE

Direction: study the following set of pictures carefully, and write a narrative essay in no less than 150 words. Marks will be awarded for content relevance, content sufficiency, organization and language quality. Failure to follow the above instructions may result in a loss of marks.



APPENDIX B. GRAPHIC NOVEL WRITING PROMPTS FOR CLASS TWO

Direction: study the following set of pictures carefully, and write a narrative essay in no less than 150 words. Marks will be awarded for content relevance, content sufficiency, organization and language quality. Failure to follow the above instructions may result in a loss of marks.



ACKNOWLEDGMENTS

The authors wish to thank all participants in the study, and Dr. Hiller Spires as well as Dr. Bin Xin for their constructive comments. The research was funded by The Second Phase of the Project Funded by the Priority Academic Program Development of Jiangsu Higher Education Institutions (PAPD: Phase ii) (Project No. 20140901), Top-notch Academic Programs Project of Jiangsu Higher Education Institutions, and the Application Research of Social Science of Jiangsu Province (Project No. 16jsyw-62).

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