Grammar-Related e-Picture-Book Creating (GRePBC) in an English Grammar Course

Ching-Huang Wang [1*] John Armstrong [2] Wei-Shi Wu [2] Ying-Ya Wen [3] Wen-Jen Wang [4]

[1*] Professor, Applied Foreign Languages, National Formosa University
[2] Assistant Professor, Applied Foreign Languages, National Formosa University
[3] Lecturer, Applied Foreign Languages, National Formosa University
[4] Associate Professor, Center for General Education, National Formosa University

Abstract

In an English Grammar course, a Grammar-Related e-Picture-Book Creating (GRePBC) assignment was given to two classes of Taiwanese day-school AFL (Applied Foreign Languages) freshmen for learning about English grammar and developing critical thinking through technology. The center of this study was on the 119 freshmen's responses to such an assignment. Two research questions produced to motivate the current study were: (1) How did the AFL freshmen respond to Grammar-Related e-Picture-Book Creating (GRePBC) from the perspective of English grammar acquisition? and (2) How did the AFL freshmen respond to Grammar-Related e-Picture-Book Creating (GRePBC) from the perspective of critical thinking? The sources of data included a 6-point-scaled questionnaire, the students' reflection papers, and their e-picture-books. The results of the study indicated that an estimated 90% of the 119 freshmen tended to agree with the effectiveness of the GRePBC assignment in helping them learn about English grammar and approximately 93% agreed that the assignment boosted their critical thinking ability. Further, many students believed that they increased their software literacy. As such, interested instructors may employ the assignment in their teaching contexts to enhance their students' knowledge of English grammar, critical thinking ability, and multimedia literacy; the interested researchers may work on further studies concerning the GRePBC assignment to make a magnificent contribution to the research, theory and instruction of relevant fields, such as children's literature, critical literacy, and multimedia technology.

Key words: Grammar-Related e-Picture-Book Creating (GRePBC), critical thinking, picture book, multimedia literacy

*Corresponding Author：Department of Applied Foreign Languages, National Formosa University, 64, Wen-Hua Rd., Huwei Township, Yunlin County, 63208, Taiwan
Tel: +886-5-6315814
E-mail: chinwang@nfu.edu.tw

I. Introduction

Every individual has the ability of critical thinking, but it requires developing through instruction, nurture, and encouragement in a given context. Critical teachers in all disciplines can use listening, speaking, reading and writing to encourage their students to become more thoughtful and open to examine what to believe or decide what to do from multiple perspectives (Unrau, 2008).

Critical thinking is of much importance for a wealth of reasons. It can make a course or an assignment more meaningful and ultimately more rewarding in that students can learn through deep thinking and greater involvement with their topic. It can prepare students for active engagement in the learning process inasmuch as it involves the evaluation of previous knowledge and current information from various perspectives, the support of reasoned decision-making (Sharma & Elbow, 2000), and the completion of a required task (Wang, Jiang, & Wu, 2014). It can also help students develop responsible citizenship qualities by stimulating their interest in public issues (Sharma & Elbow, 2000) and making them more socially aware (Wang, Jiang, & Wu, 2014). In effect, critical thinking can help students to become active rather than passive participants in their learning.

The information explosion and rise of e-culture has meant that, to some degree, English teaching and learning has had to become e-teaching and e-learning in listening, speaking, reading, writing, and thinking. The Grammar-Related e-Picture-Book Creating (GRePBC) could offer the students the opportunity of e-learning – the students were encouraged to create their works by using software such as InAlbum. Additionally, teamwork is a precious skill for students to learn, because "four brains are better than one" (Keefe, 2010, p. 24) and the GRePBC

assignment relied on student teamwork. In short, in a required course in English Grammar II the instructor intended to guide his students to engage in the learning of English grammar, picture books, and the InAlbum software as well as the development of critical thinking skills.

There is a paucity of studies on the implementation of students' e-picture-books into English Grammar classes in Taiwan. This study aimed to explore 119 Applied Foreign Languages (AFL) freshmen's perceptions of the GRePBC assignment from the perspectives of learning about English Grammar and critical thinking (i.e., creativity, imagination, respecting different ideas, cooperation, peer relationship, and communication). Two research questions were formulated to shed light on the core of the study below:

(1) How did the AFL freshmen respond to Grammar-Related e-Picture-Book Creating (GRePBC) from the perspective of English grammar acquisition?

(2) How did the AFL freshmen respond to Grammar-Related e-Picture-Book Creating (GRePBC) from the perspective of critical thinking?

II. Critical Thinking

1. Relevant Literature

Many scholars and researchers advocate that human beings have the critical thinking ability (Wang, Jiang, & Wu, 2014). Thus, critical thinking can be tutored and enhanced through appropriate training and practice, such as through course activities and assignments (Wang, 2008, 2009; Wang, Jiang, & Wu, 2014; Wang, Lin, Wu, & Liu, 2010; Wang, Wu, Fang, & Wang, 2006). Critical thinking is "invaluable in the classroom, workforce, and society as a whole" (Krieger & Perry, 2010, p.106). According to Facione and Facione (1994), critical thinking is a process in

which learners actively examine and assess information in concepts, synthesize and employ concepts, and carry out the final options. Wang, Wang, Wu and Kuo (2005/2006) define critical thinking as a process in which students learn to originate their works by applying their prior knowledge and experience, respecting diverse ideas, communicating with opponents, and cooperating with group members. Furthermore, Wang (2006) defines critical thinking as "an ability to respond considerately to diverse points of view, understand beyond the surface text, learn the way to position human beings including themselves, input their minds with the meaning of mutual help and possibly carry out the spirit of social justice in the way of empathy" (p. 18). As such, critical thinking can empower students to position human beings especially their duties and develop social-justice awareness in a larger world (Wang, Jiang, & Wu, 2014).

Developing students' critical thinking skills is a vital goal of modern education (Ku, 2009), as it equips students with the competency necessary to position themselves and others in a rapidly changing world. In a critical classroom, students must go beyond absorbing teaching material knowledge and develop skills involved in analyzing information (Facione & Facione, 1994; Ku, 2009; Profetto-McGrath, 2005), generating/organizing ideas, defending/comparing opinions, drawing inferences, evaluating alternative evidence, and producing/carrying out the best practice solution (Chance, 1986; Facione & Facione, 1994; Profetto-McGrath, 2005).

The term, critical thinking, has various potential definitions, depending on the focus of the study. The operational definition of critical thinking by Wang, Chiu, and Wu (2010) was selected to motivate the researchers to analyze and assess the participating students' responses to the GRePBC assignment for

the current study: *a learning process by which students apply previous knowledge and what they had read and learned in class to brainstorm, employ creativity and imagination to accomplish their [task], learn cooperation, learn to communicate with other team members, learn to respect multiple perspectives, and boost peer relationship* (italics in original, p. 357). The task in the definition refers to the GRePBC assignment that the participating students were required to complete in small groups. Additionally, creativity in the definition is "*an ability to generate novel ideas after continuously assembling, selecting, assessing, and connecting existing knowledge and/or prior experiences*" (italics in original, as cited in Wang, Chiu, & Wang, 2009, p.165; italics in original, as cited in Wang, Chiu, & Wu, 2010, p.357); imagination is "*an ability to form a vivid mental image of what has been studied and/or experienced*" (italics in original, as cited in Wang, Chiu, & Wang, 2009, p.165; italics in original, as cited in Wang, Chiu, & Wu, 2010, p.357).

2. Previous Studies

Following are three previous studies which showed that college students' positive attitudes toward the feasibility of e-/DVD-work creating on their critical thinking boost, picture book acquisition, or technology use.

Wang, Chiu, and Wu (2010) looked into fifty-two Taiwanese college students' responses to two assignments, English Picture-Book Creating (EPBC) and English Puppet Show DVD Creating (EPSDC). The data sources included an anonymous questionnaire, the teacher's journals, the students' reflection papers, the e-campus postings (http://e3.nfu.edu.tw/ecampus3/learn/), and the students' works (i.e., picture books and English puppet show DVDs). The results of the study indicated that the college students tended to agree that the EPBC and the EPSDC could help them to

learn about picture books and promote their critical thinking ability.

Wang, Ting, Lin, Yen, and Su (2013) unearthed sixty-one Taiwanese college students' responses to a place-based-learning e-Work Creating assignment. The data sources included an anonymous questionnaire, the students' e-works, the students' reflection papers, class observations, and follow-up e-mails. The results of the study indicated that the college students tended to agree that the e-work assignment could help them promote critical thinking ability, practice using technology, and learn about the Yunlin County where they were studying.

Wang, Jiang, and Wu (2014) worked on a research study aiming to investigate forty-one weekend-school students' responses to an e-Picture-Book Creating (ePBC) assignment in a Children's Literature course offered in the Fall Semester of 2009. The sources of data included a 6-point-scaled questionnaire, and the students'

e-picture-books and final exam papers. The results of the study showed that the ePBC assignment could help the students to learn about children's picture books (M=5.20), developed critical thinking (M=5.38), and boosted software literacy (M=5.00).

III. Methodology

1. Participants

For the sake of sampling convenience, two classes of freshmen (Class 1A: 60; Class 1B: 59) who were enrolled in the English Grammar II course in the Spring Semester of 2010 were recruited to be the participants of the current study at a rural university in mid-southern Taiwan (see Table 1). These 119 participating freshmen (M: 19; F: 100) were all Applied Foreign Languages (AFL) majors. Any freshman had the right at any time to refuse participation in this study. The participants' English names used in this paper are all pseudonyms for confidentiality.

Table 1. Demographic data: Class and gender

Class	Male	Female	Total
1A	7	53	60
1B	12	47	59
Total	19	100	**119**

2. Nature of the Class

AFL students were required to take this course in English Grammar II, and took a weekly class from the instructor for 100 minutes. The required course was mainly offered to day-school AFL-major freshmen in the Spring Semester of 2010. The textbook used in the course was 漢譯東華當代英文法下冊/*Tunghua Contemporary English Grammar – Chinese Version II* (楊/Yang ＆曾/Tseng, 2004). Through this course, students could enhance their knowledge of grammar and increase their ability to make sentences and complete short paragraphs as

well as critical thinking boost.

3. Grammar-Related e-Picture-Book Creating (GRePBC)

Simply put, the Grammar-Related e-Picture-Book Creating (GRePBC) assignment was designed to allow the students to be both receivers and creators. More specifically, the instructor incorporated the theory of critical thinking into the GRePBC assignment to encourage his students to learn about English grammar and boost their critical thinking. Each team of 2 to 4 people was encouraged to employ technology to create two grammar-related

e-picture-books before the mid-term exam and final exam respectively. It was required that the content of each e-book should be related to the major points of one chapter in the course textbook. Creative stories were preferred. Each team used the computer's microphones to record their picture books in their own ways. Before starting the GRePBC assignment, the class read and discussed sample picture books and e-picture-books produced by the instructor's previous students. Furthermore, each team had already had experience in creating a paper picture book in the English Grammar I course in the Fall Semester of 2009, and it was hoped that this could inspire them and provide a format they could employ and imitate while working on their e-books. In total, 64 e-books (Class 1A: 34; Class 1B: 30) were created and posted on the university e-campus (http://e3.nfu.edu.tw/ecampus3/learn/) for sharing and reviewing, with half of them before class in Weeks 8 and 17 respectively.

4. Invitation Activity

The instructor invited all his students to present their e-works, which were required to be posted on e-campus before class, team by team in an invitation activity in two consecutive class periods in week 8 and week 17 respectively. The main purpose of the invitation activity was to help students to review what grammar they had learned before mid-term and final exams respectively. Moreover, all the students felt free to write down any comments on and/or suggestions about any e-work presentation for their reflection papers and/or current class discussion.

IV. Data Collection

The data collection spanned a spring semester in 2010. The reliability of the study was ensured through data collection in an authentic classroom. As well as the electronic works which the student participants created in the English Grammar II course

and posted on the e-campus (http://e3.nfu.edu.tw/ecampus3/learn/), data sources included the students' responses to a 6-point-scaled course evaluation questionnaire, the students' reflection papers, and students' grammar-related e-picture-books.

1. Evaluation Questionnaire

Aside from the box for free comments or suggestions, the anonymous 6-point-scaled evaluation questionnaire was made up of 32 items and 6 sub-items for item 2, with a scale of 1 to 6 (1: strongly disagree, 2: disagree, 3: somewhat disagree, 4: somewhat agree, 5: agree, and 6: strongly agree). Such a scale allowed for Excel computation of mean values and response percentages. In the 18th week of the spring semester, all the students took their final exam in the classroom, followed by the completion of the questionnaires and the human subject forms. Among the scaled items, only the responses to items 1-2 and 6 sub-items for item 2 were analyzed and discussed in this study. The responses to the other items were not reported inasmuch as they were not tied to the current research. The valid response rate was about 80% (95/119) because 24 students' responses (20%: 24/119) were invalid (the 24 students rated item 6: If I rate this item, this questionnaire evaluation will be invalid).

2. Students' Reflection Paper

The students' reflection papers written in English, Mandarin or Mandarin-English constituted any comment on or suggestion about the whole class, especially blog paragraph completing and the GRePBC assignment. Concrete examples and quotations were necessary for the students to list in supporting their reflections. Plus, the students were encouraged to draw their mind maps to show the major points of their papers. These papers with mind maps were collected in week 18 and they were posted on the e-campus site

(http://e3.nfu.edu.tw/ecampus3/learn/) for sharing.

3. Students' Grammar-Related e-Picture-Books

The students' grammar-related e-picture-books were the combination of English grammar, art, and technology. Each group was required to complete one e-book and post their work before class in week 8 and week 17 respectively, when all the e-books were shown and discussed through the university e-campus blog to help students review related grammar for their mid-term and final exams respectively. The related grammar incorporated in the works was based on the fourteen chapters of the textbook listed below: determiners (chapter one), pre-determiners and limiters (chapter two), post-determiners (chapter three), adjectives (chapter four), relative clauses (chapter five), adverbs (chapter six), unreal tenses (chapter seven), infinitives (chapter eight), the uses of ing-forms (chapter nine), past participles (chapter ten), conjunctions (chapter eleven), sequence of tenses (chapter twelve), direct and indirect speech (chapter thirteen), and adverb particles and prepositions (chapter fourteen). The total of e-books collected on the university e-campus site (http://e3.nfu.edu.tw/ecampus3/learn/) was 64 (Class 1A: 34; Class 1B: 30)

V. Results and Discussion

The data analysis and discussion answered the two research questions. The excerpts in this section were from the students' free comments in the questionnaires and their reflection papers, with English versions or with English translations of their Chinese versions in braces "{}." In addition, all the English names used in the current study are pseudonyms for confidentiality.

1. How did the AFL freshmen respond to Grammar-Related e-Picture-Book Creating (GRePBC) from the perspective of English grammar acquisition?

In Table 2, the results for item 1, "*Grammar-Related e-Picture-Book Creating* helped me to learn about English grammar," demonstrated that 85 (90%) out of the 95 responding students strongly agreed (19%), agreed (37%) or somewhat agreed (34%) that the GRePBC assignment helped them learn about English grammar, which was also reflected in the mean value, 4.62, of item 1. Ten (10%) of the responding students somewhat disagreed (8%) or disagreed (2%) with the effectiveness of the assignment from the perspective of learning about English grammar; no responding student rated item 1 as "strongly disagree."

Table 2. Results for item 1 "*Grammar-Related e-Picture-Book Creating* helped me to learn about English grammar."

Rating*	6	5	4	3	2	1	Total
Valid Responses	18	35	32	8	2	0	95**
Percent	19%	37%	34%	8%	2%	0%	(100%)
Total	108	175	128	24	4	0	439
Mean Value							**4.62**
*6: Strongly Agree; 5: Agree; 4: Somewhat Agree; 3: Somewhat Disagree; 2: Disagree; 1: Strongly Disagree　　**The participant size was 119, but 24 responses were invalid.							

The possible reasons for these 8 "somewhat disagree" (8%) and 2 "disagree" responses (2%) from the free comments of the questionnaire included: improving English grammar by reviewing the textbook not the e-books (see Free comments 1 and 2), spending more time on pictures rather than the story of their e-works (see Free comment 3), and lacking the focus of the given chapter (see Ann's and Fang's passages).

Free comment 1: I usually [read] the text book to [r]eview [g]rammar. The [e-p]icture book is only a little part of the text book, so I don't use it [to improve my English grammar]. (Class 1B student)

Free comment 2: [The] text book is more useful for me to review English grammar. (Class 1B student)

Free comment 3: I think the [e]-book takes too much time, and we spen[t] time almost [on] pictures. [T]his doesn't work in [increasing] our grammar ability. (Class 1B student)

Ann (Class 1B student): However, it is a little pity that some groups do not point out which chapters they report and what [sentence] structures they use. Moreover, if the sound [(speakers' voices)] can be loud[er], it will be great.

Fang (Class 1B student): … some groups didn't mark out the point[s] of that given chapter [in their e-picture-books]. It made us have no idea of what they wanted to express.

Furthermore, one more possible reason was the unfamiliarity of technology use, including storyteller's low voices, small captions, and so on, as Yi wrote.

Yi (Class 1B student): After watching other groups' works, I felt it amazing! …. However, there are [still] some demerits in common, most of which are [that] background music [is] louder than speaker[s' voices], captions [are] too small, and important words [are] not clear, [and there are] no complete endings.

The positive results for item 1 are supported by many students' reflection papers. Most importantly, the students had to carefully study and understand the given chapters they drew to create their e-books; otherwise they did not know how to connect the given chapters to the contents of their e-works, just as Fang, Jen, and Rain wrote in their reflection papers respectively:

Fang (Class 1B student): … making e-picture-books let me clearly know what the point[s] of that [given] chapter, and I learn[ed] how to use those sentences correctly.

Jen (Class 1A student): We need to create two [e-]books in this term. In my opinion, it is [a] good way [to] let me practice how to use grammar [to make] correct sentences. Because the first thing we have to do is [to] study and understand each thing from the

textbook very clearly, and then start to write our stor[ies].…

This activity really interested me a lot… a good way to train myself how to connect all sentences [to become] a story. I really like this kind of way to learning English grammar.

Rain (Class 1B student): We can learn grammar and know the way [to] use it. We study not for the test but [for] homework. I think it is very interesting. This way can make student[s] want [to] learn more about grammar, because it is not boring and dull any more.

2. How did the AFL freshmen respond to Grammar-Related e-Picture-Book Creating (GRePBC) from the perspective of critical thinking?

In Table 3, the results for item 2, "*Grammar-Related e-Picture-Book Creating* helped me to increase my critical thinking ability," showed that 88 (93%) responding students strongly agreed (22%), agreed (43%) or somewhat agreed (28%) that the GRePBC worked in helping them increase their critical thinking ability, which was also reflected in the mean value, 4.79, of item 2. Seven students (7%) had somewhat negative (6%) or negative (1%) attitudes toward the feasibility of the assignment from the perspective of critical thinking ability development. However, none of the free comments of the questionnaire and the students' reflection papers could explain these negative responses to item 2, and a follow-up interview concerning the negative response could not be conducted since the questionnaires were completed anonymously.

Table 3. Results for item 2 "*Grammar-Related e-Picture Book Creating* helped me to increase my critical thinking ability."

Rating*	6	5	4	3	2	1	Total
Valid Responses	21	41	26	6	1	0	95**
Percent	22%	43%	28%	6%	1%	0%	(100%)
Total	126	205	104	18	2	0	455
Mean Value							**4.79**
*6: Strongly Agree; 5: Agree; 4: Somewhat Agree; 3: Somewhat Disagree; 2: Disagree; 1: Strongly Disagree　　**The participant size was 119, but 24 responses were invalid.							

Table 4 shows the results for sub-items 2-1 to 2-6 concerning the stimulation of creativity (2-1), imagination (2-2), respecting different ideas (2-3), cooperation (2-4), peer relationship (2-5), and communication skills (2-6). Interestingly enough, the difference between the mean value (M= 4.79) of item 2 (see Table 3) and the average, 4.95, of the mean values (5.02 + 5.02 + 5.16+ 5.18 + 4.73 + 4.56) of all the sub-items 2-1 to 2-6 (see Table 4) for item 2 was slightly different by 0.16. It follows from the result that all the responding students rated these items/sub-items very carefully and honestly. Therefore, the slight difference indicated that the statistics in Tables 3 and 4 were reliable, and that revealed the high trustworthiness of the study.

Table 4. Results for sub-items 2-1 to 2-6 "*Grammar-Related e-Picture-Book Creating* helped me to_____"

Item	M	6	5	4	3	2	1
2-1 stimulate my creativity.	5.02	n=31 33%	n=39 41%	n=22 23%	n=2 2%	n=1 1%	n=0 0%
2-2 stimulate my imagination.	5.02	n=32 34%	n=39 41%	n=19 20%	n=4 4%	n=1 1%	n=0 0%
2-3 learn to respect different ideas.	5.16	n=33 35%	n=46 48%	n=14 15%	n=2 2%	n=0 0%	n=0 0%
2-4 increase cooperation.	5.18	n=31 33%	n=52 55%	n=10 10%	n=2 2%	n=0 0%	n=0 0%
2-5 increase peer relationship.	4.73	n=21 22%	n=40 42%	n=25 27%	n=6 6%	n=2 2%	n=1 1%
2-6 increase communication skills.	4.56	n=12 13%	n=42 44%	n=30 32%	n=9 9%	n=2 2%	n=0 0%
* M= mean value　　**6: Strongly Agree; 5: Agree; 4: Somewhat Agree; 3: Somewhat Disagree; 2: Disagree; 1: Strongly Disagree　　***The participant size was 119, but 24 responses were invalid.							

The results for sub-item 2-1 (see Table 4), "*Grammar-Related e-Picture-Book Creating* helped me to increase my creativity," showed that 92 (97%) responding students strongly agreed (33%), agreed (41%) or somewhat agreed (23%) that the GRePBC assignment worked in helping them promote their creativity, which was also reflected in the mean value, 5.02, of sub-item 2-1. Only 3 (3%) responding students somewhat disagreed (2%) or disagreed (1%) that this assignment allowed them to stimulate their creativity. However, none of the free comments of the questionnaire and the students' reflection papers could explain these negative responses to sub-item 2-1, and a follow-up interview concerning the negative responses could not be done since the questionnaires were completed anonymously.

The results for sub-item 2-2 (see Table 4) presented that 90 (95%) responding students strongly agreed (34%), agreed (41%) or somewhat agreed (20%) that the GRePBC assignment worked in helping them inspire their imagination, which was also reflected in the mean value, 5.02, of sub-item 2-2. Only 5 (5%) responding students somewhat disagreed (4%) or disagreed (1%) that this assignment allowed for the development of their imagination. One reason was the free comment from a Class 1A student: {There was no relationship between imagination and grammar}. There might be not much connection between imagination and grammar, but imagination played a vital role in the completion of e-works such as picture drawing and contents.

The results for sub-item 2-3 (see Table 4) displayed that 93 (98%) responding students strongly agreed (35%), agreed (48%) or somewhat agreed (15%) that the GRePBC assignment helped them learn about respecting different ideas, which was also reflected in the mean value, 5.16, of sub-item 2-3. Only 2 (2%) responding students somewhat disagreed that this assignment allowed them to learn to respect different perspectives. However, none of the free comments of the questionnaire and the students' reflection papers could explain these negative responses to sub-item 2-3, and a follow-up interview concerning the negative responses could not be done since the questionnaires were completed anonymously.

The results for sub-item 2-4 (see Table 4) indicated that 93 (98%) responding students strongly agreed (33%), agreed (55%) or somewhat agreed (10%) that the GRePBC assignment worked in boosting their cooperation, which was also reflected in the mean value, 5.18, of sub-item 2-4. Only 2 (2%) of the responding students held a somewhat negative attitude toward the feasibility of the assignment from the perspective of cooperation development. One

reason for these two somewhat negative responses was the free comment from a Class 1A student: {I found it sort of hard to assign jobs because we had difficulty in getting together at the same time}. Another reason was a lack of involvement in the teamwork just as San, Wen, and Zen wrote in their reflection papers respectively:

> *San* (Class 1A student): …we met some difficulties in our team [in] the process of prediction. Somebody [didn't] like to do homework and [was] not positive enough to join this teamwork, [which] brought some argument and unfair[ness].

> *Wen* (Class 1A student): … some teammates were very busy engage[ing] in cheerleading [for the cheerleading contest in the anniversary school athlete]. Besides, we always have a lot of reports to do, so we had [little] time to discuss [our e-works].

> *Zen* (Class 1B student): Some people did not like to cooperate with others. So after he finished his part, he [did] not show up anymore.

The results for sub-item 2-5 (see Table 4) revealed that 86 (91%) responding students strongly agreed (22%), agreed (42%) or somewhat agreed (27%) that the GRePBC assignment worked in enhancing their peer relationship, which was also reflected in the mean value, 4.73, of sub-item 2-5. Nine (9%) responding students somewhat disagreed (6%), disagreed (2%) or strongly disagreed (1%) with the feasibility of the assignment from the perspective of peer relationship boost. However, none of the free comments of the questionnaire and the students' reflection papers could explain these negative responses to sub-item 2-5, and a follow-up interview concerning the negative responses could not be done since the questionnaires were completed anonymously.

The results for sub-item 2-6 (see Table 4) showed that 84 (89%) responding students strongly agreed (13%), agreed (44%) or somewhat agreed (32%) that the GRePBC assignment worked in enhancing their communication skills, which was also reflected in the mean value, 4.56, of sub-item 2-6. Eleven (11%) responding students somewhat disagreed (9%) or disagreed (2%) the assignment allowed them to boost their communication skills. However, none of the free comments of the questionnaire and the students' reflection papers could explain these negative responses to sub-item 2-6, and a follow-up interview concerning the negative responses could not be carried out since the questionnaires were completed anonymously.

The positive results for item 2 and sub-items 2-1 to 2-6 were supported by the students' reflection papers. For instance, Fong's reflection paper backed up the results for item 2 (critical thinking), and sub-items 2-1 (creativity), 2-2 (imagination), 2-3 (respecting different ideas), and 2-4 (cooperation).

> *Fong* (Class 1A student): …we got together to discuss our story before we took photos. Sometimes we had different opinions. We learned to accept other opinions and different ideas. We discussed again and again, we had a conclusion finally. After we discussed our story, we started to take photos. The last section is "[InAlbum.]" It is a big trouble to us, [b]ecause we did not know how to use

this software. But we followed the synopsis to understand its functions. And we completed our first e-picture book. And the second one was much easier [to finish]. [The software] was not a problem to us! About this work we needed our creativity to write a story and we shared it with our class. We learned much more information through other people's e-picture books. I think e-picture book is a good way of learning.

Lun's paper supported the results for item 2 (critical thinking), and sub-items 2-1 (creativity), 2-3 (respecting different ideas), and 2-6 (communication skills boost).

> *Lun* (Class 1B student): … I love working on the e-picture book[s]. I [could] put a lot of interesting ideas in our story. Although it had taken time to discuss our topics and stories, it was really fun. It also made me know how to negotiate with my teammates. Even though I [had some] quarrels with my teammates sometime[s], I tried to stand in each other's viewpoint.

Ying's reflection paper bolstered the results for item 2 (critical thinking), and sub-items 2-1 (creativity), 2-2 (imagination), 2-3 (respecting different ideas), 2-4 (cooperation), 2-5 (friendship), and 2-6 (communication skills boost).

> *Ying* (Class 1B student): …we had ever done a picture book last semester. In this semester, the degree of difficulty was higher than before. At

first, we had no ideas. We spent much time discussing and thinking what to do. During the process, we were ever frustrated and even wanted to give it up. However, we cheered and encouraged each other. We integrated our creativity [and] imagination and finished our e-picture book. Although we met a lot [of] trouble[s] during the process, we had a sense of accomplishment when we finished the assignment. Sometimes we might think assignments were troublesome. …. We had to accept different ideas and communicate with each other. I think that teamwork was the most important among each activity. Needless to say, cooperation, communication and respect were also important.

3. Another finding

A lot of students mentioned that the GRePBC assignment helped them to increase their computer literacy, such as editing pictures/drawings and recording voices, as Sue and Yun wrote respectively.

> *Sue* (Class 1A student): [For the first e-book], we didn't had the experience of creating [an] e-picture book, and we didn't know how to use the software, either. After creating the story, our group members decided to use "Flash" to create our e-picture book. "Flash" is not easy to use. I think it was very complicated, but finally, we still finished it, and [we were] skilled in using "Flash[.]" [For the second e-book], we also used "Flash" to create our e-picture book, and I drew the picture[s]

by myself, and also put the music in our story, this would make our e-picture book more colorful and more attractive.

Yun (Class 1B student): The e-picture book is much more difficult [to complete] than picture books we made last semester. Making [an] e-picture book needs some computer skills. Thanks to this homework, I have learned how to use some software to make animation. … I learned to use InAlbum which is [a] useful software to make some easy little animation[s].

VI. Conclusion

The results of the study were beneficial in several ways, and the ideas the researchers had set out for subsequent researches were in line with significant findings of the study:

1. Through the GRePBC assignment, the researcher gained information about the student participants' learning about English grammar and e-picture-books, mastering technology use like InAlbum, and developing critical thinking. Such information can contribute to the practice, theory and research in the educational fields of English grammar, picture books, critical thinking, software literacy, and effective teaching.

2. Presented in class and posted on the e-campus site for sharing and discussion, the students' e-works can mirror an alternative to learning about English grammar and fostering critical thinking through the creation of e-works.

3. The GRePBC assignment may be easily adapted to different educational levels and settings, which can allow students to learn about reading materials and provide an opportunity to develop their critical thinking through the exploration of their own

experiences, memories, and aspirations, and even their cultures. Additionally, the results of the study may encourage interested instructors to design their creative assignments and instructional activities in their teaching contexts, such as English Writing and English Reading, to achieve the same goals as above.

4. Interested researchers may conduct similar and/or advanced research studies concerning the GRePBC assignment to contribute to the fields of English grammar, children's literature, software literacy, and critical thinking.

5. From the instructor's belief to his students' creating of e-works, innovation was happening, and that made teaching and learning a bit more critical and rewarding. Through this study, educators may become aware of students' potential for creative learning and critical thinking, especially creativity and imagination. As such, educators may design their assignments and/or activities for their students to be creative and critical learners.

VII. Limitations

There are two limitations in the current research study:

1. The results of the study cannot be generalized to students of any level, age, or situation, because this study was limited to the demographics of two classes of English Grammar in one rural university setting.

2. A few students may have completed their reflection papers in a more positive way to please their instructor in the hope for improved scores for their assignments. This may have made it difficult to find students' negative responses to the GRePBC assignment.

References

Chinese References

(with English translation by the researchers)

1. 楊景邁、曾淵培。*漢譯東華當代英文法下冊*。台北市:東華。

   Yang, C.-M., & Tseng, Y.-P. (2004). *Tunghua contemporary English grammar – Chinese version II*. Taipei City: Tunghua.

English References

1. Chance, P. (1986). *Thinking in the classroom: A survey of programs*. New York, NY: Teachers College, Columbia University.

2. Facione, N., & Facione, P. (1994). *Holistic critical thinking scoring rubric*. Millbrae, CA: California Academic Press.

3. Keefe, B. (2010). Four brains are better than one. *English Journal, 99*(5), 24-25.

4. Krieger, C. M., & Perry, K. (2010). Off the shelves. *English Journal, 99*(5), 103-106.

5. Ku, K.Y.L. (2009). Assessing students' critical thinking performance: Urging for measurements using multi-response format. *Thinking Skills and Creativity, 4,* 70-76.

6. Profetto-McGrath, J. (2005). Critical thinking and evidence-based practice. *Journal of Professional Nursing*, *21*(6), 364-371.

7. Sharma, M. B., & Elbow, G. S. (2000). *Using Internet primary sources to teach critical thinking skills in Geography*. Hong Kong: Greenwood Press.

8. Unrau, N. J. (2008). *Thoughtful teachers, thoughtful learners: Helping students think critically (2nd ed.)*. Guernsey: Pippin.

9. Wang, C.-H. (2006). *Educational bibliotherapy study: Taiwanese college students responses to Tuesdays with Morrie*. Taipei City, Taiwan: Crane.

10. Wang, C.-H. (2008). Picture book creating and an invitation activity in a children's literature classroom. *Studies in English Language and Literature, 21*, 63-76.

11. Wang, C.-H. (2009). Teaching activities for English conversation practice and critical thinking/writing. *Studies in English Language and Literature, 23*, 11-22.

12. Wang, C.-H., Chiu, C.-Y., & Wang, J. (2009). Children's poem writing (CPW) in an English Children's Literature class. *Journal of Foreign Language Instruction, 3*(1), 163-179. (NSC-96-2411-H-150-004)

13. Wang, C.-H., Chiu, C.-Y., & Wu, W.-S. (2010). English picture-book creating (EPBC) and English puppet show DVD creating (EPSDC). *The International Journal of Learning, 17*(4), 355-379. (NSC-96-2411-H-150-004)

14. Wang, C.-H., Jiang, S.-G., & Wu, W.-S. (2014). e-Picture-Book Creating (e-PBC) in the Children's Literature Classroom. *Journal of National Formosa University, 32*(2), 81-98.

15. Wang, C.-H., Lin. C.-F., Wu, T.-Y., & Liu, H.-H. (2010). Children's Poem Writing (CPW) for learning about children's poetry and developing creativity and imagination. *Pre-Conference proceedings of Asian EFL Journal international conference 2010* (CD-R), 770-779. Providence University, Taichung County, Taiwan.

16. Wang, C.-H., Ting, M.-H., Lin, D.-W., Yen, H.-C., & Su, P.-S. (2013). e-Work creating for place-based learning. *The International Journal of Technology, Knowledge and Society*, *8*(4), 49-64.

17. Wang, C.-H., Wang, J., Wu, Y.-Z., & Kuo, J.-M. (2005/2006). Literacy in English conversation through critical thinking and writing. *International Journal of Learning*, *12*(8), 95-105.

18. Wang, C.-H., Wu, Y.-Z., Fang, Y.-C, & Wang, J. (2006). Instructional activities for critical thinking and writing. *Journal of National Formosa University (NFU), 25*(3), 81-92.

英文文法課的文法 e 繪本創作

王清煌 [1*]　約翰‧阿姆斯壯 [2]　吳偉西 [2]　溫瀅雅 [3]　王文仁 [4]

[1*]國立虎尾科技大學應用外語系　教授
[2]國立虎尾科技大學應用外語系　助理教授
[3]國立虎尾科技大學應用外語系　講師
[4]國立虎尾科技大學通識中心　副教授

摘　要

　　在臺灣日間部應用外語系大一新生的「英文文法課」裡，兩個班級的學生同時參與「文法 e 繪本創作（GRePBC）」的活動，該活動目的是讓學生透過多媒體媒介，學習英文文法和培養創意(批判)思考能力。本研究旨在發掘 119 名新生對此項活動的反應，並聚焦於兩個議題:(1)應外系新生如何從英文文法學習的角度回應「文法 e 繪本創作（GRePBC）」?和(2)應外系新生如何從創意(批判)思考的角度回應「文法 e 繪本創作（GRePBC）」?本研究的資料來源，包含一項 6 級分的問卷、學生的學習心得報告，以及他們的「e 繪本」。研究結果顯示，119 名新生約有 90%傾向認為「文法 e 繪本創作（GRePBC）」活動有助於他們學習英文文法，將近 93%的新生認為這項作業提升了他們的創意(批判)思考能力。此外，許多學生認為他們使用軟體的能力有所增長。因此，期待感興趣的老師在他們教學中運用這樣的活動，幫助學生們提升英文文法的知識、創意(批判)思考能力和多媒體能力。感興趣的研究人員不妨在未來更進一步研究關於 GRePBC 的活動，在研究、理論與教學的相關領域造就更宏偉的貢獻，諸如兒童文學，創意(批判)思考素養，以及多媒體技能等。

關鍵詞:文法 e 繪本創作、創意(批判)思考、繪本、多媒體技能

*聯繫作者：國立虎尾科技大學應用外語系，63208 雲林縣虎尾鎮文化路 64 號
Tel: +886-5-6315814
E-mail: chinwang@nfu.edu.tw