

An Evaluation of Visualization Activities' Effectiveness in EFL Reading

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Abstract—Visualization activities aim to help the language learners to build mental pictures while reading literary and creative texts. The application of such activities in reading class is to guide students to transform reading materials into visual images. Students can share their understanding of texts by illustration or dramatization. Teachers can also judge students' reading comprehension from their presentation.

Keywords—reading; visualization; illustration; dramatization

I. INTRODUCTION

Reading is one of the four basic skills in language learning. However, quite a few EFL learners are not successful in reading, and their reading ability is unsatisfactory. Alderson (2000) points out that the problems can be solved by using different kinds of instructional materials and reading instruction, which includes reading strategies. Many reading strategies have been developed for EFL learners. Visualization as a means of reading comprehension is not new in reading research. There are many researchers (Tomlinson 1998, Gambrell 1993, Keene & Zimmermann 2006, Zeigler 2008) who focus on visualization as a reading strategy. Visualization is the ability to build mental pictures or images while reading (Block et al. 2004: 140). Nowadays, people are bombarded with the visual images of TV or video games everywhere. It is obvious that rather than written texts, visual images are more understandable and people are more willing to accept pictures. Visualization activities, in a general way, include static ones (pictures, drawings, illustration) and dynamic ones (dramatizing, miming, movie). Such activities are developed for giving EFL learners a chance to share their reading comprehension through visuals. Then, whether visualization activities help EFL learners to comprehend the text or not? To what extent are visualization activities effective in EFL reading class? These questions are going to be discussed in this paper.

II. STUDIES ON VISUALIZATION ACTIVITIES IN EFL READING

Early in 1976, Pressley did an experiment on mental imagery strategy in helping third-grade children remember stories. The results indicate that the imagery group outperformed the control group with no significant difference in reading times. A similar study was done by

Gambrell (1982) with the first and third graders and similar results were obtained. The similar results also appeared in Gieson and Peeck's experiments (1984, cited in Sadoski and Paivio 2001: 178) with college students. The above studies show that the effect of visualizing in text comprehension is better than other reading strategies.

Tomlinson (1998) did a study in helping L2 readers to visualize. He starts his research with the effectiveness that L1 readers get from visualizing the text. Then, he supposes that whether L2 readers could get the benefit as well or not. His experiments prove the hypothesis that "increasing an L2 reader's ability to visualize can facilitate positive engagement with the text and can increase readers' ability to comprehend and retain what is read." (1998: 270) In a further study, Tomlinson suggests visualization activities like drawing, illustration, miming, and connection activities for helping L2 readers to visualize more effectively.

Hibbing and Rankin-Erickson have done a study on asking students to reflect on a quote "a picture is worth a thousand words". They found out that the students "who lack the ability to create visual images when reading often experience comprehension difficulties." (2009: 32) Further, they presented a summary of points on using sketches, illustrations, picture books, and movies for reluctant and low-ability middle school readers. They believe that mental image can help to enhance reading comprehension as many other researchers do as mentioned before.

Arnold (1999: 271) states, "it is helpful to use visualization throughout the reading process...visualization can prime the existing schema to facilitate comprehension or to enrich production." Camille and Ogle (2008: 150) believe that visualization is "a hallmark of good readers". Readers paint a picture in their head of what is going on in the text. They believe that helping students to gain visualization skills is an important way to foster greater comprehension when reading. Thus, with inefficient readers who lack adequate decoding skills, a visual interpretation of the texts will be a good choice for assisting their comprehension. In other words, it is supposed that if a teacher can instruct students to visualize the texts through visualization activities, it would probably help EFL reading comprehension.

III. METHODOLOGY

The study was carried out in three classes (one control class and two visualization classes) at Fuzhou University of International Studies and Trade (FUIST). All the students in

these classes were freshmen. Control class (CC) and visualization class one (VC1) are majored in environmental design. Visualization class two (VC2) major in television director. "Table I" shows the basic information of the three participating classes

TABLE I. BASIC INFORMATION OF THREE CLASSES

Class	Abbreviation	Major	Number of Students in class	Average Scores of English in College Entrance Examination
Visualization Class 1	VC1	Environmental Design	37	80.67
Visualization Class 2	VC2	Television Director	49	82.33
Control Class	CC	Environmental Design	41	78.5

The number of students in the three classes is 37 in VC1, 49 in VC2 and 41 in CC. Since the study was done by their first semester in college, the English scores in the college entrance examination can be regarded as pretest scores. As shown in "Table I", the average scores of each class are not much different. In the test with a full score of 150, VC1 scores 1.66 lower than VC 2 and 2.17 higher than CC. This slight difference can be simply considered that the English level of the students in the three classes is basically at the same level.

The researcher was also an English teacher who was in charge of lesson plans, implementation and assessment for the three classes. *50 Great Short Stories* (50 Stories) was used as supplementary reading materials in this course.

In this study, VC1 was asked to draw illustrations for one of the 50 Stories every month, and VC2 was asked to drama the same story at the same time. There are four stories read by VC1 and VC2 during the 16-week course. The four stories are *Graven Image* by *John O'Hara* (Story A), *A Haunted House* by *Virginia Woolf* (Story B), *The Foreigner* by *Francis Steegmuller* (Story C), *The Chaser* by *John Collier* (Story D). They were selected randomly from the 50

Stories. The length of each story is about 1500 words. The difficulty of reading is slightly higher than the course book. CC was asked to read the same stories without any guidance from the teacher about visualization activities. After the course, all the students were asked to take a reading comprehension test for the four stories as a post-test. The content of the test is mainly about the plot of the stories, most of which are 5WIH (who, when, where, what, why, how) questions. The total score of the reading comprehension test is designed to be 150 points, which is the same as that of the college entrance examination. The effectiveness of visualization activities in reading would be find out by comparing the scores of the two tests.

IV. DATA ANALYSIS AND DISCUSSION

There were 126 students participated in reading comprehension test. One student from VC2 was absent because of personal leave. The test results are divided into three grades according to the scores. Those above 120 are excellent. The score of 90 to 120 is medium. If the score is lower than 90, it will be considered as failure. For easy viewing and analysis, the data is listed in the following table.

TABLE II. TEST RESULTS

Class (Activities)	Number of Students in test	Number (percentage) of Excellent	Number (percentage) of Moderate	Number (percentage) of Fail	Average score of test
VC1 (Illustration)	37	11 (29.73%)	23 (62.16%)	3 (8.11%)	104.79
VC2 (Dramatization)	48	4 (8.33%)	35 (72.92%)	9 (18.75%)	96.41
CC	41	2 (4.87%)	27 (65.85%)	12 (29.27%)	91.1

From "Table II", it can be seen that among the three classes, VC1 has the highest average scores (104.79) in reading comprehension test, which can be explained that the students in this class have a better understanding of the four stories they read than the other two class. In other words, illustration is more effective for reading comprehension than dramatization (96.41) or doing nothing (91.1). This is

probably because illustration is a task that students need to complete independently. In order to complete the task, students have to devote themselves to the reading materials. The process of students trying to turn texts into illustrations may enhance the understanding of the reading materials. When they draw illustrations, the processes they decide what to draw and how to draw also strengthen the understanding.

In addition, the proportion of excellent students (29.73%) in VC1 is higher than that in VC2 (8.33%), while the proportion of moderate students (72.92%) in VC2 is higher than that in VC1 (62.16%). The reason also can be explained by the nature of the activities. Compared to completing illustrations independently, dramatization activity is a task which needs to be done in groups. Due to the different division in cooperation, students' participation in the task is different. In such kind of activities, those students with a higher sense of responsibility or English proficiency may take on more important tasks, such as playing the leading role in the story or to be a leader in groups. This may explain why the proportion of excellent scores (8.33%) in VC2 is less than that of moderate (72.92%) and failure (18.75%). After all, the group leader and the leading role are in the minority. Besides, the students who don't like English or have poor grades may choose simple tasks. Then, their participation in the activities is reflected in the results. That also explains why in the test results, compared to doing nothing, dramatization activity also helps reading comprehension to a certain extent. In this case, it can be concluded that the higher the participation in the visualization activities, the better the reading comprehension.

Through the study, the researcher also found that the results tend to agree with Gavlean's research (1983, cited in Miller 2007: 100) that after visualization activities students are more attentive; enjoy the learning experience; do more original and creative work; feel confident; are more relaxed. These positive feedbacks can be seen from students' expression. They seemed to enjoy watching their classmates' performances in dramatization activities. They also claimed that while drawing illustrations, they often had to read the story repeatedly so that they could draw the details. Both visualization activities could provide opportunities for them to show their creativity and imagination on interpreting literary texts.

As it should be, the above results do not show that visualization activities can be used perfectly in reading comprehension. There are still some restrictions on such activities. First of all, these activities are time-consuming. Although they can help students understand the story better, the efficiency of reading is not high. It may take several hours or even more for students to understand a short story. Secondly, illustration activities may not work out smoothly for those who are not good at drawing. Although the beauty of illustration is not required, the ability of drawing may restrict students' expression of stories. Some students may understand the story, but they were not able to draw the details. However, this does not affect the results since the experiment was to test their reading comprehension, but not to evaluate their illustration works. Thirdly, visualization activities are quite picky of reading materials. Illustration activities are mainly suitable for reading materials with more descriptive words, while dramatization activities are suitable for those with more conversational words. Both activities may not work for other types of reading materials.

V. CONCLUSION

The results of the above statistics reflect the application of visualization activities in reading by non-English major freshmen in FUIST, however, the number of participants is limited. Therefore, the reference value of activity effectiveness may change with the scope of the study. Also, due to the limitation of teaching arrangement and time, the experiment could not be quantified and averaged. The cooperation and participation of different students will make the results accidental.

As Aristotle, the ancient Greek philosopher, said, the soul never thinks without an image. Visualization activities can help students to turn the text into a visual view to a certain extent, and thus deepen the understanding and impression of reading materials. Different visualization activities have their own advantages and disadvantages. In reading teaching, teachers should choose such activities according to different materials, pay attention to the characteristics of students, strengthen teaching guidance and activity management, get familiar with and develop more effective activities, so as to improve their effectiveness in reading comprehension more successfully.

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