Effectiveness of Question-Answer-Relationship Strategy in Improving the Reading Comprehension of the Second Year BSED English Major Students

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Abstract: This pre-experimental study sought to determine the effectiveness of Question-Answer-Relationship (QAR) strategy in improving the reading comprehension of 28 Second Year Bachelor of Secondary Education English major students enrolled during the Academic Year 2016-2017 in one of the colleges in Angeles City, Philippines. One-group pre-test-post-test design was employed in the study. Parallel forms of pre-test and post-test including a self-evaluation form were utilized for data collection. At the onset of the experiment, the researchers conducted a reading comprehension pre-test among the participants. Subsequently, a ten (10) day QAR strategy immersion was employed to the participants as the intervention phase. After completing the immersion, the researchers conducted a post-test on the participants' reading comprehension. A self-evaluation form was also accomplished after the post-test. Results show that a significant difference is evident between the participants' pre-test and post-test scores wherein a higher mean score was observed in the post-tests (20.89) compared to participants' pre-tests (19.82). Furthermore, based on the participants' responses on the self-evaluation form, more than half of them reported that they became better and feel confident at answering comprehension questions after learning the QAR strategy. All participants also agreed that they will recommend the QAR strategy to their peers. Therefore, this study concludes that employing the QAR strategy is effective in improving the reading comprehension of the students.

Key Words: question-answer-relationship strategy; reading comprehension

Reading has always been an integral part of human existence. In the past, reading was all about getting meaning from the printed page. It was simply considered as a receptive phase of written communication (Alcantara, Cabanilla, Espina, & Arcelli, 2003). However, due to the inevitability of change, modern philosophers, educators, authors, and experts from different realms gave reading a multi-level definition and acknowledgement of its importance to the society. While reading can be defined as a multi-faceted process that requires a cautious and methodical instructional approach (Healy, 2002), reading can also be considered as an interactive, problem-solving process of interpreting meaning from the text (Hughes, 2007). Modern developments in reading also emphasize involvement of perceptual learning, cognitive, analytic, interactive, associative and strategic skills, emotional satisfier, and meta-cognitive

activity (Alcantara et al., 2003). Taking all definitions as well as the modern reading trends into consideration, it can be inferred that reading, just like any other sources of knowledge had also underwent a huge turnabout. To individuals who have an affinity for reading, see reading as an important affair with relative reasons and purposes. Similarly, regular people have diverse aims and intentions in reading which vary from simply reading for pleasure, obtaining and verifying information, to checking text accuracy (Nunan, 2010). Whether a person reads for relaxation, information or both, he or she needs to read with comprehension which is the focal point of reading.

Comprehension is the goal of reading. Reading comprehension is one of the pillars of the act of reading. When a person reads a text, he engages in a complex array of cognitive activity. The person simultaneously uses his awareness and

understanding of phonemes, phonics and ability to comprehend or construct meaning from the text (K12Reader, 2008). Without comprehension, reading will be just like going through the words on a material from left to right without interpretation. The words on the page will hold no significance at all. Despite the fact that people read for various reasons, the topmost objective of reading is and will always be to derive understanding or to comprehend what the writer or author of a reading selection wants to convey. Once the information has been processed, putting the information into action comes next. This is why reading with comprehension is very important. So in order to learn how to read with comprehension, there is a need for readers especially students to strategize or find ways on how they can instantaneously process text and meaning from a reading material or article. Thus, teachers are faced with constant challenges of addressing the needs of their students particularly in identifying certain comprehension strategies that will improve their students' reading abilities.

Generally, comprehension strategies help students become purposeful and active readers who are in control of their own reading comprehension (Adler, 2016). However, previous studies revealed that some of these strategies have been found to have contradicting effects on students' reading comprehension. One of them is the QAR or Question-Answer-Relationship strategy that aims to "clarify how students approach the tasks of reading texts and answering questions" (Raphael, 1986, p.176). This strategy consists of different levels of questions namely: Right There; Think and Search; Author and Me; and On My Own questions (Eanes as cited in Par, 2011). While some studies reported that QAR strategy is effective and has positive effect on students' reading comprehension (Cummins, Strieff & Ceprano, 2012; Hosseini Faard & Rimani Nikou, 2014; Par, 2011; Peng, Hoon, Khoo, & Joseph; 2007), other researches revealed that this strategy had negative or no significant effect on students' reading ability (Johnson, 2014; Kucera, 2009; Stafford, 2012). Also, while this strategy has been extensively researched in foreign settings, related studies involving Filipino students were not encountered.

Given these conflicting results and the lack of similar studies in the Philippines, the researchers were motivated to carry out this study with the hope of adding relevant information on the effect of QAR strategy in the reading comprehension of Filipino students. Specifically, it aims to achieve the following objectives: 1) to describe the participants' pre-test scores in reading comprehension prior to the intervention and participants' post-test scores after the 10-day QAR strategy immersion; 2) to determine if there is a significant difference between the participants' pre-test and post-scores in reading comprehension; and 3) to describe the participants' responses in the self-evaluation form.

2. METHODOLOGY

2.1 Research Design

This pre-experimental study employed one-group pre-test-post-test design. This kind of research approach involves formal, objective, systematic process in which numerical data are used to obtain information about the world. This research method is used to describe variables, examine relationships among variables and determine cause-and-effect interactions between variables (Burns & Grove, 2005).

2.2 Participants

Participants of the study comprised of 28 Second Year Bachelor of Secondary Education English major students enrolled during the Academic Year 2016-2017 in one of the Colleges in Angeles City, Philippines. Three (3) were males and twenty-five (25) were females. The researchers executed the total enumeration technique where the entire population was considered in the study.

2.3 Instruments

Four (4) instruments were utilized in the study: 1) pre-test; 2) post-test; 3) short response rubric and 4) self-evaluation form. All instruments were validated by three (3) Language experts. Parallel forms pre-test and post-test consist of 26 items that measure students' reading comprehension. To test the reliability of the tests, Raagas and Ramos' (2007) software for item analysis was used. Students' test scores who participated in the pilot test were utilized for item analysis. Computed values of .75 for pre-test and

.81 for post-test were obtained using the Kuder-Richardson Formula (KR20) which indicate that both tests are reliable.

The literary pieces for both pre-test and post-test, *The Aged Mother* by Basho and *The Soul of the Great Bell* by Lafcadio were taken from online sites. On the other hand, the short response rubric which was used to score the participants' answers on the Author and Me and On My Own questions along with the self-evaluation form were adopted from a similar study conducted by Peng, Hoon, Khoo, and Joseph (2007).

During the 10-day strategy immersion, four (4) reading selections were used to check the participants' understanding of the strategy. To assess the participants' understanding of the first category of QAR –*In the Text*- the researchers lifted the stories *A Boy so Young* from Menez (1999) and *The Country's Good Son* from Thein (1999). In order for the researchers to check the participants' understanding of QAR's second category –*In My Head*- literature pieces, *Scheherazade* and *Emperor's Seed* were used. Both literatures were taken from online sites.

2.4 Data Gathering Procedure

At the onset of the study, the researchers conducted a reading comprehension pre-test among the participants wherein an hour was allotted to answer the test.

After the pre-test, the ten (10) day QAR immersion commenced. Day 1 was spent giving a brief introduction of QAR Strategy, distribution of handout to the participants, discussion of the *Right There* strand, framework modeling using the short fable *Belling the Cat* by Aesop which was then followed by a ten (10) item multiple-choice test. In Day 2, the researchers distributed the participants' results in the *Right There* test. A short review of the Right There strand was done. The researchers entertained QAR-related questions from the participants to tie any loose ends from the first strand. Day 3 started with a brief review of the *Right There* strand and was immediately followed by an introduction and discussion of the *Think and Search* strand. The researchers used the same fable *Belling the Cat* for framework modeling and gave the participants another set of ten (10) item multiple-choice test. In day 4, the researchers distributed to the participants the results of their

test from the previous day. A short review of the *Think and Search* strand was done. The researchers entertained queries regarding the second strand. And that ended the immersion for the *In the Text* category of the QAR strategy. For the next category, the researchers decided to add a day per strand to ensure understanding on the part of the participants. Hence, three (3) days were allotted for each strand in the *In my Head* category. For day 5, the researchers gave the participants a brief recap on QAR Strategy and *Think and Search* strand. It was followed by an introduction and discussion of the *Author and Me* strand. Aesop's fable *Belling the Cat* was once again used for framework modeling. Day 6 was spent on reviewing *Author and Me* strand and giving the participants a test where they are asked to give a short response to the five (5) questions or tasks given to them. The participants' answers were graded using a standardized rubric where a maximum of two (2) points and a minimum of zero (0) point is given to each item depending on how effective the participants answered the question or task. Day 7 was when the researchers distributed the participants' results in the *Author and Me* test. A short review of the *Author and Me* strand happened, followed by exchange of questions and answers among the researchers and the participants. For the day 8 of the immersion, the participants were given a recap of the *Author and Me* strand. It was followed by an introduction and discussion of the *On my Own* strand. For framework modeling, Aesop's *Belling the Cat* was used. In day 9, the researchers briefly discuss the *On my Own* strand followed by a short-response test. Just like all the tests given throughout the treatment, the participants were given thirty (30) minutes to answer. The final (10th) day of the immersion was when the researchers distributed to the participants the results of their *On my Own* test followed by an exchange of questions and answers. An overall recap on the QAR Strategy and its strands was also accomplished to prepare the participants for the post-test. After the ten-day immersion in the strategy, the participants were given a twenty-six (26) item post-test on reading comprehension to be answered for an hour. Afterwards, a self-evaluation form was accomplished.

2.5 Data Analysis

This study utilized both descriptive and inferential statistics. While the participants' pre-test and post-test scores along with their responses on the self-evaluation form were presented using frequency and percentage count, mean, mode, and standard deviation, significant difference between the pre-test and post-test scores were determined using the paired sample t-test. A level of significance of 0.01 was used to determine if significant difference exists between the participants' pre-test and post-test scores.

3. RESULTS AND DISCUSSION

Reflected on Table 1 is the frequency and percentage distribution of the participants' pre-test scores in reading comprehension test. One (3.6%) out of 28 students had the lowest score of 14 while 2 (7.1%) students had the highest score of 23. Furthermore, 6 (21.4%) students had scores of 20 and another 6 (21.4%) students with scores of 21. The test given prior to the 10-day QAR strategy established the participants' baseline in their reading comprehension. This data served as basis to test the effectiveness of the intervention by comparing it with the participants' post-test scores.

Table 1. *Participants' Pre-test Scores in Reading Comprehension Test*

Raw Score	Frequency	Percent
14	1	3.6
15	1	3.6
16	2	7.1
17	3	10.7
18	2	7.1
19	3	10.7
20	6	21.4
21	6	21.4
22	2	7.1
23	2	7.1
Total	28	100

Table 2 presents the frequency and percentage distribution of the participants' post-test scores in reading comprehension test. One (3.6%) out of 28 students had the lowest score of 15 while 1 (3.6%) student also got a perfect score of 26. Results further show that 6 (21.4%) students had scores of 24. This indicates a movement in the participants' post-test scores as compared to their pre-test scores.

Table 2. *Participants' Post-test Scores in Reading Comprehension Test*

Raw Score	Frequency	Percent
15	1	3.6
16	2	7.1
17	4	14.3
18	3	10.7
19	1	3.6
20	2	7.1
22	3	10.7
23	2	7.1
24	6	21.4
25	3	10.7
26	1	3.6
Total	28	100

Table 3 shows the difference between the participants' pre-test and post-test mean scores and standard deviation. Based from the results, it can be observed that the mean score of the participants' pre-tests prior to the 10-day QAR strategy immersion is 19.32 with a standard deviation of 2.36. On the other hand, the participants' post-test mean score after the intervention is 20.89 but with a standard deviation of 3.45. This implies that while participants' post-test scores improved due to the difference of mean scores from their pre-test, this also means that their post-test scores are more dispersed compared to their pre-test scores. In addition, the computed value of 0.008 which is less than the 0.01 level of significance indicates a significant difference between the pre-test and post-test scores. Therefore, it can be concluded that the QAR strategy is effective in improving the reading comprehension of BSED-II English students.

Based from the present findings, it is evident that the use of QAR strategy significantly

improved the students' reading comprehension. In fact, results of this study give credence to similar studies which reported that students who were taught the QAR strategy had improvements in their reading comprehension compared to the ones who were not immersed in the strategy (Cummins, Streiff & Ceprano, 2012; Hosseini Faard & Rimani Nikou, 2014; Par, 2011; Peng, Hoon, Khoo, & Joseph (2007). However, present finding also disproves previous claims that QAR strategy had negative or no significant effect on students' reading comprehension (Johnson, 2014; Kucera, 2009; Stafford, 2012).

Table 3. *Difference between Participants' Pre-test and Post-test Scores in Reading Comprehension Test*

	Pre-test Scores	Post-test Scores
Mean	19.32	20.89
Standard Deviation	2.36	3.45
Sig. (2-tailed)	.008**	

**-significant at 0.01 level

Table 4 shows the participants' responses on the self-evaluation form given by the researchers after the 10-day intervention. It is evident that more than half of the students strongly agree that they became better and feel confident at answering comprehension questions after learning the QAR strategy. Same finding was also observed in a previous study where more than half of the Primary 6 pupils who were taught the QAR strategy felt more confident about answering comprehension questions after learning the strategy (Peng, Hoon, Khoo, & Joseph, 2007). Results of this study further revealed that majority of the students strongly agree that they find the QAR strategy for answering comprehension questions helpful (71.4%) and will continue to use the QAR strategy when answering comprehension questions (78.65). Lastly, the table shows that all (100%) students mentioned that they will recommend the QAR strategy to their peers. Indeed, QAR strategy can improve students' reading comprehension. Significant difference between pre-test and post-test scores was further proven by the result of the self-evaluation form given to the participants.

Table 4. *Participants' Responses on the Self Evaluation Form*

Statement	SA (1)	A (2)	D (3)	SD (4)	Mode	Des.
I know how to use the QAR strategy to answer comprehension questions.	12 (42.9)	15 (53.6)	1 (3.6)	0	2	Agree
I was good at answering comprehension questions prior to learning the QAR strategy	8 (28.6)	17 (60.7)	3 (10.7)	0	2	Agree
I became better at answering comprehension questions after learning the QAR strategy.	18 (64.3)	10 (35.7)	0	0	1	Strongly Agree
I feel confident answering comprehension questions after learning the QAR strategy.	14 (50.0)	13 (46.6)	1 (3.6)	0	1	Strongly Agree
I find the QAR strategy for answering comprehension questions helpful.	20 (71.4)	8 (28.6)	0	0	1	Strongly Agree
I will continue to use the QAR strategy when answering comprehension questions.	22 (78.6)	6 (21.4)	0	0	1	Strongly Agree

Statement	Yes (1)	No (2)	Mode	Des.
I will recommend the QAR strategy to my peers.	28 (100.0)	0	1	Yes

4. CONCLUSIONS

The Question-Answer-Relationship (QAR) strategy is effective in improving the reading comprehension of Second Year BSED English major students. More than half of the participants strongly agree that they became better and feel confident at answering comprehension questions after learning the QAR strategy. More so, all participants will recommend QAR strategy to their peers.

Given the limitations of this study, the researchers recommend conducting another similar study employing more sophisticated experimental designs such as involving both experimental and control groups and utilizing bigger samples.

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