

The Use of Survey, Question, Read, Recite, Review (SQ3R) Study Method for Increasing Pupil's Academic Performance

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Abstract — The study was determined to look into the effectiveness on the use of Survey, Question, Read, Recite, Review (SQ3R) study method as a strategic tool for increasing Grade Six pupils' academic performance amidst the current crisis who were enrolled in San Miguel Central Elementary School during the S.Y. 2020-2021 utilizing the quasi-experimental method of research to demonstrate the effectiveness of studying towards the use of SQ3R study method. The queries about the pupil's academic performance were answered in this study after the data have been gathered, analyzed and interpreted. A total of 28 Grade Six pupils in Osmeña section as respondents were treated with SQ3R study method as experimental group, while the remaining total of 28 Grade Six pupils in Roxas section as respondents were exposed to conventional skimming method of studying as controlled group. To determine the level of the pupil's academic performance, pre-tests were administered directly before the content for each course were delivered and post-tests were followed after the delivery of each content to both experimental and control group. The processing of data was done utilizing the Statistical Package for the Social Science (SPSS) computer software. The measure of mean was used in getting the Mean Percentage Score and One-Way Analysis of Covariance (ANCOVA) was used to spell out the significant difference between the result of the pretest and posttest. The findings signified that there was an increase in the pupil's academic performance from the pretest to posttest using Survey, Question, Read, Recite, Review (SQ3R) study method. It was evident that there was a significant difference in pupil's level of achievement using SQ3R study method and conventional skimming method. The study had drawn an implication on the consideration of the use of SQ3R study method in the implementation of any remediation and intervention activities and strategies to help improve pupil's academic performance. Teachers must ensure and provide that learning activities at home that can draw pupil's interest and active participation amidst the pandemic situation.

Keywords — *Survey, Question, Read, Recite, Review (SQ3R), Academic Performance*

I. Introduction

Teachers as an individual catalyst in this new normal education serve as pressing function in every distinctive attribute of human lives in the teaching and learning process where learning takes place which emerges in every learning situation. The implementation of the distance learning modality amidst the pandemic offers opportunities to foster independent learning skills of the learner which is specifically designed to respond the needs of the learner in the absence of in

person classes which is temporarily restricted due to COVID 19 worldwide issues. Eventually, learning still be viewed possible even with the use of the new alternative platform of education. At this course of home-based learning, aside from parental mentoring assistance, teachers still play a vital role with the professional priorities and materials as aids which are helpful in guiding the pupil's individual learning process.

According to Filgona, et al. (2020), the success of learning depends on whether or not the learners are motivated. It was found out that motivation drives learners in reaching learning goals. This implies that learning is facilitated by motives or drive. In this connection, teachers need to be aware that pupils learning sometimes hindered when they lose interest and disengage from studying due to excessive exposure to online gaming which greatly affect their academic achievement as a whole.

Nowadays, number of theories and concepts of learning that are relevant to classroom teaching were developed to minimize the problem. However, despite of the effort invested by teachers to succeed in improving the acquisition of learning among pupils, a problem of low academic rate in the vicinity remains unsolved and still existed.

Based on the National Achievement Test (NAT) data result San Miguel district, the average MPS in English had shown only 63.49 from the three consecutive years started from 2011 to 2013, then 64.27 in 2012 and for 2013 which got only 62 MPS. This result is noted far from the targeted 75% level of proficiency.

The researcher believed that these poor academic results were caused by some factors that impede pupil's acquisition of learning that affect their performance in the academic. This has proven in the sixth graders in San Miguel Central Elementary School and SPED Center wherein pupils were expected higher level in the academic performance but has been observed to have difficulties and become one of the major recurring problems among teachers in the vicinity.

As observed by the researcher in the target research environment based on the result of the English MPS S.Y.2019-2020 consolidated by the school English coordinator in SMCES-SPED Center, San Miguel, Zamboanga del Sur that of the entire pupils in grade six regular sections MPS result had shown only 69.02% which was beyond from the targeted criterion level of success or MPS of 75% mastery. Thus, it is important to develop effective interventions and implement them early to help these low performing pupils. Experiences and other material devices will be used to give meaning and understanding to the learner that will determine the need for supplemental experiences while learning at home.

The researcher believed that SQ3R study method, an acronym for five distinct steps (Survey, Question, Read, Recite and Review), a study method proposed by Francis P. Robinson, a prominent American educational psychologist in his book *Effective study* can be a tool to help pupils with low academic performance. With these five steps learners are expected to increase their understanding of the text by engaging in the sequence of process before, during and after.

Along with this, the researcher prompted to conduct action research with the use of Survey, Question, Read, Recite and Review, a study method to address the needs of the low performing pupils in terms of academic in English subject in regular sections of San Miguel Central Elementary School and SPED Center, San Miguel District, Zamboanga del Sur in this school year amidst the pandemic situation.

The implementation of SQ3R study method as a tool in the acquisition of learning that includes five main steps must be introduced. SQ3R stands for: Survey, Question, Read, Recite and Review.

Step 1: Survey

The first step in SQ3R is to survey what you are reading. Scan the piece of writing to establish its purpose and get the main ideas. Go over the title and headings, pictures, questions, bold or italicized prints, introduction and conclusion and footnotes as these will give hints and emphasis to the important details and information.

Step 2: Question

That is where the “Q” in SQ3R comes in. Jot down questions that you may have after you survey the material that will give purpose and improve comprehension to the main headings and pictures into questions. These questions not only give you a study guide for later but help you consider what you already know and how that fits in with what you are about to learn.

Step 3: Read

Now that you have skimmed the text and already crafted questions, it is finally time to read. At this point you have already created an organized plan for what you are about to learn. By making notes and highlight the main point that support the concept.

Step 4: Recite

Once you have finished reading the material, reciting helps to put the information into a long-term memory and put it into your own words. Recite involves setting aside the text and saying out loud everything you have learned. By doing so, reciting out loud what you have read not only gives you a sound to associate with the reading but helps to strengthen the information in your mind.

Step 5: Review

After reciting everything you can remember, it is important to review the material to understand and remember it by drawing a concept map and summarize what you have learned. This gives instant, meaningful feedback about how well you read the material and able to recall what you have learned.

ACTION RESEARCH QUESTIONS:

This study was determined to look into the use of Survey, Question, Read, Recite, Review (SQ3R) study method for increasing pupil's academic performance among six graders of San Miguel Central Elementary School.

Specifically, these four sub-problems were raised to answer the main problem:

1. What is the level of pupils' academic performance in English using SQ3R study method (experimental) and conventional skimming method (control) as revealed in the posttest result during the first and second trial run?
2. What is the mean percentage score (MPS) increase of pupils' academic performance in English using SQ3R study method (experimental) and in conventional skimming method (control) from the pretest to the posttest result during the first and second trial run?
3. Is there a significant difference in the level of pupils' academic performance in English between SQ3R study method (experimental) and in conventional skimming method (control) during the first and second trial run?

Based on the results, what implications can be drawn from using SQ3R study method in increasing pupil's academic performance in English?

II. Methodology

The research design adopted a quantitative type, the kind of research approach that usually involves collecting and converting data into numerical form so that statistical calculations can be made, and conclusions will be drawn because the respondents will be given pretest and posttest to assess their academic performance levels with or without using the SQ3R study method. The researcher conducted series of demo-teaching on separate sessions on the same class as respondents based on the total population handling controlled class and experimental class to determine the levels of academic performance using the SQ3R study method.

The study was a quasi-experimental type of research in evaluating the present existing conditions of the variables involved. Experimental research is the only type of the research that can test hypotheses to establish cause-and-effect relationship. According to Pearson (2011), experimental research allows statements about cause and effect by controlling the potential sources of variance that aimed to determine the effectiveness of the proposed solution to the problem.

A. Participants and/ or other Sources of the Data and Information

This action research was determined to look into the use of Survey, Question, Read, Recite and Review (SQ3R) study method for increasing pupil's academic performance and was delimited only to the 56 pupils of two regular sections where 28 pupils were from section Roxas and the 28 pupils were from section Osmeña of San Miguel Central Elementary School and SPED Center, Poblacion, San Miguel, Zamboanga del Sur school year 2020-2021.

Purposive and non-random sampling techniques were employed in the selection of the two heterogeneous groups to be the research respondents since these two groups were having a problem on having poor academic performance and were appropriate for this quasi-experimental research assigned as experimental group and control group. Previous entrance examination result was the basis of sectioning to be in the regular sections and the recent result on having poor academic performance were used as reliable source in the selection.

Table 1. Respondents of the Study: Grade-Six Pupils in Regular Section

Grade-Six Level of San Miguel Central Elementary School	Total Population	Sample Size
Grade Six – Roxas (Experimental)	28	28
Grade Six – Osmena (Control)	28	28
Total	56	56 respondents

Table1 has shown the identified two groups of respondents as sample of population of Grade-Six Regular sections of SMCES-SPED Center which comprised the two sections namely; Roxas and Osmeña which has a total of 56 research participants.

B. Data Gathering Methods

The researcher sought letter of approval from the Schools Division Superintendent of Zamboanga del Sur before administering the study. A written permission was formally furnished to the school administrator upon the approval. After securing the permission, the researcher requested an IATF approval through the office of the municipal mayor to conduct limited face to face demonstration teaching in a form of written letter and secured a copy to the principal of the school in the conduct. Granted the permission, the researcher scheduled the day of the conduct of demonstration teaching and administered the test to the respondents. To avoid disturbances of the modular distant learning at home, the researcher made use of the free time of the pupils in administering the test.

The respondents were treated with two instruments. The first instrument were the pretest and posttest composed of five item tests for the first and second trial runs; the second instrument were the lesson plans to be used during the conduct of demonstration teaching in the first and second trial runs of the two groups. The first instrument, pretest was given to the experimental and controlled groups prior to the application of the two methods the use of SQ3R method and the conventional Skimming method (control group). The administration of the two methods was made into two trial runs, using the second instrument, the lesson plans were utilized in the series of demonstration teaching. The pretest was of helpful in testing the initial equivalence among groups. A posttest was administered to measure treatment effects. The same procedure was done in the second trial run. During the retrieval, the researcher assured that all answer sheets gathered and collected were properly accomplished by the respondents for computation and data analysis.

C. Data Analysis Plan

In order to make findings and conclusions of this study valid, the raw data gathered were treated statistically using the following processes:

1. Measure of mean, standard deviation, and One-Way Analysis of Covariance (ANCOVA). These spelled out the difference between the level of academic performance of the control group and experimental group on the results of the pre-test and post-test.

2. Mean Percentage Score (MPS). This determined the levels of pupils' academic performance of the two methods during the pre-test and post-test. This was computed with its descriptive equivalent below taken from DepEd Memorandum No. 160, s. 2012.

MPS	Descriptive Equivalent
96 – 100%	Mastered
86 – 95%	Closely Approximating Mastery
66 – 85%	Moving Towards Mastery
35 – 65%	Average
15 – 34%	Low
5 – 14%	Very Low
0 – 4%	Absolutely No Mastery

3. Statistical Package for Social Sciences (SPSS). It is a computer software that was used to process data on the significant relationship, for accuracy and convenience.

III. Results and Discussion

This presented the analyzed, interpreted and extracted data on the use of Survey, Question, Read, Recite, Review (SQ3R) study method for increasing academic performance of the Grade Six regular pupils of San Miguel Central Elementary School-SPED Center, San Miguel, Zamboanga Del Sur during the school year 2020-2021.

Pupils' Academic Performance in English: First Trial Run

The first trial run dealt with the topic on "The Animal Mind: Smart and Sensitive" (informational text) where pupils were assessed their academic performance using SQ3R study method (experimental group) and conventional Skimming method (controlled group)

Level of Pupils' Academic Performance. Table 2 and 3 have shown the test results of the pupils' academic performance using SQ3R study method (experimental group) and conventional skimming method (controlled group) for first and second trial run.

Table 2. Level of Pupils' Academic Performance in English: First Trial Run

Test	Using SQ3R Study Method (Experimental Group)		Conventional Skimming Method (Controlled Group)	
	MPS	Descriptive Equivalent	MPS	Descriptive Equivalent
Pretest	29%	Low	27%	Low
Posttest	76%	Moving towards mastery	61%	Average
MPS Increase	47%		34%	

Scale: 96 – 100% = Mastered; 86 – 95% = Closely Approximating Mastery; 66 – 85% = Moving Towards Mastery; 35 – 65% = Average; 15 – 34% = Low; 5 – 14% = Very Low; 0 – 4% = Absolutely No Mastery

As shown in the table 2, the use of SQ3R study method generated a posttest result with an MPS of 76%, descriptively interpreted as *moving towards mastery* of which a computed increase of 47% in the level of achievement of the pupils from the pretest with an MPS of 29% which was descriptively interpreted as *low* for the first trial run.

The pretest of the controlled group in the first trial was *low* with a mean percentage score MPS of 27% respectively. A descriptive equivalent *average* with an MPS of 61% for the posttest in the first trial run indicates a 34% increase in the level of achievement of the students from the pretest.

Table 3. Level of Pupils' Academic Performance in English: Second Trial Run

Test	Using SQ3R Study Method (Experimental Group)		Conventional Skimming Method (Controlled Group)	
	MPS	Descriptive Equivalent	MPS	Descriptive Equivalent
Pretest	36%	Low	37%	Low
Posttest	84%	Moving Towards Mastery	62%	Average
MPS Increase	48%		25%	

Scale: 96 – 100% = Mastered; 86 – 95% = Closely Approximating Mastery; 66 – 85% Moving Towards Mastery; 35 – 65% = Average; 15 – 34% = Low; 5 – 14% = Very Low; 0 – 4% = Absolutely No Mastery

Pupils' Academic Performance in English: Second Trial Run

The second trial run dealt with the topic on “Beetle” (*informational text*) where pupils were answered and assessed their academic performance using the SQ3R study method (experimental group) and conventional skimming method (controlled group).

Level of Pupils' Academic Performance.

The data results shown in Table 3 reflected the pupils' academic performance using the SQ3R study method (experimental group) and conventional skimming method (controlled group) for second trial run.

As shown in the table, the use of SQ3R study method generated a posttest result with an MPS of 84%, descriptively interpreted as *moving towards mastery* which has computed increase of 48% in the level of achievement of the pupils from the pretest with an MPS of 36% descriptively interpreted as low for the second trial run. The posttest result in control group exhibited an MPS of 62%, descriptively interpreted as *average*, which is 25% increase in the level of achievement from the pretest with an MPS of 37% which is descriptively interpreted as low.

The findings indicated that there was an increase in the level of academic performance of the pupils from the pretest to posttest using the two methods in studying. The experimental group, which was taught using the SQ3R study method appeared to have a better performance in the posttest with an average increase in their performance levels' achievement of 47% in the first trial run and 48% in the second trial run compared to pupils in the controlled group with an average increase in the first trial run of only 34% and 25% in the second trial run. The posttest result of the experimental group was higher than that of the controlled group. This indicated that SQ3R study

method as a tool for improving pupils' level of academic performance was way more effective than using the conventional Skimming method.

Testing Significant Difference on Pupils' Academic Performance: 1st Trial Run.

Using One-Way Analysis of Covariance (ANCOVA) to test, analyze, and interpret the difference on the posttest while controlling pre-test as covariate in the experimental and controlled groups, at 0.05 level of significance. The main effects of table 4 (f -ratio = 14.001 and p -value = 0.000) revealed that there was a significant difference between pupils' academic performance in the posttest results of the experimental and controlled groups during the first trial run. The adjusted R squared has shown that 25.7% of the variation of the level of pupils' academic performance is accounted for by the variations in the use of SQ3R study method.

Table 4. Testing Difference on Pupils' Academic Performance between SQ3R Study Method (Experimental) and Conventional Skimming Method (Controlled) Using One-Way ANCOVA: First Trial Run

Source of Variation	Type III Sum of Squares	Df	Mean Square	F-ratio	p-value
Corrected Model	10.673 ^a	2	5.336	10.521	.000
Intercept	89.973	1	89.973	177.395	.000
Covariates	2.798	1	2.798	5.516	.023
Main Effects	7.101	1	7.101	14.001	.000
Error	26.881	53	.507		
Total	689.000	56			
Corrected Total	37.554	55			

*a. R Squared = .284 (Adjusted R Squared = .257) * With Significant Difference (p-value < .05)*

Testing Significant Difference on Pupils' Academic Performance: 2nd Trial Run.

By employing One-Way Analysis of Covariance, Table 5 indicated the test of significant difference in pupils' level of academic performance in the posttest results of the experimental group and controlled group during the second trial run. The main effects present (f -ratio=29.664 and p -value =0.000) which indicated that there was a significant difference in pupils' level of academic performance when they are studying using SQ3R study method and using conventional skimming method in the second trial run. The adjusted R squared shows that 34% of the variation of academic performance was accounted for by the variations in the use of SQ3R study method in studying.

Table 5. Testing Difference on Pupils' Academic Performance between SQ3R Study Method (Experimental) and Conventional Skimming Method (Controlled) Using One-Way ANCOVA: 2nd Trial Run

Source of Variation	Type III Sum of Squares	Df	Mean Square	F-ratio	p-value
Corrected Model	16.314 ^a	2	8.157	15.147	.000
Intercept	109.622	1	109.622	203.554	.000
Covariates	.243	1	.243	.451	.021
Main Effects	15.965	1	15.965	29.644	.000
Error	28.543	53	.539		
Total	788.000	56			
Corrected Total	44.857	55			

a. R Squared .364(Adjusted R Squared = .340) * With Significant Difference(p-value < .05)

IV. Conclusion

The study provides the following findings based from the analyzed and interpreted data:

1. The level of pupils' academic performance in English using SQ3R study method generated a posttest result with an MPS of 76%, descriptively interpreted as moving towards mastery from the pretest with an MPS of 29% which is descriptively interpreted as low for the first trial run and a posttest result with an MPS of 84%, descriptively interpreted as moving towards mastery from the pretest with an MPS of 36% descriptively interpreted as low for the second trial run.

The pretest of the controlled group in the first trial was *low* with a mean percentage score MPS of 27% respectively. A descriptive equivalent *average* with an MPS of 61% for the posttest in the first trial run and a posttest of 62%, descriptively interpreted as average from the pretest with an MPS of 37% which was descriptively interpreted as low in the second trial run.

2. The SQ3R study method generated a computed increase of MPS 47% in the level of achievement of the pupils in English from the pretest to the posttest in the first trial run and a has computed increase in the posttest of 48% in the level of achievement from the pretest in the second trial run while conventional skimming method indicated only 34% increase during the first trial run and 25% increase during the second trial run in the level of academic performance of the pupils from the pretest.

3. Using One-Way Analysis of Covariance (ANCOVA) to test, analyze, and interpret the difference on the posttest while controlling pre-test as covariate in the experimental and controlled groups, at 0.05 level of significance, the main effects of table 4 (f-ratio = 14.001 and p-value = 0.000) in the first trial run and of table 5 (f-ratio=29.664 and p-value = 0.000) in the second trial run revealed that there is a significant difference between pupils' level of academic performance in the posttest results of the experimental and controlled groups.

Hereunder are the conclusions of the study based from the findings presented.

1. The findings in the first and second trial runs therefore concluded that there is significant effect of using Survey, Question, Read, Recite, Review (SQ3R) study method in the pupil's academic performance in English subject of Grade 6 regular sections in San Miguel Central Elementary School-SPED Center, San Miguel 1 District in the division of Zamboanga Del Sur. The results of pupils' academic performance using SQ3R study method (experimental) as revealed in the pretest and posttest result during the first and second trial run warrants the claim that Survey, Question, Read, Recite, Review (SQ3R) study method could increase the level of pupils' academic performances.
2. The mean percentage score (MPS) increase of pupils' academic performance in English using SQ3R study method (experimental) from the pretest to the posttest result during the first and second trial runs exemplified an increase in the level of pupils' academic performance from the pretest to posttest using the Survey, Question, Read, Recite, Review (SQ3R) study method.
3. Aligned to the findings in the first and second trial runs. It was evident and revealed that there was a significant difference in pupil's academic achievement when the pupils study using Survey, Question, Read, Recite, Review (SQ3R) study method. It clearly implied that pupils' academic performance was well improved with the use of SQ3R study method.
4. The study has drawn an implication on the consideration in the utilization of (SQ3R) study method as a strategic tool in reading and as studying scaffold that can be used when implementing intervention program, activities and strategies that are stimulating to enhance pupils' academic performances. This indicated that it is an extremely effective method for both comprehension and memory retention where pupils' involvement in studying is highly encouraged especially during this pandemic time.

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