

Enhancing the Performance Reading Comprehension Skills of Grade 11 TVL Students of San Isidro National High School Tagkawayan Through E-Texts

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Abstract

This study aimed to know the effectiveness of using e-texts in enhancing the performance in reading comprehension of the Grade 11 - TVL students of San Isidro National High School, Tagkawayan, S.Y. 2019-2020. This study used a pre-experimental research design using pre-tests and posttests. The researcher used mean, MPS (mean percentage score), and z-test to test the significant difference. The Mean Scores of the PreTest averaged 6.848 (elementary) while the Post Test mean, 22.455 (intermediate). The Mean Percentage Scores (MPS) of the Pre Test MPS was 17.120 (Low) while the Post Test MPS was 56.140 (average). The test statistic Z equaled to -24.97, was not in the 95% critical value accepted range. Therefore, H_0 was rejected. The researcher recommended 1) training both students and teaching staff in the use of digital texts to optimize their learning outcomes for school governing personnel; 2) using different strategies and practices when reading digital among teachers; 3) teaching of technology skills explicitly to primary and sometimes secondary students is seen as a necessity for developing 21st century skills in children for both teachers and students; and 3) developing digital texts that are user-friendly in developing new reading enhancement programs among teachers.

Key Words: *e-texts, printed texts, technology, skills, reading comprehension*

Introduction

Reading digital books is becoming a mainstream phenomenon in the education today. With the demand of electronic readers (or e-text) on the rise, there is a concern about how students are being taught to use these digital resources.

With the advancement of technology, education in the Philippines has been abreasting the call to move forward and embrace the changes and chances of this advancement.

Technological and socio-economic developments have led to drastic changes in social structures. With technological developments in particular, individuals can communicate with each other in faster and more convenient ways and learn about what is happening in daily life more quickly. Technology that appeared in every area of human life has also brought improvements and changes to the field of education, and in line with these changes, how technology can be used in education has been a current issue. In this regard, educational programs and instructional methods and techniques need to be developed and renewed education to adapt to technological changes. In other words, technology should be integrated into education.

However, with the implementation of the K+12 Curriculum, textbooks have been really a struggle among educators which have been scarce for couple of years now. Printed reading materials have been compromised that is why, there is a need to be resourceful among the frontliners of education.

In this regard, the third batch of Technical Vocational and Livelihood Senior High School (SHS) students of San Isidro National High School who will be graduating by S.Y. 2019-2020, consisting of 33 students posted 38 percent struggled comprehending what they read. The Grade 11 SHS students posted an even higher percentage, at 65.

That was very alarming, when most of the reading materials are readily available using electronic gadgets that was posing a threat on learning the required learning competencies imposed by DepEd.

With digital texts on the rise and lagging behind textbooks, students may not be able to cope with the digital age of reading which would provide them more struggling time in reading passages (through cellular phones, projected and e-texts).

This study aimed to know the effectiveness of using e-texts in enhancing the performance in reading comprehension of the Grade 11 - TVL students of San Isidro National High School, Tagkawayan, S.Y. 2019-2020.

Specifically, it sought to answer the following questions:

1. What is the performance in reading comprehension before and after the utilization of e-texts of Grade 11 TVL students of San Isidro National High School?
2. Is there significant difference in the performance in reading comprehension before and after the utilization of e-texts of Grade 11 TVL students of San Isidro National High School?
3. What are the recommendations of the findings of this study for the improvement of the reading comprehension skills of Grade 11 TVL students of San Isidro National High School?

The scope of this study was limited to the Grade 11 TVL of San Isidro National High School of Tagkawayan. S.Y. 2019-2020. There were only 23 males and 10 females with a total of 33. The reading materials used for this study were all downloaded from englishforeveryone.com. The reading levels used from the said website were from level 9-11, as there was time constraint for this said remediation. These texts were to be projected through powerpoint presentation, PDF, and/or were given to the students using their cellphones. These methods could provide ease to both the teachers and the students.

Electronic texts (E-Texts) has a variety of issues ranging from the influence of digital text-based learning on students' preferences to retention and impression, (Van Horne et al, 2016), to the complexities of digital text design, and factors such as learner's attitude and attitude, (Baek, & Monaghan, 2013), as well as physical aspects such as eye fatigue and stress, (Jeong, 2012). This engagement with digital texts, (Abaci et al, 2015; Dennis et al., 2016), explored digital text analysis in terms of predicting student academic outcomes, (Junco & Clem, 2015).

Reduced concentrations due to eye fatigue, (Kochurova et al, 2015), can be a barrier to successful digital text-based learning, as screens can stress the eyes and cause headaches, (Jabr, 2013). Lin et al, (2015), found that both memory and ability improved after using paper and pencil, and increased eye fatigue when using a tablet.

One critical question is whether digital text converted from its print version, (Porion, et al., 2016), is significantly different from text designed either primarily or exclusively for the digital screen, (Pegrum, 2015).

Singer, and Alexander, (2016), found that students could recall key ideas regardless of text type while Jeong, (2012), found that eye fatigue and stress can increase students' stress in reading digital texts. But Ackerman and Lauterman, (2012), and Lauterman and Ackerman, (2014) said that learning digital text-based had lower quality results than print-based text learning where subsequent research had questioned the reliability of this comparison, (Norman, and Furness, 2016).

In this regard, navigation, display and scrolling are identified as possible factors affecting reading comprehension, (Mangen et al, 2013). In fact, Dundar, and Akcayir, (2012), indicated that digital texts used more of the reader's mental resources than print-based texts. However, specially designed digital readers do not strain the eyes, (Bilton 2010).

Gustafson et al, (2013), studied Simple View Reading that was conducted on the concept of reading on some aspects of reading comprehension. Mangen et al., (2013), provided that

scrolling inevitably impacts comprehension of the text while Benedetto et. al, (2013) inquired about the effects of the display technology on visual fatigue, and Solak, (2014) prompted that it is still easier to read from printed text than with digital text.

Methodology

Research Design

The study used a pre-experimental research design using pre-tests and posttests. This is a simple form of research design where a single group is observed at two time points, one before the treatment and one after the treatment. Changes in the outcome of interest are presumed to be the result of the intervention or treatment. No control group or comparison is employed.

This design provided a quantifiable data that can be enhanced through comparative description of the pretest and posttest results on the level of reading comprehension skills of the Grade 11 TVL students, S.Y. 2019-2020.

Research Population and Sample

The Grade 11-TVL students comprised of 23 males and 10 females, with a total of 33 students. All were selected to take and answer the worksheets from englishforeveryone.com that were projected using PDFs, PPTs, wondershare, and/or using their mobile phones.

Research Instrument

The instrument used for the study were the various worksheets from englishforeveryone.com. Levels 9-11 were chosen for the study as they have the same number of passages per level. However, the number of items for each level varied, ranging 4 to 10.

Data Gathering Procedure

At the beginning of November, the researchers started to administer a pretesting to the level of the Grade 11 TVL students. Then, after knowing the level, the proponent started giving the passages from the maximum level they have passed. The proponent implemented the program by giving passages every Thursday of the week. The last passage served as the post assessment for that reading level.

After the 12th week, the post testing was administered.

Lastly, the pretest and post test was compared to see if there was an improvement in the reading level among the students.

Statistical Treatment of Data

The researcher utilized the following statistical treatment

1. Mean

$$\text{Mean} = \frac{\text{sum of all the scores}}{\text{Total number of examinees}}$$

Legend:

- 33-40 = advanced
- 25-32 = upper intermediate
- 17-24 = intermediate
- 9-16 = lower intermediate
- 0-8 = elementary

2. Mean Percentage Score (MPS)

$$\text{Mean Percentage Scores} = \frac{\text{Mean}}{\text{Total number of examinees}} \times 100$$

Number of Items

Legend:

Percentage

96%-100%

86%-95%

66%-85%

35%-65%

16%-34%

5%-15%

0%-4%

Descriptive Equivalent

Mastered

Closely Approximating Mastery

Moving Towards Mastery

Average

Low

Very Low

Absolutely No Mastery

Deped Order No. 71. s, 2010

3. **Z Test.** This is a statistical test used to determine whether two population means are different when the variances are known and the sample size is large. The test statistic is assumed to have a normal distribution, and nuisance parameters such as standard deviation should be known in order for an accurate z-test to be performed.

Results and Discussion

Table 1

Mean Scores of the Pre Test and Post Test Using E-Texts

Comprehension Scores	Mean			
	Pre Test		Post Test	
	F	%	F	%
33-40	0	0	0	0
25-32	0	0	6	18
17-24	0	0	27	82
9-16	7	21	0	0
0-8	26	79	0	0
Sum of Scores	226	100	741	100
Mean	6.848		22.455	
Interpretation	Elementary		Intermediate	

Legend:

33-40 = advanced

25-32 = upper intermediate

17-24 = intermediate

9-16 = lower intermediate

0-8 = elementary

The Table 1 showed the Mean Scores of the PreTest and the Post Test of the data using e-texts. It stated that the PreTest averaged 6.848 (elementary) while the Post Test mean 22.455 (intermediate), almost four jumps from the PreTest's result.

This implied that the big jump of almost four folds suggest that the treatment really works among the respondents. Somehow, factors such as learner perceptions and attitudes (Baek and Monaghan, 2013), physical aspects such as eye fatigue and strain (Jeong, 2012; Benedetto, et al, 2013), and impacts of scrolling and comprehension of the text (Mangen, et al, 2013), were

surpassed. This can also infer that those factors could be overcome using parallel reading passages as treatment in between the pre test and post test

Table 2.

Mean Percentage Scores of the Pre Test and Post Test Using E-Texts

	MPS	
	Pre Test	Post Test
	17.120	56.140
Interpretation	Low	Average

Legend:

Percentage	Descriptive Equivalent
96%-100%	Mastered
86%-95%	Closely Approximating Mastery
66%-85%	Moving Towards Mastery
35%-65%	Average
16%-34%	Low
5%-15%	Very Low
0%-4%	Absolutely No Mastery

Deped Order No. 71. s, 2010

The Table 2 showed the Mean Percentage Scores (MPS) of the Pre Test and the Post Test of the data using digital texts. It stated that the Pre Test MPS was 17.120 (Low) while the Post Test MPS was 56.140 (average), more than three jumps from the Pre Test result.

Interventions or treatment injections were able to improve reading comprehension more than threefold. With this, intervention program must be promulgated and be implemented to other school for validation.

Table 3

Summary of the Respondents' Profiles Using E-Text: Mean and MPS

	E-Texts	
	Mean	MPS
Pre Test	6.848	17.120
Post Test	22.455	56.140

The test statistic Z equals -24.972854, was not in the 95% critical value accepted range. $x_1 - x_2 = -15.61$, was not in the 95% accepted range. The statistic S' equaled to 0.625.

The average of **pre test** was considered to be **not equal to** the average of the **post test**. In other words, the difference between the average of the **pre test** and **post test** was big enough to be statistically significant. When the p-value $< \alpha$, therefore, H_0 was rejected.

Recommendations

With the results of this study, the researcher had come up with the following recommendations:

1. In light of these findings, training and personal development emerge as key aspects of any future e-text learning initiative: both students and teaching staff may need to be trained in the use of digital texts to optimize their learning outcomes. This must be given by the governing personnel of the schools.

2. For teachers, try to use different strategies and practices when reading digital texts and print-based texts. Provide quite similar reading materials and passages to really see the similarities and differences from the results of the two modality.

3. For both teachers and students, the explicit teaching of technology skills to primary and sometimes secondary students is seen as a necessity for developing 21st century skills in children.

4. Lastly, for teachers, there is a need to develop digital texts that are user-friendly in developing new reading enhancement programs.

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