Localized Curriculum on the Reading Achievement of Grade 8 Students

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Abstract – This study aimed to determine whether a localized curriculum would improve the reading achievement of the Grade 8 students. The research subjects were the Grade 8 students of Escalante National High School, Negros Occidental, Philippines. Pretest-posttest experimental design was utilized in this study. Two groups of subjects were compared in terms of their pretest and posttest results. The experimental group was exposed to the localized curriculum for their reading instruction while the control group received the reading instruction as prescribed by the K to 12 - Grade 8 English curriculum. The data were obtained using the researcher-made test instrument. Descriptive mean, paired and independent sample t-tests were the statistical tools used for the data analysis. The research findings revealed that the reading achievement of the Grade 8 students in English in the experimental group improved from 'approaching proficient' to 'proficient'. It implied that localized curriculum helped increase the level of reading achievement of the students, thus the hypothesis of no significant difference between the pretest and posttest of the experimental group was rejected. This study suggested that since localized curriculum improved the reading achievement of the students, the school may establish a 'school-based curriculum localization matrix aside from using the 'regional and division curriculum localization matrix' and ensure a continuous capability building for teachers on how to localize curriculum. A similar investigation may be conducted like the teachers' knowledge and skills and effective strategies in localized curriculum in relation the students' academic performance.

Keywords – curriculum localization matrix, localized curriculum, reading achievement, K to 12

INTRODUCTION

Linking skills in reading directly to concrete applications and authentic contents may increase the possibility of learning [1]. It has been suggested that by using authentic or localized academic texts as part of innovation and reinforcement, low-skilled students become more active learners and are then more inclined to use their skills in higher level academic tasks [2].

The localization of reading instruction is used in elementary, secondary, and postsecondary education to engage students, deepen content learning, and promote transfer of skill. According to Taylor (2004), localization is the freedom for schools or local authorities to adapt the curriculum to local conditions and relating the context of the curriculum and the process of teaching and learning to the local environment [3]. The approach is well grounded in psychological theories of transfer of and motivation in learning [4].

The reading achievement of the learners must be the major concern of the entire educational system.

This is to improve quality outcomes because according to UNESCO (2002), if the reading skills will not be improved among the learners, it will contribute to high dropout rates, high number of repeaters, low passing grades, and inadequate language skills [3]. These problems, in turn, result to a considerable number of illiterate Filipinos and out of school youths and graduates who are not prepared for work. This issue may be helped by localizing reading curriculum.

The proficiency in reading is significant towards enhancing the country's literacy. Good reading and math skills are potent tools in learning and help children prosper in school and their future careers [5]. The ability to read written material is very important in the civilized world.

Since one's reading achievement determines one's future and the country's as well, this must be enhanced in school. The development of the reading skills is critical to effective learning and in many cases, deficiencies in these areas are often at the roots of why

gaps in learning occur. Recently, these gaps are exposed in the National Achievement Test (NAT). Although, the NAT of the Grade 6 mean percentage score (MPS) in Math, Science, Filipino, English, and Social Studies improved from 54.66% in 2005 to 66.9% by school year 2012 – 2013, still it falls below the planning standard of 75 MPS. Likewise, the high school participation rate for 12-15 years improved from 61.16% from 2005 to 64.8% by 2013, yet it is still below the planning standard of 100%.

Specifically, the Grade 8 English NAT nationwide results, continue to show achievement gaps with an average of 48.77 MPS and the high drop-out with an average rate of 7.73 % [6].

Among the least mastered reading skills tested in NAT are vocabularies, inferences, sequencing events, getting the main idea, predicting outcomes, and identifying themes, author's purpose, and attitude.

In 2014, the Escalante City Division's English NAT result for Grade Six, showed an average increase of 9.4 MPS from 55.84 to 65.24 while the NAT 4th Year English had an average increase of 10.69 MPS from 47.81 to 58.50. Although it had an increase, yet the 2014 NAT in English yielded below the planning standard of 75 MPS [7].

Despite having the National English Proficiency Program which is a training program to improve the English proficiency and to complement the 'Every Child's a Reader Program', still majority of the learners have low literacy skills. In terms of the learners' reading ability, Phil-IRI (Philippine Informal Reading Inventory) showed that most of the learners were in frustration level. Only 48% of 1,532 Grade 7 learners were independent readers in oral reading and 40% for silent reading which were both below the planning standard of 100%.

There are lots of factors to consider. However, it is said that education fails to respond to the needs of the society because there is a gap between the local culture's way of acquiring and generating knowledge. The mainstream culture generally adapted by the formal school affects the learning process of the students [8]. Hence, there is a need then to value the local learning system since our country is basically a culturally diverse society.

Learning English using localized materials such as the utilization of selections about one's place will enable children to connect their heritage while developing their reading skills at the same time [9]. Studies also show that the reading of meaningful, connected text results in improved reading achievement [10].

As embodied in R.A. No. 10533, known as the Enhanced Basic Education Act of 2013, the curriculum shall be flexible enough to enable and allow schools to localize, indigenize and enhance the same based on their respective educational and social contexts.

With this mandate, teaching-learning process shall be made more learner-centered; localized instruction, and indigenization of learning materials shall be encouraged [11].

Since curriculum localization initiatives are ongoing which assume a more important role to increase the reading performance of the learners, this study on the localized curriculum on the reading achievement of students is of paramount importance.

OBJECTIVES OF THE STUDY

The purpose of the study was to determine whether a localized curriculum could improve the reading achievement of the Grade 8 students.

Specifically, the study determined the level of the reading achievement of the control group and experimental group in the pretest and posttest; the significant difference between the pretest and posttest performance of control group; the significant difference between the pre-test and posttest performance of experimental group; the significant difference between the control group and experimental group in the pretest and post test; and the significant difference between the mean gains of the pretest and posttest of control group and experimental group. Related hypotheses were tested in this study.

METHODS

The experimental research design was utilized in this study. Specifically, the researchers used the pretest-posttest equivalent groups design which is widely used in behavioral research, primarily for comparing groups and/or measuring change resulting from experimental treatments [12].

An intervention which is localized curriculum was introduced to the experimental group. The control group did not receive said intervention or treatment.

Locale of the Study

The experiment was conducted in two Grade 8 sections of Escalante National High School of the Division of Escalante City, Escalante City, Negros Occidental, Philippines, SY 2014-2015.

Escalante National High School is a public school with a total population of no less than 2,000 students and 126 teachers.

Among the 6 main high schools in Escalante City Division only Escalante National High School offers Special Science Class, Special Program for the Arts, Open High School and Extension Night High School classes.

Subjects of the Study

The subjects were 40 Grade 8 students. They were treated into control and experimental group. There were 20 subjects for each treatment group equated according to their mental ability based on the results of Raven's Progressive Matrices and their reading ability based on Phil-IRI results.

Research Instrument

The study used a 30-item researcher-made test as instrument. It was a multiple type of test with 4 alternative answers to choose from. The same instrument was used as Pretest and Posttest for both control and experimental groups. The instrument covered the identified national reading competencies properly distributed among the 30 items. These reading competencies are usually tested in the National Achievement Test (NAT) such as the following: 1) explaining the meaning of a word through structural analysis (prefixes); 2) explaining the meaning of a word through structural analysis (suffixes); 3) Arriving at meanings through context clues; 4) Recognizing propaganda techniques used in a given text; 5) Differentiating facts from opinions; 6) Identifying the main idea; 7) Making inference; 8) Predicting outcomes 9) Sequencing events; 10) Explaining how the elements specific to a genre contribute to the theme of a particular literary selection; 11) Expressing appreciation for sensory images used; 12) Explaining figurative language used; 13) Determining the tone of the author; 14) Determining the purpose of the author; and 15) Identifying similarities and differences of the featured selections. The researcher-made questionnaire was validated by three (3) experts. The test was subjected to item analysis and reliability test. The reliability of this test was established using on line Kuder-Richardson (K-R 21).

The instrument was subjected to content-validation by three jurors, who were considered experts in this field of study. Using the criteria set forth by Good and Scates, the test instrument was rated 5 in average, interpreted as 'very good'. Thus, the test instrument was valid.

A dry run was conducted to the Grade 8 group of another High School on December 22, 2015. After collecting and checking the test, an item analysis was conducted.

Item analysis focused on level of difficulty and discriminating power. The overall difficulty index (Di) was 77% and interpreted as 'moderately difficult'. The discriminating power (Dp) was 40, interpreted as 'very good'. The reliability of this test was established using on line Kuder-Richardson (K-R 21) which yielded .78 interpreted as 'good'; Thus, the test instrument was acceptable and reliable.

Data Gathering Procedure

In preparing the experiment, the researchers considered the possible intervening factors that might affect the validity of the result of the study [13].

Pre-experiment. Before the start of the experiment, the following materials were prepared: 1) K to 12 Curriculum for Grade 8 English, 2) English 8 Learning Modules, 3) Teachers' Guide in English for Grade 8, 4) Regional and Division Curriculum Matrix Support Instructional Materials, 5) Instructional Plans, 6) Authentic Assessment, and 7) Products/Performance.

To ensure a conducive learning environment for both control and experimental groups, the experimental areas were properly checked and put in place. To eradicate the Hawthorne's Effect or the tendency of the subjects to behave differently, they were not informed that they are being studied. They were still made part of the usual sections. Seats, working tables, lighting, and ventilation were important considerations.

Table 1. The Equated Mental Ability and Reading Ability of the Subjects

Groups	MA				RA			
	S	Н	A	Total	In	Ins	Total	
Control	4	11	5	20	4	16	20	
Experimental	4	11	5	20	4	16	20	
Total	8	22	10	40	8	32	40	

Legend: S-Superior; HA-Highly Average; A-Average; In-Independent; Ins-Instructional

To equate the subjects both in control group and experimental group, the researchers utilized the Raven's Progressive Matrices' result processed by a licensed Psychometrician for their mental ability test and Phil-IRI results for their reading ability.

Table 1 shows the equated mental ability (MA) and reading ability (RA) of the subjects.

During the experiment. With the approval of the Schools Division Superintendent and the School Head, the teacher-researcher started to handle classes of the two groups of subjects on January 5, 2015. On the said day, the pretest was administered to each group. Since the experiment was protected from Hawthorne's effect and was not an adversarial one, no informed consent by individual subjects nor their parents' were required from the researchers. Neither a confidentiality agreement was executed. The researchers and the school officials agreed that the undertaking was purely a research exercise which aimed to introduce innovation and help improve instruction. In this study, the participants did not know that they were the subject respondents since the researcher taught the whole section.

On the actual experiment, the 4 A's method using KPUP (Knowledge, Process, Understanding, and Product) and differentiated learning were used for both the control and experimental groups. The instructional plan templates used for the control and experimental groups were also the same in terms of the objectives and the subject matter which were the 15 identified national reading competencies. However, instructional plans differed in the learning/reading materials. The control group received reading instruction using the plain K to 12 English Curriculum for Grade 8 while the experimental group received the localized curriculum (locality-based reading/teaching materials). Since there were 15 identified national reading competencies; the classes lasted for fifteen days. Each daily lesson lasted for one hour with five meetings per week. After completing the lessons, the posttest was administered.

RESULTS AND DISCUSSION

Table 2. Reading Achievement of Control and Experimental Group in Pretest and Posttest

Sources of Variation	Pretest	Posttest
Control Group		
SD	3.76	2.95
Mean	19.00	20.00
Interpretation	Proficient	Proficient
Experimental Group		
SD	4.26	3.01
Mean	16.55	19.20
Interpretation	Approaching proficient	Proficient

Scale: 23.8-30.0: Advanced; 17.9-23.7: Proficient; 12.0-17.8: Approaching Proficient; 6.0-11.9: Developing; 1.0-5.9: Beginning

Table 2 presents the level of reading achievement of the control and experimental group in pretest and posttest. The result reveals that the reading achievement of the control group remains in 'proficient' level while the experimental group level-up from approaching proficient to proficient. This supports a study claiming that the localization of the lessons had a positive effect on the posttest scores [14].

Table 3. Comparison of Reading Achievement in Pretest and Posttest of the Control Group

SV	SD	Mean	DF	Comp	t	P	Interpretation
Pretest	3.76	19.00					
Posttest	2.95	20.00	19	-1.69	.10	6	Not Significant

Table 3 shows the difference of the reading achievement of control group in the pretest and posttest. The probability value of .106 indicates no significant difference on the reading achievement of control group in the pre-test and post-test. This finding means that there is no significant increase on the reading achievement after the control group was taught with K to 12 English curriculum. Thus, the hypothesis which stated that there is no significant difference on the reading achievement in pretest and posttest of the control group is accepted.

This result adheres to the idea that K to 12 curriculum must be enhanced through the use of curriculum localization [5] because per UNESCO, the crucial failure of school system worldwide had been attributed to the lack of relevance of the curriculum to the lives of learners [3].

Table 4. Comparison on the Reading Achievement in Pretest and Posttest of Experimental Group

SV	SD	Mean	DF	Comp	t P	Interpretation
Pretest	4.26	16.00				
Posttest	3.01	19.00	19	-3.84	.001	Highly Significant

Table 4 presents the result of comparing the pretest and posttest reading achievement of experimental group subjected to localized curriculum.

As presented in the table 4, the probability value of .001 denotes a highly significant difference on the reading achievement of the experimental group. This implies that the use of localized curriculum marks a significant increase on the reading achievement of the experimental group. Thus, the hypothesis which stated that there is no significant difference on the reading achievement of experimental group in pretest and posttest is rejected.

The findings support prior studies stating that the

reading of meaningful connected text results in improved reading achievement [10].

Table 5 and table 6 present the result of comparing the pretest and posttest reading achievement of experimental and control group.

Table 5. Comparison on the Reading Achievement in Pretest of Control and Experimental Group

SV	SD	Mean	DF	Comp t	P	Interpretation
Control	3.76	19.00)			
Experime	ntal 4	.26 16.55	5 38	1.92	.062	Not Significant

As presented in Table 5, the probability value of .062 signifies that there is no significant difference on the reading achievement of control group and experimental group in the pretest. Thus, the hypothesis which stated that there is no significant difference on the reading achievement in pretest of control and experimental group is accepted. This implies that before the control and experimental group were subjected to interventions they had practically the same reading performance.

Table 6. Comparison on the Reading Achievement in Posttest of Control and Experimental Group

SV	SD	Mean	DF	Comp t	P	Interpretation
Control	2.95	20.00				
Experimenta	al 3.01	19.20	38	.847	.402	Not Significant

The probability value of .402 presented in table 6 shows that there is no significant difference on the reading achievement of control group and experimental group in the posttest. Thus, the hypothesis which stated that there is no significant difference on the reading achievement between the 2 groups in the posttest is accepted.

This implies that the reading achievement of pupils subjected to the interventions has no significant difference. Hence, the localized curriculum must complement with the K to 12 Curriculum to increase learners' reading achievement.

Table 7 shows the result of comparing mean gains in the reading achievements in pretest and posttest of control group and experimental groups.

Table 7. Comparison of the Mean Gains in Pretest and Posttest of Control and Experimental Groups

SV	SD	Mean	DF	Comp t	P	Interpretation
Control	2.63	1.00				
Experime	ental 3	.08 2.65	38	-1.81	.077	Not Significant

The obtained probability value of .077 as a result of comparing the mean gains of the control group and

experimental group indicates that there is no significant difference between the reading achievements of the 2 groups. This means that the K to 12 and the developed localized curriculum when used in the classroom setting yield similar results. Thus, the null hypothesis stating that there is no significant difference between the mean gains of the control group and experimental group is accepted.

This finding supports the idea that identifying localization goals and local content and correlating the same with learning standards has effects to reading [11].

As embodied in R.A. No. 10533 known as the Enhanced Basic Education Act of 2013, Sec. 5. (h.) Curriculum Development, the curriculum shall be flexible enough to enable and allow schools to localize, indigenize and enhance the same based on their respective educational and social contexts.

CONCLUSION AND RECOMMENDATION

The experimental group exposed to the localized curriculum improved their reading achievement from 'approaching proficient' level to 'proficient' level. The localized curriculum is, thus, helpful to the learners because they can easily make connections to the reading texts and easily comprehend what they read. Hence, this present study supports the previous claim that reading in English utilizing localized materials such as selections about one's place will enable learners to develop their reading skills while connecting to their heritage and culture [9].

This result strengthens the UNESCO's assertion that a vital dimension of quality education is that of relevance of curricular content; the diversity of local, cultural, and socio-economic realities [3].

Further, the result of the experiment proves that a prime factor driving the localization of school curricula and the localization of schooling content is the ethnic and linguistic diversity of many places. This diversity must be considered when innovating school lessons, both in terms of local relevance and in terms of linguistic delivery, to create the vital links between learner and materials [3].

Furthermore, the result strongly justifies the efforts and use of resources by DepEd-Escalante (and its other counterpart in the country) in producing localized reading materials with both educational and cultural significance in the sense that these materials are based from the indigenous culture and rich history of the locality.

For the state college under study and any other higher education institutions, providing teacher education and training in the locality, the result of this present study can be the basis of enhancing teacher education curriculum in a way that it also gives credence to localized instruction.

It is recommended that inasmuch as localized curriculum improved the reading level of the students, the school may establish a School-based Curriculum Localization Matrix aside from using the Regional and Division Curriculum Localization Matrix. This may entail cultural mapping in the school community and research on indigenous knowledge that will lead towards production of more localized reading materials.

Schools may invest for continuous capability building for teachers on how to localize curriculum without deviating from the standards of National BEC (Basic Education Curriculum). These include localized teaching methodology, procedures, and techniques; content integration; understanding culture knowledge; and writing teacher-made localized and authentic strategic instructional materials with relevance, quality, and flexibility.

The school may strengthen the CSBTP (Continuing School -Based Training Program) for instructional plans and strategic instructional materials validation to come up localized lesson exemplars.

With the individual learner's reading profile highlighting the areas of the development, the schools may conduct innovation using localized intervention program to suit learning needs and follow-up support and supervision.

A similar investigation may be conducted such as 'effective strategies in teaching localized curriculum', localized curriculum in teaching other learning areas, 'teacher's knowledge and skills in localized curriculum in relation the students' academic performance'.

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