IMPROVING GRAMMAR, VOCABULARY, AND READING COMPREHENSION SKILLS THROUGH COGNITIVE ACADEMIC LANGUAGE LEARNING APPROACH

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ABSTRACT

This study aims to determine the effectiveness of Cognitive Academic Language Learning Approach (CALLA) in improving the fifth grade pupils' skills in grammar, vocabulary, and reading comprehension. Using pre-test—post-test quasi-experimental research design, the investigation involved two groups of students: the control group exposed to the regular English reading classes and the experimental group exposed to CALLA for twenty sessions. Results revealed that there was no significant difference between the pre-test and post-test performances of the control group in grammar, vocabulary, and reading comprehension. This suggests the regular English reading classes did not significantly improve the students' skills. On the contrary, there was a significant increase in the post-test performance of the experimental group, which means that CALLA was an effective approach in improving students' skills in grammar, vocabulary, and reading comprehension. Moreover, when the two groups' post-test performances were compared, a significant difference was found in favor of the experimental group. This signifies that CALLA was more effective than the regular teaching approach used in their English reading class. In light of the findings, the study forwards valuable recommendations.

Keywords: Cognitive Academic Language Learning, Grammar, Vocabulary, Reading Comprehension

INTRODUCTION:

Developing English language skills, particularly reading and its associated skills, is undeniably difficult at times especially to second language learners in the Philippines. One instance to prove this was the result of the National Achievement Test (NAT) in 2012, which showed that Grade 3 students got a Mean Percentage Score of 54.42% in English Reading Comprehension (George Lucas Educational Foundation, 2015). The data suggest that young Filipino learners find it difficult to understand English texts. Thus, in the Philippines, teaching English, particularly developing vocabulary, grammar and reading comprehension among young learners, is a great challenge among elementary teachers.

The previous data implies that improving English instruction must be a priority. In that issue, various studies have addressed problems of low performance in grammar, limited vocabulary, and poor reading comprehension (Nejad & Mahmoodi-Shahrebabaki, 2015); (Taheri, 2014). However, research on the solutions to these problems seem to receive less attention as well. Without doubt, teachers have to carry the burden of looking for effective strategies to alleviate problems in students' performance in English. This issue actually calls for further research to identify effective teaching approach that would ameliorate learners' English skills.

Knowledge of strategies is important because the greater awareness you have of what you are doing, if you are conscious of the processes underlying the learning that you are involved in, then the more effective learning will be. (Nunan, 1991) showed that learners taught the strategies underlying their learning are more highly motivated than those who are not. He also found that not all learners automatically know which strategies work best for them. For this reason, explicit strategy training, coupled with thinking about how one goes about learning, and experimenting with different strategies, can lead to effective learning (Nunan, 1991).

(Oxford, 1990), one of the leading teachers and researchers in the language learning strategies field, argues that strategies are important for two reasons. In the first place, *"strategies are tools for active, self-directed involvement, which is essential for developing communicative competence"*. Secondly, learners who have developed appropriate learning strategies have greater self-confidence and learn more effectively. According to Oxford, language learning strategies contribute to the main goal, communicative competence, allow learners to become more self-directed, expand the role of teachers, are problem-oriented, are specific actions taken by the learner, involve many actions taken by the learner, not just the cognitive, support learning both directly and indirectly, are not always observable, are often conscious, can be taught, are flexible, and are influenced by a variety of factors.

The researcher finds it imperative that teachers develop and enrich their instructional methods and teaching techniques to cater to the needs of the learners. In this attempt to improve the learning of pupils, this study was chosen and was conducted to find out the effectiveness of Cognitive Academic Language Learning Approach (CALLA) improving grammar, vocabulary, and reading comprehension skills of fifth grade pupils of Mindanao State University-Integrated Laboratory School.

LITERATURE REVIEW:

The (Colorado Department of Education, 2011) described CALLA as an approach aimed for English Language Learners (ELLs) in ESL or bilingual programs, which takes into one language development, content area instruction, and explicit instruction. It focuses on content, thus, allowing learners to develop academic language skills based on the content. Cognitive theory and scaffolding form the theoretical foundation of CALLA, which suggest that instructional supports are provided as students go through the learning process.

CALLA believes in the perplexity of language as a cognitive ability and that it has to be developed to the extent that learners are able to make use of it on his/her own. This means that teaching strategies suitable to learners' skills should be employed in a facilitative manner. Moreover, CALLA puts emphasis on the need for procedural knowledge since it is seen as a facilitative knowledge for learning language and content.

As summarized by (Chamot, Issues in Language Learning Strategy Research and Teaching, 2004), the instructional model of CALLA has the following phases:

1. *Preparation* – The teacher identifies students' current learning strategies
2. *Presentation* – The teacher models, names, explains new strategy; asks students if and how they have used it.
3. *Practice* - Students practice new strategy; in subsequent strategy practice, teacher fades reminders to encourage independent strategy use
4. *Self-evaluation* – Students evaluate their own strategy use immediately after practice
5. *Expansion* - Students transfer strategies to new tasks, combine strategies into clusters, develop repertoire of preferred strategies

6.*Assessment* - Teacher assesses students' use of strategies and impact on performance.

A noticeable unique characteristic of CALLA is the explicit instruction and modelling of learning strategies by the teacher to students, such as the metacognitive strategies in reading. Its recursive process, which allows teachers and students to revisit the other phases should there be a need to reinforce them, also characterizes the CALLA model (Chamot, 2005). As (Chamot & O'Malley, 1994) noted, CALLA can also be used for beginning learners of English such as elementary pupils, although teachers still need to adjust the content of the lessons and to fit the activities to learners who need hands-on experiences in learning. Content such as Science as lessons can be suitable to elementary pupils, as (Chamot & O'Malley, 1994) suggested. As final note, she mentioned that *"the experience of implementing CALLA in a school program has shown that the model is flexible and can be adjusted to meet different needs, that students find CALLA instruction motivating, and that the model can be effective in helping students become more successful academically"* (p. 392.).

One study conducted by (Nejad & Mahmoodi-Shahrebabaki, 2015) used metacognitive strategy through CALLA in improving reading comprehension of intermediate Iranian EFL learners. Following the model of CALLA, they found that the approach was effective since a significant increase in students' reading comprehension performance was observed. However, the study were participated by high school students and focused solely on reading comprehension. This opens an opportunity to conduct a separate study on the effectiveness of CALLA on improving not only reading comprehension but also vocabulary and grammar among elementary pupils.

METHODS:

Research Design:
The researcher used the quasi-experimental design to attain the objectives of the study. It employed two intact randomly selected groups; one served as the control group and the other as the experimental group. To avoid biases, the researcher drew lots to determine which group would serve as the experimental group and which one would serve as the control group. The researcher also gathered numerical data on the scores of the respondents in grammar, vocabulary, and reading comprehension. The CALLA intervention was conducted from October to January 2015. After the said period, the gathered data were analyzed.

Research Subjects
The participants of the study were the fifth grade pupils of Mindanao State University-Integrated Laboratory School. There were four sections of fifth grade pupils; however, only two sections were utilized. The researcher randomly selected 41 pupils to compose the experimental and control group, respectively. Thus, 82 pupils served as respondents in the study.

Research Instruments
This study mainly utilized two instruments to gather the desired data. The first one was the instructional plan for Cognitive Academic Language Learning Approach (CALLA). It served as guide for the researcher to teach the lessons consistent with the principles and strategies of CALLA. Specifically, Science lessons were used as content in teaching the English lessons in the instructional plan. The second instrument was the test questionnaire, which was used to assess the learners' performance in grammar, vocabulary, and reading comprehension. The test was administered twice: first was during the pre-test while the second during the post-test. The researcher made sure that the post-test was not a replica of the pre-test by rearranging the test items and options.

Data Gathering Procedures
After securing permission from school heads and ensuring ethical conduct of the study, the researcher administered the pre-test to both experimental and control groups using the self-constructed test composed of three parts, namely, grammar, vocabulary, and reading comprehension. Tabulation and computation followed the pre-test. After which, the teaching sessions were conducted, where the control group was exposed to the regular English reading class while the experimental group was taught using Cognitive Academic Language Learning Approach (CALLA) following the CALLA Instructional Sequence, namely: preparation, presentation, practice, evaluation, and expansion. A sample instructional plan is provided in the Appendix. The experimental group received 20 sessions of instruction using CALLA while the control group attended the regular English/Reading classes. After the interventions, the researcher administered the post-test. Then the data were analyzed and interpreted. Shown below is the schematic diagram of the study.

RESULTS AND DISCUSSION:

This study aimed to determine the effectiveness of Cognitive Academic Language Learning Approach

(CALLA) in improving fifth grade pupils' grammar, vocabulary, and reading comprehension skills. The data below show the results of the t-Test analyses of the pupils' pre-test and post-test performances.

Table 1: Comparison of Pre-test and Post-test Scores within the Experimental Group

Test		Mean	*t*	p	Interpretation	Decision
Grammar	Pre-test	24.27	-7.21	.000	*Significant*	Reject Ho
	Post-test	29.27				
Vocabulary	Pre-test	24.80	-6.53	.000	*Significant*	
	Post-test	28.20				
Reading Comprehension	Pre-test	32.20	-4.60	.001	*Significant*	
	Post-test	34.70				

As shown in Table 1, the *p*-values are less than α=0.05. Therefore, in terms of grammar, vocabulary, and reading comprehension scores, there is a significant difference between the experimental group's pre-test and post-test performance. Particularly, the post-test scores are bigger than the pre-test scores. Hence, based on the results, there is a sufficient evidence to reject the hypothesis and conclude that there is a significant increase in pupils' performance after the application of Cognitive Academic Language Learning Approach (CALLA). It further implies that CALLA is an effective approach in teaching English to young learners in the elementary level.

Table 2: Comparison of Pre-test and Post-test Scores within the Control Group

Test		Mean	*t*	p	Interpretation	Decision
Grammar	Pre-test	18.27	-.191	.850	*Not Significant*	Accept Ho
	Post-test	18.40				
Vocabulary	Pre-test	17.50	.235	.819	*Not Significant*	
	Post-test	17.20				
Reading Comprehension	Pre-test	21.00	-1.718	.120	*Not Significant*	
	Post-test	24.10				

The results reflected in Table 2 are far different from the results in Table 1. It can be seen that the pre-test and post-test scores of the pupils in the control group did not show significant difference since *p*-values are much greater than α=0.05. These findings only mean that there is no significant increase in the pupils' performance in the grammar, vocabulary, and reading comprehension after exposing them to the traditional method of teaching. As a conclusion, there is no sufficient evidence to reject the hypothesis and infer that the traditional method enhanced the performance of the pupils in English.

Table 3: Comparison of Pre-test Scores between the Control Group and Experimental Group

Test	Group	Mean	*t*	p	Interpretation	Decision
Grammar	Control Group	18.27	3.49	.001	*Significant*	Reject Ho
	Experimental Group	24.27				
Vocabulary	Control Group	17.50	3.12	.006	*Significant*	
	Experimental Group	24.80				
Reading Comprehension	Control Group	21.00	3.84	.001	*Significant*	
	Experimental Group	32.20				

In Table 3, the pre-test scores of the control group and the experimental group are compared. It is shown that the *p*-values are less than the level of significance 0.05, which means that the difference between their scores is considerably significant. This is further supported by the mean scores of the two groups shown in the second column. Great differences are observable in all types of tests given to them such as grammar, vocabulary, and reading comprehension. Therefore, the hypothesis is rejected which means that in the pre-test, the control group got scores which are not better than the scores of the experimental group. It can also be implied that the experimental group already has the prior proficiency before the pre-test was administered to them.

Table 4: Comparison of Post-test Scores between the Control Group and Experimental Group

Test	Group	Mean	*t*	p	Interpretation	Decision
Grammar	Control Group	18.40	6.461	.000	*Significant*	Reject Ho
	Experimental Group	29.27				
Vocabulary	Control Group	17.20	5.097	.000	*Significant*	
	Experimental Group	28.20				
Reading Comprehension	Control Group	24.10	3.350	.004	*Significant*	
	Experimental Group	34.70				

Table 4 tabulates the results of the comparison between the post-test scores of the control group and the experimental group. As can be gleaned, the *p*-values in all types of tests given to the respondents are less than α=0.05. This leads to the interpretation that the difference between their scores is highly significant which means that the hypothesis is rejected. The mean scores shown in the third column wherein the experimental group got bigger mean scores in grammar, vocabulary, and reading comprehension tests also support this. It can only mean that the experimental group, which was exposed to CALLA, significantly improved as compared to the control group. Thus, it supports the claim that the use of CALLA in teaching English has a positive effect to learners.

CONCLUSION:

The main aim of this study is to determine the effectiveness of Cognitive Academic Language Learning Approach (CALLA) in improving fifth graders' grammar, vocabulary, and reading comprehension. Based on the findings of the study, the use of Cognitive Academic Language Learning Approach (CALLA) can contribute to the improvement of pupils' academic achievement in terms of grammar, vocabulary, and reading comprehension. Moreover, applying content-based teaching in reading classes is effective in improving pupils' reading comprehension performance. Finally, the Cognitive Academic Language Learning Approach (CALLA) improves pupils' cognitive skills awareness as shown in the results of the post-test.

RECOMMENDATIONS:

In light of the aforementioned findings and conclusions drawn from the study, the following recommendations are hereby presented. Language/Reading teachers should make use of the Cognitive Academic Language Learning Approach (CALLA) and should utilize content across curriculum, such Science lessons, which are interesting and motivating for the learners. They should carefully select materials that are suitable to learners' needs and interests as well. Language/Reading teachers must plan how to improve the academic achievement of the pupils. One important consideration in the reaching-learning process is the strategy used by the teacher. Teachers must try to use different strategies to improve the skills of the students, particularly grammar, vocabulary, and reading comprehension. Language/Reading teachers should realize the importance of reading resources. References, textbooks, and supplementary readings should include content, which will be used as springboard for grammar, vocabulary, and reading comprehension activities and exercises. Specifically, science lessons will capture the interest of pupils and therefore motivates them to learn. Professional development activities such seminar-workshops and in-service trainings on the use of CALLA in improving pupils' grammar, vocabulary, and reading comprehension should be conducted. Pupils must have the interest and determination in improving their skills in grammar, vocabulary, and reading comprehension. They must develop the habit of reading. Training programs on the use of Cognitive Academic Language Learning Approach (CALLA) will update and equip Language/Reading teachers more of the skills in using CALLA as a strategy in enhancing learners' language competence. Future investigations related to the use of Cognitive Language Learning Approach (CALLA) should be conducted. Implementing CALLA in other content areas such as Mathematics, Social Studies, and Literature and Composition.

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