Using Story Reading and Explicit Instruction in the Vocabulary Acquisition of Kindergarten Children

Pamela D. Singzon

Felicitas E. Pado

University of the Philippines Diliman

Abstract

This research investigated the relationship of children's literature with vocabulary acquisition of kindergarten children. A quasi-experimental study was conducted involving three kindergarten classes, with a proportionate number of boys and girls, from a public school in Quezon City. Filipino was the first language of most of the subjects. The medium of instruction used in the study was predominantly English.

The first group was exposed to Method 1 (story reading with unlocking of difficulty activities), the second group to Method 2 (story reading without unlocking of difficulty vocabulary) and the third group to Method 3 (explicit instruction in vocabulary without story reading). A pre-test and post-test was given prior to and after the vocabulary acquisition sessions. Results show that Method 1 was the most effective in contributing to the vocabulary development of the kindergarten subjects. Method 2 came in second while the least effective method was Method 3.

Independent samples t-tests were computed to determine differences in vocabulary mean scores between boys and girls, and with the educational background of the subjects' mothers. Results showed no significant differences or interactins in both instances.

Key words: children's literature, story reading, vocabulary acquisition, explicit instruction

R eading aloud storybooks is slowly gaining acceptance in the Philippines as a way to introduce students to the pleasures of reading and books. More recently, the purpose of reading aloud has expanded to include instructional purposes such as developing comprehension and critical thinking skills, vocabulary and concept development, and decoding (Barrentine, 1996). Birkerts' (1999) strongly-held belief is that reading is a primary shaping influence; that it exerts its greatest formative effects at the earliest stages but remains a vital factor throughout development. He notes that our earliest reading experiences are, generally, of being read to. While being read to is quite different from self-directed reading, its influence as a precursor event is mighty and needs to be considered. Being read to is, more than any later reading engagement can be, a complete environmental experience.

Story reading brings a distinctive kind of richness to children's literature experience. Familiar and favorite books shared as oral stories provide an avenue for expanding young children's language and increasing their story comprehension (Zeece, 1997). Because language is an interactive process, children learning a language need ample opportunity to interact in a meaningful, interesting context and play with the language while developing vocabulary and structures. Collaboration of their peers and teachers create meaningful contexts as well as opportunities to negotiate meaning in those contexts.

Vocabulary acquisition and reading. Vocabulary plays an important part in learning to read. As beginning readers, children use the words they have heard to make sense of the words they see in print. Words help students read, learn and understand their world. The larger their vocabularies, the better able they are to learn and do. In addition, vocabulary also is very important to reading comprehension. Readers cannot understand what they are reading without knowing what most of the words mean. As children learn to read more advanced texts, they must learn the meaning of new words that are not part of their oral vocabulary (National Institute for Literacy, 2007).

According to Francie Alexander (2008), there are three reasons as to why vocabulary is critical to reading success:

1. Comprehension improves when you know what the words mean. Since comprehension is the ultimate goal of reading, you cannot overestimate the importance of vocabulary development.

- 2. Words are the currency of communication. A robust vocabulary improves all areas of communication listening, speaking, reading and writing.
- 3. When children and adolescents improve their vocabulary, their academic and social confidence and competence improve, too.

High-quality children's literature that is captivating for both students and teachers can be used to develop process skills and essential knowledge in children. The educational potential of a well-executed children's story can change how teachers plan their curricula.

Gender and vocabulary acquisition. The most well-known 'gendered' aspect of second and foreign language learning is probably that girls tend to perform better than boys (Arnot, David, and Weiner, 1996). As early as the 1930s linguists have proven that girls are generally ahead in their linguistic development but studies have shown the differences to be less significant than expected. From his own investigation into innate sex differences in second language learning, Ekstrand (1980) believes that all behavioral variations may be explained by cultural factors. Sunderland (1995) likewise points out that any apparent superior proficiency as regards scores may always be partially a function of the test.

Mother's education and language acquisition. Social class and family background variables figure prominently in emergent literacy research—the links between parental occupation, income, or educational history and children's achievements have been addressed in numerous studies (Purves and Healey, 1994). In general, more literate and highly educated parents have children who perform better in school. The most important factor affecting a pupil's achievement is the educational level of her/his parents, with mother's education having the greatest effect (Croxford, 2001).

Research Aims

The study sought to explore the impact of children's literature in the development of vocabulary of young children. Specifically, the study was undertaken to answer the following questions:

1. Are there significant differences in vocabulary acquisition among kindergarten children who are :

- a) exposed to story reading with explicit instruction of vocabulary?
- b) exposed to story reading without explicit instruction of vocabulary?
- c) exposed to explicit vocabulary instruction without story reading?
- 2. Is there a significant difference in the vocabulary mean scores:
 - a) between the boys and the girls?
 - b) based on the educational background of the mothers?

Methodology

Research Design

The study was quasi-experimental, making use of a pretest-posttest control group design that focused on the comparability of the different groups. The research involved three groups, each consisting of intact classes. The methods applied for each group were as follows:

Method 1/Group 1:	Story reading with unlocking of difficult words
Method 2/Group 2:	Story reading without unlocking of difficult words
Method 3/Group 3:	Explicit instruction of vocabulary without story reading

The results of the application of each method then determined the extent of vocabulary acquisition. A comparison of the results further determined the effect of each method on the vocabulary acquisition between boys and girls, as well as its interaction with the educational background of the mother.

The Research Locale and Sample

The research was conducted in an elementary public school located in Quezon City. The area where the school was located was home to over 20,000 squatter families occupying University land. The sample consisted of children from three kindergarten classes. Two of the classes had 27 students while the remaining class had 31 participants. The subjects came from similar economic backgrounds, with a proportionate number of boys and girls who were at least 5-6 years of age. The predominant language used in the home was Filipino. Class selection for each method was based on random selection.

Instruments

The Basic Information Sheet served as the preliminary instrument. This answered data regarding the name, age, school, language at home of the children as well as the educational background, income and occupation of their parents. The following instruments were used during the actual study itself:

Picture Vocabulary Test. This is an individually administered oral assessment of the child's ability to name objects, actions, and concepts pictured in illustrations. The pictures consisted of 75 vocabulary words that came from the stories that were read to the children. The test was not timed and did not require reading or writing by the examinee. Subjects were rated using a 3-point rubric as shown in Table 1. The score of each subject for each word for both the pretest and post test was recorded in the Individual Score Sheet. Total raw scores were tabulated in a Summary Data Sheet. Two were accomplished for each group to separately record the total scores of boys and girls for both pretest and post test.

Table 1 Three-Point Rubric of the Picture Vocabulary Test

0	Subject is unable to respond or give the correct answer.
.5	Subject gives the vocabulary word in Filipino, describes the
	word, or gives a synonym.
1	Subject is able to give the correct answer.

Behavior Checklist. This consisted of a list of children's behaviors during story reading concerning vocabulary acquisition. This was the basis for recording of behaviors in order to further determine the effect of story reading on vocabulary growth.

Procedures

Preparatory Phase:

1. Fifteen books were selected based on: a) children's interest; b) concept load; c) vocabulary load; and d) illustrations. Five (5) vocabulary words from each story were chosen.

2. Lesson plans were made for each of the three groups for all 15 stories. The subjects were selected, then permission was sought from the school administration in order to conduct the research at the establishment. Once the school gave its consent, one of the teaching methods was randomly assigned for each class. The teachers of each class were briefed about the study and their assistance was sought in taking down observations using the checklist.

Data Gathering:

1. Pilot Study

Prior to the actual collection of data, a pilot study was conducted in a kindergarten class that was not utilized during the actual experiment. The flow of activities was observed in order to get a clearer idea on how the actual experiment would be conducted. Possible problems that could occur during the actual study were addressed at this stage.

2. Observation of the Target Classes

A week was allotted in order to become familiar with the school and classroom set-up as well as with the teachers and students of the research locale. This provided an opportunity for the students and teachers to adjust to the presence of the instructor-researcher as well as to the audio-visual equipment that was used in the study.

3. Data-Gathering

This consisted of 15 sessions of 30 minutes each of conducting the lessons with each group. Pretests and posttests were done before and after the actual lessons. The flow of lessons for each treatment group is shown in Table 2.

Group 1	Group 2	Group 3
 Prereading Unlocking of difficult words Motivation Motive Questions Reading of the Story Discussion of the Story Engagement Activity 	 Reading of the Story Discussion of the Story Engagement Activity 	 Warm-Up Introduction of Pictures and Target Words Supporting Activity Review of Pictures and Target Words

Table 2.Lesson Flow for Each Treatment Group

At the end of each session for all three groups, the vocabulary words and the corresponding pictures that were taken up were placed in a word wall. This was done to help reinforce retention of the target words.

The researcher taught the three groups in order to have strict implementation of the lessons and to avoid contamination of strategy. The actual story reading was done purely in English. Prereading and post-reading activities as well as the discussions that followed were done in both English and Filipino, but with more emphasis on English. Filipino was used to support the instruction only when clarifications were necessary or when the students had difficulty understanding the lessons. Care was taken to use only the English names of the target words. Translating them to Filipino was avoided.

Data collection involved participant observation, video tape recordings, informal interviews and written field notes.

Data Analysis

Statistical treatments consisted of the following:

Problem 1: Computing for the analysis of covariance (ANCOVA) for the posttest. Pretest scores were controlled by using such scores as the covariate. Adjusted means were computed in order to determine the effectiveness of each method.

Problem 2: Running an independent samples t-test for gender and mother's education, and computing for the analysis of variance (ANOVA) with a two-way classification for gender and mother's education.

The criterion level of significance was set at $\alpha = .05$. A qualitative analysis was likewise done based on the statistical results as well as information taken from observations during the teaching sessions.

Results

Story Reading and Vocabulary Acquisition

Table 3 presents the pretest and post test scores on vocabulary acquisition of the three methods

Controlling for pretest scores, ANCOVA computations were made for the three research methods. The resulting significance value of .012 was less than the predetermined level of $\alpha = .05$. Thus, there was a significant difference in the subjects' vocabulary acquisition when exposed to the three different teaching treatments.

Type of Method	Mean Pretest Scores	Mean Post Test Scores	Gains
Method 1: Story reading with unlocking of difficult words	30.73	42.53	11.8
Method 2: Story reading without unlocking of difficult words	32.17	43.04	10.87
Method 3: Explicit instruction of vocabulary without story reading	29.94	38.33	8.39

Table 3					
Pretest and Post Test Scores on Vocabulary Acquisition of the Three					
Methods					

Based on the corresponding gains, the two methods utilizing story reading as a teaching strategy for vocabulary acquisition had the higher values as compared to using explicit instruction of vocabulary without story reading. In comparing the gains for both methods that made use of story reading, the method that included prereading activities reflected a higher value as compared to the method that did not utilize prereading activities. As such, Method 1 was the most effective in teaching vocabulary to the students, with Method 2 the second most effective and Method 3 being the least effective.

The effectiveness of each method was further established when the values of the adjusted means were taken into consideration (see Table 4). Computing for the adjusted means meant that the influence of pretest knowledge of the students (as denoted by pretest scores) was removed in order to show 'actual vocabulary acquisition' based on post test scores after exposure to the different teaching methods.

Table 4 Adjusted Post Test Scores Using Pretest Scores as Covariate

Type of Method	Adjusted Means
Method 1: Story reading with unlocking of difficult words	42.7544
Method 2: Story reading without unlocking of difficult words	41.7956
Method 3: Explicit instruction of vocabulary without story reading	39.3602

Resulting values indicate that Method 1 was the most effective. Coming in second was Method 2, and the least effective was Method 3. Similar to the findings in the studies of Brett, Rothlein and Hurley (1996), evidence shows that in order to effectively teach vocabulary, both methods of explicit and incidental teachings must be applied. That is, vocabulary acquisition should be developed naturally through reading and the learner's desire to clarify concepts (incidental) as well as be targeted for the learners (explicit).

With the combination of explicit and indirect instruction, the subjects were able to retain more of the target words. During the pre-reading activities, the story reader was able to assist them in gaining knowledge about the words by using pictures as well as explanations that were easier for the children to understand. Applying the motivation-motive question tandem allowed them further to be able to relate the words to schemas that were familiar to them. As a result, the children were more prepared for the story reading sessions that followed. In the event that the children encountered the target words while the stories were being read aloud, the level of familiarity associated with the specific words made the subjects more able to comprehend the story and put into memory the words that were earlier pointed out. Reinforcement of this knowledge was done further through the discussions that immediately followed the story, as well as through the post-reading activities.

Although the results clearly show that combining incidental and explicit instruction is best in teaching vocabulary to the children, further analysis indicates that all three methods utilized in the study showed gains in the vocabulary acquisition of the subjects. It seems that for as long as children are put in situations where there is exposure to words, acquisition of language will always occur, although at differing rates.

Observations During and After the Story Reading Sessions

For each session, the children were observed to always repeat words during story reading as well as answer questions asked about the story. They questioned or commented while their eyes were focused on illustrations in the book or while their fingers were pointing at the pictures. This behavior occurred more often with the group who had story reading but no pre-reading activities. The children would focus on the pictures and utter their names. More often than not, these words were the target words that were not introduced to the subjects prior to the actual reading of the story.

During the five story reading sessions, the children would ask about words heard during story reading. These were instances when the subjects tried to clarify the name of the animal or object that came up while the story was being read.

Further observations were made of the children's behavior. While waiting for the story reading sessions to start, there were instances when some of the children would come up to the instructor and inquire what story was going to be read for the day. Besides wanting to see the actual book, they also wanted to take a peek at the pictures and words that were to be utilized for the story. They were excited and were eagerly anticipating the start of the story reading session.

Once the teacher was about to begin, some students were sometimes able to catch a glimpse of the book. They would ask what it was about. When they happen to see the cover, they comment about details in the said cover. Some children also tried to take a look at the pictures and written names of the target words that the instructor had placed upside down on a table in front. They tried to turn them right side up in order to see the picture and attempt to read the written words.

Most of the children participated actively in the discussions that followed the story reading sessions. They enthusiastically attempted to answer the questions that the researcher asked and they even tried to show off their prowess at remembering the target words. Compared to the start of the experiment where participation was desultory, the children became more eager to participate in the activities out of genuine interest.

Vocabulary Acquisition in Relation to Gender

Results of the independent samples t-test showed that there was no significant difference in the vocabulary mean scores between the boys and girls. All methods showed a significance value greater than the level of significance set at $\alpha = .05$. For Method 1, it was .498; for Method 2, it was .299; and for Method 3, it was .950 (see Table 5).

Method	Mean Difference	Std. Error Difference	Df	t	Significance
Method 1	2.5167	3.6712	29	.686	.498
Method 2	4.1566	3.9151	25	1.062	.299
Method 3	.2445	3.8441	25	.064	.950

 Table 5

 Independent Samples t-test Between Teaching Methods and Gender

ANOVA computations resulted in a value of .776. With a significance level set at $\alpha = .05$, this showed that the interaction between the three methods and gender was also not significant.

The key issue put forth involving gender and language learning emphasizes that girls are well ahead in language acquisition as compared to the boys. The expectation, thus, would be that girls would attain higher scores than their male counterparts. However, in the case of this study, values resulting from the implementation of the three teaching methods showed that boys garnered higher scores as compared to the girls (see Table 6), although the difference is not statistically significant.

 Table 6

 Post Test Mean Scores for Each Teaching Method Based on Gender

	Story Reading with Prereading Activities		Story Reading without Prereading Activities		Explicit Instruction of Vocabulary without Story Reading	
Gender	N	Mean	Ν	Mean	Ν	Mean
Boy	16	43.7500	13	45.1923	13	38.4231
Girl	15	41.2333	14	41.0357	14	38.1786

Vocabulary Acquisition in Relation to Maternal Education

Results of the independent samples t-test showed that there was no significant difference in the vocabulary mean scores based on the educational background of the mother. All methods showed a significance value greater than the level of significance set at $\alpha = .05$. For Method 1, it was .544; for Method 2, it was .371; and for Method 3, it was .488 (see Table 7).

 Table 7

 Independent Samples t-test Between Teaching Methods and Maternal Education

Method	Mean Difference	Std. Error Difference	Df	t	Significance
Method 1	2.2583	3.6770	29	.614	.544
Method 2	3.7118	4.0741	25	.911	.371
Method 3	-2.6917	3.8281	25	703	.488

ANOVA computations resulted in a value of .486. With a level of significance set at $\alpha = .05$, this showed that the interaction between the three methods and maternal education was not significant.

These results do not confirm the findings of Purves and Elley (1994), whose study found a positive correlation between a mother's educational attainment and their children's academic outcomes. One probable explanation for the this is the limited sample used in the current study.

Conclusions

1. One of the most persuasive rationales for sharing literature with young children is that it benefits the development of vocabulary.

For years, researchers, teacher educators, parent educators, and parents have recognized the value of reading to children, and numerous studies

document the beneficial effects of reading to preschool children. Instruction in this area can take place primarily through interactive dialogue--children gain comprehension skills, increase their understanding of literacy conventions, and are encouraged to enjoy reading.

2. Reading aloud to children needs to be accompanied by pre-reading activities in order to have the most effective manner of imparting vocabulary knowledge to students.

Explicit instruction of vocabulary words through pre-reading allows the children to become familiar with key words prior to the story being read. Thus, even before story reading, the children have overcome blocks towards fully understanding the story.

3. Results showed that there was no significant difference in the vocabulary mean scores between boys and girls, and there was no significant interaction between gender and teaching methods.

There are issues that surround the relationship between gender and teaching methods in terms of its effect on vocabulary acquisition. There exists the belief that these differences are rooted in purely biological factors; others, to processes of socialization; or from a combination of both. The findings of this study did seem not to lean in any direction, as no gender differences were found.

4. Results showed that there was no significant difference in the vocabulary mean scores based on the educational background of the mothers, and there was no significant interaction between teaching methods and mother's educational attainment.

Based on the measures of achievement that were recorded, the computed values followed the trend similar to that of gender in relation to teaching methods, with no significant differences or interactions between the teaching methods and the educational background of the subjects' mothers.

Recommendations

In light of the findings of this study, the following recommendations are made:

- 1. Story reading with pre-reading can be applied by early childhood educators in addressing the challenge of teaching pupils vocabulary.
- 2. Emphasis must be given on establishing an environment that promotes and motivates children to utilize books in learning. This includes having a conducive reading area in the classroom with developmentally appropriate books readily available. Ample time must be given for free reading in the classroom.
- 3. Ongoing professional development is essential in order to give teachers the theoretical and curricular understandings to construct effective learning environments with their students.
- 4. Educational leaders interested in supporting a curriculum that gives emphasis on literature-based instruction should ensure that several components are present:
 - a. On-going staff development on the use of appropriate methods of instruction;
 - b. Planning time for teachers in order to observe, evaluate and support each other as new teaching methods are being implemented;
 - c. Availability of resources must be improved;
 - d. Schools should develop collaborations with other institutions that can provide school personnel with the support to enable them to make changes that will enhance student learning.
- 5. Teachers can familiarize parents with strategies that would foster their children's literacy development. These would include: (a) examining their own habits with respect to books; (b) determining resources available for bringing children into contact with children's literature; (c) distinguishing between different types of children's books; (d) examining the main elements involved in choosing a book for their child; (e) basic story reading techniques; (f) using intervention techniques in various learning situations that promote positive parent-child interaction (reinforcement, attitude of

warmth, listening, simple and clear instructions); and (g) recognizing their child's strengths and limitations.

- 6. More empirical studies are needed to gain a better understanding of the value of book reading for young children. Replication of the research design can be made with added suggestions for further studies:
 - a. Utilize Filipino as the medium of instruction. This would also mean using Filipino story books with the intent of vocabulary acquisition in Filipino.
 - b. Consider home-reading practices in the analysis of interaction between mother's educational attainment and the teaching methods.
 - c. Increase the length of time of the study by adding more sessions to be observed.
 - d. Increase the sample by adding more subjects, still keeping in mind that there should be a proportionate number of boys and girls that make up each group.
 - e. Increase the number of words that the subjects will be tested on.

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About the authors:

Pamela D. Singzon is a graduate of the University of the Philippines with a BS in Business Economics and an MA in Education (Teaching in the Early Grades. She worked in a pre-school for six years as teacher and administrator before settling down as a full-time wife and mother. Email:

Felicitas E. Pado is a Professor at the Teaching in the Early Grades (TEG) area of the Division of Curriculum and Instruction at the College of Education, University of the Philippines Diliman.

Email: <u>felypado@yahoo.com</u>