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How oral content vocabulary language transfers to student writing

Julie A. Post

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How Oral Content Vocabulary Language Transfers to Student Writing

By

Julie A. Post

A Graduate Field Experience

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

Literacy and English as a Second Language

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Signature Page

This Graduate Field Experience
Has been approved for Cardinal
Stritch University by

Ruth A. Hoenick

April 28, 2012

Copyright Page

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Abstract

This action research investigated how oral content vocabulary used during oral discussion transferred to students' academic content writing. In order to accomplish this, four students in fifth grade received explicit vocabulary instruction. The guiding question of the study was: Will the students transfer content vocabulary used in oral discussion to their content area writing? The researcher hypothesized that the students would use more academic content vocabulary during discussion than in their content area writing. An eight-week intervention was conducted. First, student academic content language used orally during discussion was tracked. Next, student writing was analyzed for usage of the same target vocabulary. Then data from these samples were compared. The results showed that explicit instruction of academic content vocabulary fostered an increase in target vocabulary words used in both oral discussions and in student writing. During the intervention, students used more academic content vocabulary during oral conversations than in their writing. There were positive student outcomes in that a higher number of academic content vocabulary words were used in content area writing after the intervention.

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Chapter One

Introduction

Content area writing requires students to understand academic vocabulary, comprehend expository writing in textbooks, synthesize information, and use an academic register characterized by expository or formal language (Brown, 2007; Montelongo, Herter, Ansaldo, & Hatter 2010; Neufeld, 2005). Prior to writing within or about a content area subject, content area reading, which is also challenging for English language learners (ELLs), must be read and understood. Teachers can scaffold text comprehension and improve students' reading and writing skills through building new vocabulary. I believe I can increase student use of advanced vocabulary through peer discussion, repeated exposure to target words, and in turn increase the use of content area vocabulary in student writing.

This chapter of my action research will serve as an overview of the school at which the action research will take place. In the first section I will describe the school, programming model, decision-making processes, policies, procedures, staffing information, and other relevant contextual information related to my topic. In the second section I will discuss student language and academic data. In the next section I will describe the student population with whom I intend to work for this project. The following section includes a summary of best practice research related to my topic. Lastly, the final section provides an overview of my action research project.

Context of District and School

This first section describes features of the school. Washington Elementary School is one of fifteen elementary schools in the Sheboygan Area School District, which serves almost 10,000 students. In the 2010-11 school year, there were 327 students enrolled in kindergarten through fifth grade at Washington. The student population consisted of 55.7% male and 44.3% female

with a race/ethnicity breakdown of 1.5% American Indian, 29.4% Asian (Hmong), 6.1% Black, 16.2% Hispanic, and 46.5% Caucasian. The school is a Title I school with 77.4% of the student population considered low socio-economic status and thus received free or reduced lunch. This number has increased every year since 2006 when 62.7% of students were lower SES. Sixty-five point four percent of the students were proficient in English. The students with limited English proficiencies were 9.2% Spanish, 23.9% Hmong, and 1.5% other. English is a second language for 42% of the students.

Students who eat breakfast at school arrive at 8:05. The official school day begins at 8:25 and ends at 3:25. Most students walk to school or are transported by parents. The first two morning classes are specials such as art, music, or gym. Students then have extended blocks of reading and writing using a workshop approach. Students proceed to a 50 minute lunch hour which includes a recess period then continue with content area workshops of either science or social studies. This year math workshop is being implemented.

Washington School for Comprehensive Literacy's unique programming model is described in this section. It is the only school in the Sheboygan Area School District which implements the Comprehensive Intervention Model (CIM) (Dorn & Soffos, 2012), and it was the first school in the state to adopt this model developed at the University of Arkansas at Little Rock. The school aims to ensure all students are literate thinkers and problem-solvers. Teachers use a workshop approach to teach academic subjects, typically explaining, modeling and demonstrating specific concepts and strategies in mini-lessons. Lessons are reinforced in small groups led by a teacher or literacy coach, in peer study groups, in literacy discussion groups, and independently.

The Comprehensive Intervention Model (CIM) is a framework which includes a combination of high-quality, differentiated classroom instruction, a portfolio of research-based interventions, an assessment system at an individual and system level, and a school-embedded professional learning. Small-group interventions have been refined to include authentic reading and writing activities. The CIM is also used as an intervention. A four-tiered, layered approach is used as a problem solving process to monitor a student's response to intervention.

The decision to implement the CIM was decided by several teachers who researched models for literacy to be taught in this school. Two teachers volunteered to be trained in Arkansas as literacy coaches, and several classroom teachers volunteered to learn about the CIM and become model classrooms. Over a two year process the model was slowly introduced to all classroom teachers. At the same time, Washington staff decided to apply for charter school status. Washington School for Comprehensive Literacy currently follows most of the district's school board policies and calendar. Day-to-day building decisions are made by the principal. A literacy coach plans and facilitates the grade level team meetings and the vertical (all-teaching staff) meetings. The literacy coach also trains the staff in the CIM and its interventions. Washington has a dedicated staff, and most have worked there for seven or more years. There are a total of 52 staff members, although not have full contracts or are there daily. There is 1 principal, 1 literacy coach, 2 secretaries, 2 custodians, 1 counselor, 19 teachers in grades K-5, 1 speech teacher, 2 cross-categorical teachers, 4 English Language Learner (ELL) teachers, 1 gifted and talented teacher, 7 specialists, 1 reading recovery teacher, 1 reading assistant, 2 physical and occupational therapy teachers, 1 food server, 2 cross-categorical educational assistants, 3 ELL educational assistants and 1 library media assistant. There are also 2 foster grandparents who volunteer and work one-on-one with students. Students who transfer to Washington often

require time to adjust and become familiar with appropriate workshop behavior and expectations because there are fewer traditional assessments such as end of chapter exams. More observational and anecdotal records are used to student determine proficiency as well as portfolios and performance tasks.

Student Language and Academic Data

This section examines student languages and academic data of Washington School for Comprehensive Literacy. In the state of Wisconsin, there are over 45,000 English language learners representing at least 125 different native languages (Wisconsin Department of Public Instruction, 2008). There are six languages represented at Washington: English, Hmong, Spanish, Bosnian, Chinese, and German. Students who speak Spanish, Hmong, and Bosnian receive support in their home language.

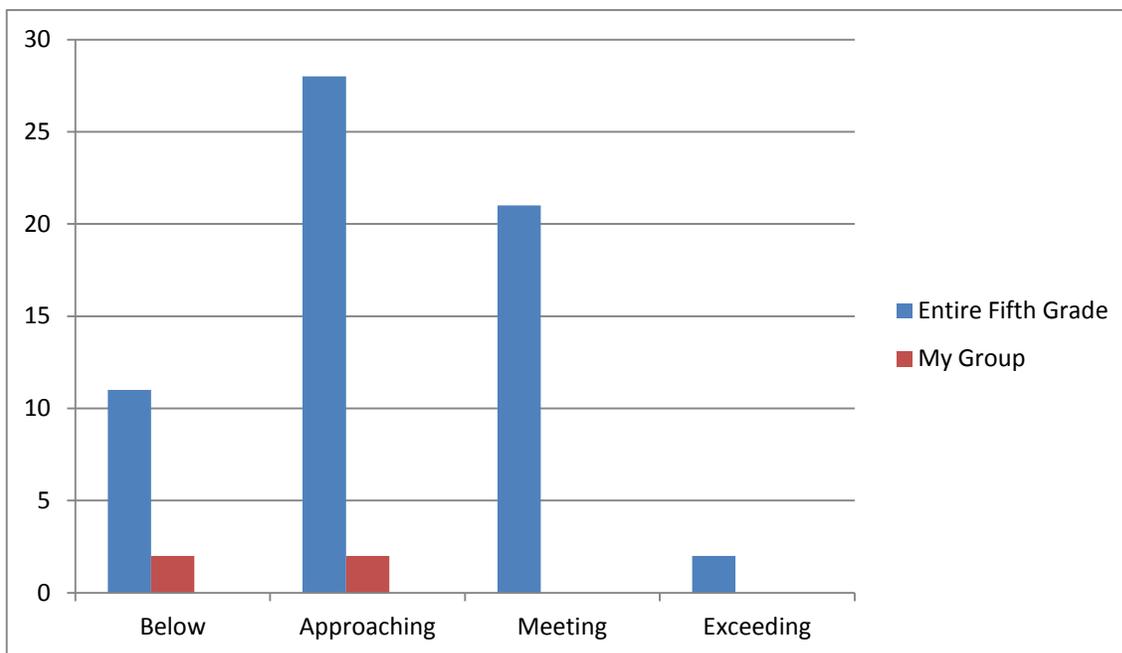
Washington uses an assessment wall to monitor students' growth over time in reading, writing, and math. This "wall" is four pocket charts which cover a space of ten feet by 25 feet. It hangs in the classroom of the literacy coach. Teachers use a data collection sheet and update the wall at five data points during the year (three weeks after school begins and again at the end of each quarter). The form uses four proficiency categories -below, approaching, meeting, exceeding- for charting student progress. Each pocket chart is divided by grade level, beginning with kindergarten and ending with fifth grade, and each grade level is further separated into reading, writing, and math. The proficiency categories are based on the Common Core Standards of Wisconsin for each particular grade level (Common Core State Standards Initiative, 2010). Writing proficiency is determined by teacher completion of a grade level scoring guide. Three areas are taken into consideration: process and habits, audience and purposes/author's

craft, and language use and conventions. Students are then ranked as below, approaching, meeting, or exceeding these writing proficiencies.

The following graph shows the writing proficiency data from the end of first quarter for fifth graders from the assessment wall. There are a total of 62 fifth graders. Overall, placement is as follows: Below-11 students (17%), Approaching-28 students (45%), Meeting-21 students (35%), and Exceeding-2 students (3%). Two students in my group are classified as Below and two students are classified as Approaching. These data indicate that the students in my group would benefit from small group instruction in the area of writing because they are producing work that is considered below grade level. I will peruse their writing portfolios to learn the students' strengths and weaknesses in writing.

Table 1

First Quarter Fifth Grade Writing Proficiency



Student Population for This Research

In this section, I provide background information on the student population which will be used for the research. The focal group consists of four students, ages 10-12. There are 3 males and 1 female. The group consists of 2 Hmong, 1 Hispanic, and 1 Caucasian. All of the students in the focal group were born in WI. Three have attended Washington School for Comprehensive Literacy since kindergarten and one student transferred from Howards Grove, a small Wisconsin village, to Washington in third grade. Two of the students were in an ELL kindergarten class at Washington. One student's family came from Laos. Both parents speak Hmong and English. The focal student is the youngest in the family and has two male siblings in high school. She has cousins who attend Washington, and they have shared folklore with me about Hmong culture. She likes math, writing fairy tales, and playing the clarinet. She wants to travel to Washington, D.C. to visit the museums. Another student attended Head Start, and was in Reading Recovery at Washington. His parents moved here from Laos and speak Hmong. This student is the oldest of three boys. Both his parents work in factories. He likes to read, draw manga, and play soccer. The third student's parents moved to Sheboygan from Mexico. The mother speaks Spanish and does not work outside the home. The father speaks conversational English and works two jobs to provide the best of everything for his family. The student in the focal group is the middle child. He attended Head Start before entering an ELL kindergarten classroom at Washington. He speaks Spanish and English. He likes video games and wants to go to Hershey, PA someday to make chocolate. His family frequently travels to Mexico to see extended family. His father wants him to learn English and graduate from high school. The final student in the focal group began school at the Early Learning Center, which is a preschool. He has attended Washington

since kindergarten. The father works third shift and his mother cares for their two year old son. This student likes comic books, movies, and fantasy literature.

Best Practice Research Related to Students of Low Socio-Economic Status and Vocabulary Development

This section describes best practice related to students of low socio-economic status. The purpose of this study is to investigate how literacy discussion targeting specific content vocabulary transfers to students' academic content writing. I believe I can support my students' writing development within a content area by providing explicit vocabulary instruction in order to build their vocabulary knowledge and the inclusion of academic vocabulary within their writing. However, I felt it necessary to discuss best practice research related to children of low SES status because almost 80% of the children from my school live in poverty.

Poverty hits many children, but especially minority children particularly hard. More than one of every six American children lives below the poverty line, and the proportion of minority children who are poor is higher (Diaz-Rico & Weed, 2006). Since low socio-economic status (SES) is a reliable predictor of poor school readiness and reading skills (Snow, Burns, & Griffith, 1998), it is important for teachers to lessen the gap of vocabulary knowledge between non-poor and poor children. Teachers can do this by encouraging oral conversations, and encouraging peer discussion. Students of lower SES also know fewer words than their counterparts. The number of words children of lower SES are exposed to is lower than those of working class or higher SES families. It is estimated that higher-SES children are exposed to more words by the time they were three, and on average had a vocabulary of 1,100 words. The children of working class families had vocabularies of 700 words while children from lower SES families had

vocabularies of 500 words (Hart & Risley, 1995). Participation in shared reading of informational text will provide opportunities for the students to encounter new words and engage in conversations, thereby, building their repertoire.

Another way to build vocabulary knowledge in children is through direct, explicit instruction. Beck and McKeown (2007) demonstrated through vocabulary instruction intervention that children as young as kindergarten can add sophisticated words to their vocabulary. Providing children with opportunities to gain facility of difficult words promotes higher levels of vocabulary knowledge. All the students will benefit from this exposure.

In summary, encouraging oral discussion by the students during daily interventions allows them to practice new vocabulary and increases their use of and knowledge of new vocabulary words, and thereby will lessen the vocabulary gap that students from lower SES often suffer.

Overview of Project

Based on observations of my own students, district data, and recent research, I have chosen an action research topic which will improve my understanding of English as a Second Language practice and the specific interventions used at Washington School for Comprehensive Literacy, a charter school that implements the Comprehensive Intervention Model. I have also considered the population I serve as 77.4% of the students are lower socio-economic status (SES). Since children from lower SES often lack the rich vocabularies of their higher SES peers, I can increase their knowledge of sophisticated words through explicit instruction and repeated encounters with the word. Through exposure to new words taught by a teacher during oral discussion, and peer use of the words during discussion, students can build their oral vocabulary.

Increasing the number of words a lower SES child hears will increase the vocabulary repertoire of that child thereby improving literacy skills for a successful academic future.

According to the research of Beck and McKeown (2007), oral conversation is the primary source from which children learn the words they know. All children's vocabulary grows during the school year, but children who come from lower socio-economic backgrounds are found to have a larger vocabulary gap. As children progress through school, the academic language becomes increasingly complex. In addition, according to the research of Magno and Amarles (2011), linguistic feedback plays a significant role in developing writing proficiency among second language learners. These students are not only learning the conventions of writing but academic processes as well. Students need to summarize, evaluate, and draw conclusions for their writing. Studies have shown that the lack of vocabulary knowledge is a serious issue in students' writing (Kaur and Hegelheimer, 2005).

Conclusion

In this chapter I have discussed features such as the Comprehensive Intervention Model which are unique to my school. I also discussed how poverty affects vocabulary in children. My action research will investigate how literacy discussion targeting specific content vocabulary transfers to students' academic writing. All the students in my focal group are considered below or approaching grade level. I believe that by holding them to high standards, they will produce quality writing. I hypothesize that students will use more of the new vocabulary words in their oral discussions. With continued interventions, students will begin to increase the use of content area vocabulary words within their academic writing.

Chapter Two

Introduction

This chapter examines the factors that influence literacy skills and the effects that literacy instruction have on building oral vocabulary among children who come from lower socio-economic status (SES) environments. A growing number of children are living in poverty. Children from low households score significantly lower on reading and vocabulary tests when compared to children who come from middle or high income homes (Diaz-Rico & Weed, 2006). Therefore, increasing vocabulary knowledge among children coming from lower socio-economic environments is essential in order to have these children achieve success. First, research on parental literacy and the home literacy environment are introduced. Next, studies focusing on vocabulary instruction are discussed. Then, the effect of reading to preschool children is introduced, and finally studies focused on strategies which may improve student vocabulary and writing are discussed.

Parental Literacy and Home Literacy Environment

In order to learn language, children need opportunities to develop language (Rice, 1989). The following section reveals how parental literacy and the home literacy environment, including cultural factors, influences children's language.

Hammer, Farkas, and Maczuga (2010) completed a secondary analysis of previously collected data. The authors used data from four Head Start Family and Child Experiences Survey (FACES) cohorts. The four cohorts of Head Start children and their families were from 1997, 2000, 2003, and 2006. Each cohort consisted of a nationally representative sample of three and four year old Head Start children and their families. FACES 1997 consisted of 3,200 children in 40 Head Start programs. FACES 2000 had 2,800 children in 43 programs. FACES 2003 had

2,400 children in 63 programs, and FACES 2006 had 3,500 children in 60 Head Start programs. For each FACES cohort, data collection occurred in fall and spring of the children's first year in Head Start, the spring of the children's second year in Head Start if they were three years old when they enrolled, and the spring of kindergarten.

The goals were to investigate the longitudinal effects of factors such as the role of child and family characteristics, speech-language impairment, and the home literacy environment on the reading outcomes of children from homes of low socio-economic status (SES). Some family characteristics associated with low SES are maternal education less than a high school degree, single-parent household, primary parent language other than English, and receiving welfare or food stamps. Ethnicity and language impairment were also considered. Consideration was also given to the home literacy environment and the preschoolers' oral language.

The authors decided to 1) identify the child and family factors at Head Start entry which were related to the child having a speech-language impairment and the frequency of home literacy activities, 2) examine the impact of child and family characteristics, the presence of a speech-language impairment, and the home literacy environment on children's vocabulary and letter-word identification at the end of Head Start, and 3) examine how all the variables affected children's reading abilities by the end of kindergarten.

The authors used the 1997 FACES cohort. The authors restricted the sample by using only complete data for maternal education, presence of one or two parents in the home, child age and gender, and ethnicity. The Peabody Picture Test-III (PPVT-III) and the Woodcock Johnson Tests of Achievement-Revised (WJ-R) Letter-Word Identification subtests had been administered in the spring before kindergarten (Dunn & Dunn, 1997; Woodcock & Johnson 1990). The Early Childhood Longitudinal Study-Kindergarten (ECLS-K) Cohort Reading

subtest had been administered in the spring of kindergarten. Therefore the cohort was narrowed from 3,200 children and families to 1,015 children and families. Children who were not proficient speakers of English were not included in the 1997 FACES sample. Variables were considered for the data because much of the information was provided by parents on questionnaires. The questionnaires asked about the frequency in which the families told the child a story, read to the child, taught letters, or sang a song. Parent responses determined whether the child had speech-language needs. The authors used the children's standard scores on the PPVT-III and the WJ-R Letter-Word Identification subtest (Dunn & Dunn, 1997; Woodcock, 1990). Both three and four year olds were included. Because some children attended Head Start for two years, data collected in the spring prior to kindergarten were used.

The authors developed a model using logistic regression to test for child and family characteristics which predicted speech-language impairment. Then they used ordinary least square regression to examine the predictors of home literacy activities. Next the ordinary least square regression was used to determine the children's vocabulary and letter-word identification abilities in the spring of the final year of Head Start. Finally, all variables which impacted the children's early reading proficiency were examined using ordinary least square regression.

The findings were as follows: The sample children averaged a little more than four years old in the fall of Head Start. Half the children were male. Forty-six percent attended Head Start for two years. Approximately 30% of the children were Caucasian, 38% were Black, and 22% were Hispanic. Eleven percent were from other ethnic backgrounds. Eleven percent had speech impairment. Only 44% lived in two parent households. The mothers' education averaged slightly below 12 years of schooling. It was reported a family member engaged in literacy activities an average of six times per week.

The sample children scored one standard deviation below the nationally standardized mean on the PPVT-III and two-thirds of a standard deviation below on the WJ-R Letter Word Identification subtest (Dunn & Dunn, 1997; Woodcock & Johnson 1990). In the spring of kindergarten, the children performed at the mean on the reading subtest of the ECLS-K that was administered. It was found that boys were three times as likely as girls to have speech-language impairment.

Maternal education and Hispanic ethnicity affected home literacy activities; children with mothers having more education experienced more literacy activities, and Hispanic children were exposed to fewer literacy events at home than Caucasian Head Start children. The latter two factors were also significant predictors of the children's performance on the PPVT-III (Dunn & Dunn, 1997). These factors also affected the WJ-R Letter-Word subtest (Woodcock & Johnson, 1990). Children with mothers having higher educational levels scored higher on the test. The results also indicated that boys had significantly lower letter-word knowledge than girls. Children who were older, having spent less time in Head Start, scored lower on this assessment.

The results for predicting children's reading knowledge in the spring of their kindergarten year revealed that Black children scored lower than Caucasian children, and children with a speech-language impairment scored lower in reading but home literacy activities did not affect it. Oral language and Letter-Word Identification test scores positively affected reading at the end of kindergarten.

The authors analyzed key factors that predict Head Start children's reading abilities in kindergarten. The study included variables that have been found to impact the outcomes of children. It was determined that child and family characteristics impacted children's language and letter identification. Children with mothers having higher education levels had higher

vocabulary and letter-word identification abilities. However, the mother's education did not determine the reading outcomes at the end of kindergarten. This was thought to be because the educational setting equalized the effect of maternal education. The researchers also found gender to be a factor in having speech-language impairment when identified on a parent questionnaire.

Children who were younger when they enrolled in Head Start received two years in the preschool setting. As a result, children's age was related to letter-word identification abilities, with younger children from the beginning of the investigation scoring higher than the older children, who had less experience in the classroom setting. The findings of home literacy environment affecting children's language outcomes need to be further investigated since the data in this sample were provided by parent reports.

Children's ethnicity had an effect on their home literacy environment. Hispanic families reported reading less frequently to their children than Caucasian and Black families. Ethnicity also impacted the children's vocabulary and early reading scores. Hispanic and Black children scored lower on the PPVT-III than Caucasian children (Dunn & Dunn, 1997).

The presence of speech-language impairment did not impact children's vocabulary or early letter-word identification abilities as the authors anticipated. Since the existence of impairment was reported by the parents, they believed the parents' concerns may not have been warranted.

The authors' findings supported the need for speech-language pathologists in preschools such as Head Start. The presence of speech-language impairment during Head Start was related to poor reading outcomes in kindergarten. A speech-language pathologist could aid in prevention of written language problems in young children. The authors suggested the speech-language

pathologists follow the Head Start children into elementary school to monitor their reading abilities, especially in kindergarten.

Another factor the authors address is maternal education. They believe that by encouraging mothers to become involved in literacy activities at school, they may become more confident, comfortable oral readers, and therefore, might increase home literacy activities such as book reading.

The previous study demonstrated how more experience in an enriched classroom setting can have a positive effect, not only on children, but also on their parents. Undereducated parents can become more supportive in home and school literacy activities by being involved in the classroom. The following study also focused on how socio-cultural factors and home literacy environment affect children's literacy development.

Roel van Steensel (2006) conducted a study which examined the relation between the home literacy environment (HLE) and literacy development in the early years of school. The author included a sample of children from different socio-economic and ethnic-cultural backgrounds. The intent was to relate HLE profiles to social and cultural factors in order to account for differences on children's literacy scores during the first and second years of formal primary education and in kindergarten. The study also examined whether HLE influenced the predictive value of ethnic and socio-economic status.

The researchers secured for their project 116 children and their parents from 19 primary schools in Tilburg, Netherlands. Tilburg is a city of approximately 200,000 and is located in the southern part of the Netherlands. In the Netherlands, primary school begins when children are four years old; there is a two-year kindergarten period. Formal instruction in reading, writing, and mathematics starts in first grade. The children in this study were in the final stage of

kindergarten. The initial sample comprised nearly equal numbers of boys and girls (53.4% were boys). The ages of the children ranged from 5.7 to 7.4 years. Forty four percent were firstborns.

The study consisted of 48 native Dutch families (41.4%) and 68 ethnic minority families (58.6%). The latter category comprised of families from Turkey, Somalia, Morocco, Iraq, Surinam, Ethiopia, Egypt, Yemen, Poland, the Netherlands Antilles, and the Dominican Republic. The majority of the ethnic minority mothers were most proficient in their first language.

The family socio-economic status (SES) was based on the mother's educational level. This varied considerably: 28 mothers (24.1%) had taken primary education, 43 mothers (37.1%) had taken prevocational training or junior secondary education; and 45 mothers (38.8%) had taken senior secondary or higher education. Hence, the groups were classified low SES, middle SES, and high SES according to the level of the mother's education. Low SES mothers were most prevalent in the ethnic minority sample.

The children were in first grade during the second period of the data collection. One hundred four children were left in the sample. During the third period of collection, 93 children remained; the children were in second grade. Children who left the sample either repeated classes, jumped classes, were referred to special education classes, or moved. Group characteristics remained, nevertheless, the same.

Two types of data were collected. First, a parent questionnaire was used to collect data on children's home literacy environment. The parent questionnaire obtained information about individual literacy activities of family members in seven different activities (reading books, magazines, newspapers, and advertising brochures, making shopping lists, writing letters/postcards and using a personal computer). These activities included those of parents and

older siblings. The questionnaire was also used to obtain information about joint literacy activities involving the child. Six parent-child or older sibling-child activities were included: shared book reading, storytelling without the use of books, joint library visits, watching literacy-focused television programs, singing children's songs/rhyming, and shared writing activities.

Then, an observation form and standardized school tests provided information on the children's literacy development during kindergarten through second grade. In kindergarten, the Concepts Test (Verhoeven & van Kuyk, 1992) was used. This assessed the knowledge of concepts considered important for formal instruction in first grade. An observation form was developed in order to focus on emergent literacy development of 15 items. In first and second grade, five literacy measures were used: a word decoding test, a vocabulary test, two reading comprehension tests, and a spelling test.

The data gathered from the parent questionnaire on frequency of literacy activities were used to determine home literacy environment profiles. The literacy activities of parent/older siblings were broken down into two different functions: literacy activities for personal reasons and literacy activities as part of daily living routines. Those activities involving the child were affected by perceptions of what is thought to be important for children's school development. Many times the literacy activities engaged in by parents, such as television viewing and storytelling without books, are not considered high priority activities by teachers, who place higher value on shared reading, library visits, and singing children's songs/rhyming.

The author compared the home literacy environment profiles (HLE) of Dutch native and ethnic minority groups in order to discover a relationship between socio-cultural factors and home literacy experiences. A considerable variation was found between, as well as, within groups. The majority of Dutch families were rich in HLE. Most ethnic minority families were

rich in child-directed HLE (those families engaging in fewer personal or routine literacy activities, however, frequently exposed to parent/sibling activities). This suggests that a lot of minority children are exposed to school-related literacy activities in their homes. With respect to socio-economic status (SES), as the level of education increases, the amount of home literacy activities increases. The results also suggest that within every SES, parents may not value literacy for themselves, but they do for their children. The of children from rich HLEs had the highest scores on all literacy measures, with the exception of word decoding in grades 1 and 2, and spelling in grade 2. Overall, children from poor HLE had the lowest scores, except for oral language skills in kindergarten and word decoding in grade 2. The absence of differences on word decoding and spelling may be due to these being specific skills acquired through formal instruction. Comprehension was strongly affected by home factors. It was determined that children who are involved in high priority literacy activities seem to further their reading comprehension regardless of parental or older siblings' individual literacy practices.

In summary, the authors provided evidence against the assumption that low socio-economic status and ethnic minority families fail to support children's literacy development. The authors suggested that acculturation was a factor of the types of literacy activities in which families engage their children. In addition, children's literacy development in the early primary years is not solely determined by home experiences. Factors such as participation in preschool educational facilities contribute too. This study demonstrates even the lower socio-economic status families, with the mothers having the lowest education, exposed their children to school-related literacy activities in their homes.

Research by van Steensel demonstrated that even impoverished families value literacy for their children. This study also suggests that in every SES group, there are parents who value

literacy for their children, but not for themselves. The next study is indicative of this as the researchers investigate how parental literacy affects science homework.

There is a relationship between general school achievement and the social interaction found in teaching/learning situations, or in the means of assistance, of students by their parents (Portes, 1988). In another study by Portes, Zady, and Dunham (1998) parents of low science achievers tended to use the printed directions in a concrete manner. Therefore, Zady and Portes (2001) conducted a study which measured parental dependence on printed instructions. At the same time the researchers investigated the literacy-related difficulties that low-socio-economic status parents encountered when they attempted to help their children with science homework.

Seventh-grade science students from a U.S. mid-south metropolitan school district were selected for the study. Parental permission was secured to obtain state test results from California in order to determine science and total achievement scores for 89 students and parents who volunteered. Of these, 32 students were chosen. This final group was comprised of 16 students, six male and ten female, with low science achievement and in the high science achievement there were also 16 students, seven male and nine female. The median family income for high achievers was approximately \$44,000 and \$11,000 for low achievers. There were not many students with both low socio-economic status and high achievement. The average parental education level for high achievers was 13-16 years. It was 12-15 years for low achievers.

Mother and child sat together in a room with an interviewer/observer who asked warm-up questions centered on home science activities. Three science tasks were assigned to the child. The mother was given written instructions and was informed she could help at any time and for unlimited time duration. The tasks were arranged in order of increasing difficulty. The science

tasks given were found in various science education resources and were representative of homework assignments.

Task 1, the simplest task, was a floating/sinking block exercise with prediction. It was solved by the child alone most commonly among the high achievers whereas among the low achievers, the mothers participated more. Task 2 examined combinatorial logic. It was again solved independently among the high achievers, but in order to be solved perfectly the mother assisted. The children in the low achiever group rarely solved Task 2 alone, and when the mothers participated, a perfect score was infrequently achieved. The third and most challenging task involved the testing of acids and bases. In the directions, a first step was included and was a precursor for further testing. Task 3 was scored using a rubric. Only one child obtained a solution for Task 3, but through mother direction, high achievers obtained a perfect score. Most often, high scores were not obtained from the low achievers, even with mother regulation. The low achiever group also had difficulty solving Task 3.

Discourse during the science tasks was videotaped and analyzed. The frequencies of maternal interaction were noted, and coded, specifically for actions dependent on the printed directions: the mother physically pushed the directions toward the child; the mother read the directions verbatim, or closely paraphrased; the mother read aloud imperatives or questions from the directions.

The results were compiled using maternal interaction scores, science achievement standardized scores, and the grade on Task 3. Total maternal utterances and physical cues for Task 3 were found to be greater for high achievers as compared to low achievers. The overdependence on the directions which the low achievers/low socio economic status mothers demonstrated while helping their children complete the science tasks may be an indication of

these parents' own developmental level. Overall, these parents could not meet the task demands. They often pushed the directions at their child rather than elaborate verbal cues, something the mothers of high achievers did easily. The authors contributed much of this problem to be related to parental literacy, specifically a higher level literacy problem. However, all parents showed a willingness to participate.

In summary, when science or other homework is sent home, teachers must be cognizant of barriers such as parental literacy because parents impede a student's ability to understand and complete a task.

The previous study demonstrated how adults became seemingly frustrated by their limited literacy skills while helping their children with science homework, and reveals how parental literacy and the home literacy environment influences children's language. Hammer, Farkus, and Macuga (2010) showed that maternal education and ethnicity play a role in home literacy activities as well. Although, according to van Steensel (2006) this does not imply that home literacy activities are absent, rather they are different than those valued by educators. Zady and Portes (2001) also investigated how limited literacy skills of parents affect their students' homework. Despite the lack of literacy skills in themselves, parents of lower socio-economic status, in general, do engage in school based literacy activities. Although parental literacy and the home literacy environment play a key role in a child's literacy development, teachers also influence children's language through classroom discourse, the types of books selected for read alouds, and through literacy instruction. The subsequent section describes two types of vocabulary instruction and its effects on oral vocabulary.

Effects of Vocabulary on Oral Language Leading to Stronger Writing

Because students of lower socio-economic status do score lower on reading and vocabulary tests, it is important that teachers build children's oral vocabulary, and the goals for vocabulary acquisition in older students involves deepening word knowledge and helping students develop and maintain new words learned. A specific instruction strategy is detailed below which examines how children in kindergarten and first grade increased their oral vocabulary repertoire.

Beck and McKeown (2007) conducted a study to examine the extent to which children in kindergarten and first grade could benefit from vocabulary instruction. They reported on two studies that provided rich vocabulary instruction of words that are more advanced than those typically found in kindergarten and first-grade children's oral vocabulary. Trade books often used as read alouds were sources for identifying words used in the two studies.

The participants for Study 1 were eight classes of children, four from kindergarten and four from first grade, from one school. Two classes from each grade were designated as experimental and two as comparison. Experimental classes were those in which teachers implemented Text Talk, the treatment used in the study.

The school in which the study took place was located in a small urban district with a lower socio-economic status. The children were all African American. Eighty-two percent were eligible for free or reduced-price lunch. In addition, this school district was recently identified for a possible state takeover if achievement was not improved.

Every child in eight classrooms, 121 total, was invited to participate in the study. All but two returned permission slips. Thus the study began with 119 children. However, because of the transient nature of the school district's population, pretest and posttest data were collected from 98 children. Fifty-two were in the experimental classroom and 46 in the comparison classroom;

85 of whom had begun the year at the school and 13 who entered during the first semester of the school year.

The principal of the school suggested the kindergarten and first grade teachers listen to the information about the study. Four of teachers were included in the study. All teachers were female. Two were European American and two were African American. Their teaching experience was 2, 4, 20, and 5 years.

The vocabulary instruction used was part of Text Talk, a research and development project based on read alouds (Beck & McKeown, 2001). Text talk used to its advantage the advanced thinking capabilities of young students compared to their reading abilities. It provided students with opportunities for rich language development through discussion of narratives that are more complex than those they can read independently. The books chosen did not rely too heavily on pictures to communicate the story. After instruction, oral use of several words from the story was encouraged. The authors selected words considered tier 2, sophisticated words of high utility.

For Text Talk, Rich Instruction was developed for several words from each story. The vocabulary instruction for these words occurred after a story had been read, discussed, and concluded. The goal was to enhance general vocabulary development rather than story comprehension. Tally marks were recorded for the words from stories each time a child heard or used one of the words.

Text Talk was introduced to the four teachers through a three hour workshop. Materials were provided in the form of 36 books with questions to frame the text interactions and vocabulary activities. The instructional intervention was scheduled for a 10-week period. During the study, research staff members observed teachers once per week and met with the group every two

weeks. It was found that the teachers implemented the vocabulary lessons with fidelity. The teachers themselves were pleased with the students' learning.

The comparison group did not receive Text Talk stories or vocabulary instruction. They did, however, engage in daily read alouds as part of their daily school routine. These children were also exposed to books with strong story lines and high-quality language. Only the experimental classrooms had daily Text Talk read alouds.

Prior to the Text Talk instruction, both the experimental instruction group and the comparison (no Text Talk instruction) group were administered the PPVT-III in order to determine vocabulary knowledge (Dunn & Dunn, 1997). The analysis showed that the groups did not differ significantly in verbal knowledge. Experimenter designed pretests and posttests were administered to determine the extent of which children learned instructed words. Since no difference in instructed and comparison groups was found, 13 newly enrolled students were added to the study.

Overall, the children in the instructed group learned more of the words. The instructed kindergarten group showed significantly higher gains than the comparison classes as did the first grade group. However, Study 1 only provided initial instruction. After completion of Study 1, the researchers had another question: In order to learn and develop their understanding of sophisticated words, would children need more instruction over time? The researchers felt students needed more encounters with a word and those encounters should be distributed over several days. For that reason, Study 2 was begun in order to determine the extent to which increased instruction would enhance a child's vocabulary.

Study 2 provided the same Rich Instruction for all words then additional instruction, named More Rich Instruction, was provided for a subset of words. Hence, students were instructed

using the same instruction as Rich Instruction but it was more frequent and for a longer duration. Study 2 took place in the same urban school district but in a different school as Study 1. The students were also all African American. Eighty-one percent qualified for free or reduced-price lunch. All three kindergarten classes and all three first grade classes participated. Thirty-six kindergarten and 40 first graders participated in the study to completion. Again, all the teachers were female. Five were European American and one was African American. Their teaching experience was 7, 9, 12, 18, 20, and 32 years. Once again, the teachers were asked to participate in the study, this time however, as a professional development to help the teachers gain insights to help develop their students' language abilities.

Again, Text Talk read alouds were the instructional action of the study. Six words from each of seven trade books were identified for instruction. The words were randomly assigned to one of two instructional conditions. One condition was Rich Instruction, used in Study 1. The second condition was designated More Rich Instruction. It provided the same instruction as Rich Instruction, but was enhanced with additional instruction over several days. Students were instructed on six words per week. All students received Rich Instruction on all six words. More Rich Instruction was provided on three of those six words. In addition, the More Rich Instruction words were reviewed in two cycles. The study lasted nine weeks.

Text Talk was introduced to the six teachers of Study 2 through a two-hour workshop. Two trade books were provided along with lesson plans for the teachers to implement within their classrooms. Teachers were asked to complete all instruction for a book over a five-day period. Staff members visited each classroom four times during the nine weeks of instruction. As in Study I, research staff compared the script of the vocabulary lesson to the implementation in the classroom. The teachers again implemented the lessons with a high degree of fidelity.

Pretests and posttests were developed for each of the 42 words for kindergarten and first grade. These included a picture task format as used in Study 1, and an additional all-verbal format. The verbal format involved asking the children to respond yes or no to four questions about a word.

The results were separated by grade group. The results for kindergarteners indicated that pre-to-post test gain in the number of More Rich Instruction words was significantly higher than the pre-to-post gain in the number of Rich Instruction words known. The results for first grade indicated the pre-to-post gain in number of More Rich Instruction words known by first graders was significantly higher than the pre-to-post gain in number of Rich Instruction words.

The results of Study 2 indicate that more instruction was beneficial, with gains about twice as large for words given more instruction for both kindergarten and first grade. In the picture task, children needed to process a question containing a target word and then identify a scene that represented a response to that question. This allowed the child to demonstrate more knowledge than most common forms of vocabulary knowledge assessment. Study 2 also included a verbal task which had the children make a decision about how the word fit a situation.

This study demonstrates that children as young as kindergarten and first grade can add sophisticated words to their vocabulary. Providing children with opportunities to gain facility of difficult words promotes higher levels of vocabulary knowledge.

Another way to integrate new vocabulary to students is through word walls. Word walls are often seen in preschool and elementary classrooms, and are tools used to scaffold the acquisition of language in many classrooms. Harmon, Wood, Hedrick, Vintinner, and Willeford (2009) investigated the use of word walls in classrooms in order to enhance vocabulary learning. The

authors first focused on middle school students' perceptions and understandings about word walls. This information was obtained through individual interviews.

Forty-four seventh grade students from a suburban middle school in south central Texas were the subjects of this study. The students were in two reading sections, and were grouped heterogeneously by ethnicity and reading ability. The groups consisted of 63% Caucasian, 30% Hispanic, and 7% biracial and Asian students.

From the interviews, it was discovered that 43.1% of the students used the term *word wall* when identifying a word wall and 12 % could not tell the authors what the word wall was. Overall 60% of the students knew the word wall was used for learning vocabulary. More than 50% of the students were not able to ascertain that a word wall helped with word meaning. All the students realized word walls were used by both students and teachers.

The authors used the responses from the interviews to consider how word walls could be more effectively used in middle-level classrooms. They incorporated associative learning and visuals into their study. In addition, they developed lessons which allowed for active engagement in learning new words.

All participants had the same teacher for reading. Twenty-three students from one section self-selected the words in the study while the 21 students in the other section continued with the regular vocabulary program. The students who self-selected their words engaged in lessons which were designed around word walls in order to support vocabulary learning in a reading classroom.

Since students in the self-selected section had a choice of the words learned instruction began with building background knowledge about how to select words. This discussion helped the students think metacognitively about their own vocabulary, and reminded them that they should

select useful words. The students chose three words each, presented them to the class, and then decided on the top five in their group. From the groups' choices, a total of ten were studied in depth. The teacher added two so the list was twelve. The teacher modeled and supported the students during each of the following tasks of the study: introducing the words, making connections with the words, applying the word to real situations, and presenting the words to the class.

When the words were introduced to the class, each group selected a color to represent the word. The word was written on a flashcard then color coded. The word was defined at least three different ways either with definition, example, synonym, or antonym. These were written on a poster board.

In order to make connections with the words, the groups created symbols to represent their words. The purpose of the symbol was to help the students remember the word's meaning. The symbols could be an object or idea. A sentence completion was written on their chart.

Now that the students applied the word to real situations, their task was to think of a situation or context for using the word. They illustrated an index card for the word wall and also wrote a sentence about the situation.

Once the groups completed all tasks, they presented their information to the class. First they pinned the word on the word wall, explained the color choice, and displayed their definitions on their poster. Then they showed the class their symbol, explained its meaning, and pinned it next to the word. Next they introduced their sentence completions and asked for suggestions of how to finish them. They also shared their applications of their words to real life situations. Future class sessions were spent using the word wall for review.

The authors collected data for six weeks. To measure the impact of instruction, interviews were conducted with the students who received word wall instruction. For the interviews, students compared two word wall pictures. One of a word wall with only words and the other a snapshot of the word wall they created. The students preferred the word wall with colors and symbols. They stated that this word wall was more useful because the colors and symbols helped them remember the meanings of words. In addition, the students stated that the details, such as the pictures, hinted about the meanings of the words. Some students thought the word wall was helpful with classroom assignments or when reviewing for tests.

Measures of student achievement from the weekly tests and the delayed test were collected. Hence, both qualitative sources (pre-interviews, artifacts, and field notes) and quantitative data from the Group Reading Assessment and Diagnostic Evaluation (GRADE) that was administered as a pretest to both groups were used (AGS Group Assessments, 2001). At the beginning of the study, the GRADE showed there were no significant differences in reading between both classes. The scores from the six weekly teacher-developed tests were collected. These included writing word definitions and responding to meaningful use sentence prompts. Both groups studied the same words from the vocabulary workbook as the last round of words, and took this same test. There were no significant differences in scores between the two groups of students. Two weeks after the last lesson, a delayed test was given with the last set of words. After examination of scores, it was found that the students in the word wall class had higher scores on the application section of the test. They also demonstrated a higher understanding of word meanings in the sentence completion measure.

By providing opportunities for students to interact with word walls during spelling and vocabulary lessons, connections between words and symbols were made. As shown in this

study, a higher level of understanding of the word meanings and the ability to successfully apply them to meaningful prompts resulted from the use of incorporating printed word and symbol. Although centered on different vocabulary instruction methods, these two studies showed that vocabulary knowledge can be increased through discussion of narratives, repeated exposure to new vocabulary, and self-selection of words.

Social interactive routines such as read alouds are strongly supportive of language development, especially for vocabulary (Rice, 1989). In addition, it is through conversational interactions that students learn from each other, so children actually need to spend more time talking. Harmon, et al. (2009) encouraged talk among peers when building interactive word walls. By sharing words and symbols they created for their word wall, students not only gained knowledge, but also helped their peers make connections between the word and visual cue. Beck and McKeown (2007) also proved instruction which focused on discussion helped children build a repertoire of words. For that reason, the next section focuses on how reading vocabulary can lead to stronger writing.

Effects of Reading Vocabulary Leading to Stronger Academic Writing

Robbins and Ehri (1994) focused their study on the various ways children increase their vocabulary and learn the meanings of words. They usually found this to be through either direct, explicit reference by adults such as in the classroom or through encounters with words in verbal contexts such as television, conversations, or stories. Their purpose was to determine whether exposure to target words in stories would improve children's knowledge of the words over that of control words. The researchers also investigated whether the number of exposures to words influences learning. In addition, they wondered whether children's entering vocabulary

knowledge would influence gains. For these reasons, their study focused on children's acquisition of new vocabulary by listening to stories.

Fifty-one native English speaking kindergarteners from a public elementary school were selected for the study. They were from middle to lower-middle class families. All were considered non-readers by their teachers. Children who were familiar with the text used were dropped from the sample. The remaining 45 students were administered the PPVT-R in order to exclude children with extremely poor vocabularies and those with extremely rich vocabularies (Dunn & Dunn, 1981). Thirty-eight children now remained in the sample. They were divided into three ability groups; low, medium, and high. The groups were randomly assigned a storybook group. Thirty-three children, 12 girls and 21 boys, remained in the study until the end.

The texts, *A Crocodile's Tale* (Aruego & Areugo (Dewey), 1972) and *The Boy Who Cried Wolf* (Littledale, 1975) were edited to 680 words and grade 2 readability level. Eleven target words were substituted for familiar words or phrases in each story. The target words from one story did not occur in the other story. The length of the target words were on average two syllables. All of the words were determined to be low frequency words in conversations with kindergarten students. A post-test only format was used in order to not alert the children of the target words. Participants were tested on 11 words from the story they heard and 11 from the story they did not hear. The test was multiple choice and presented as a detective game. Each word had a choice of four picture choices and a 'don't know' option. Children were examined individually. Each child listened to one story containing the 11 target words. They heard the story twice, from two to four days apart. The story was briefly discussed, but no word meanings. The child was asked how he/she liked the story before the multiple-choice vocabulary test was administered.

The results indicated that entering vocabulary knowledge (PPVT-R scores) was related to kindergarten performance on the vocabulary posttest. Subjects with a higher PPVT-R score recognized more correct definitions of words than those participants with lower scores (Dunn & Dunn, 1981). Most of the target words were unfamiliar to the students; therefore, by having the stories read to them, the students were not only exposed to new vocabulary but also made connections to the stories they heard. This was evident when the children responded to a target word by stating they heard the word in a specific book.

In summary, this study suggests that hearing words more than once in stories may establish a higher rate of acquisition, and non reading kindergarten students can acquire new vocabulary from listening to stories. When a kindergarten student listens to stories at least twice, and hears unfamiliar words repeated in stories, he/she builds recognition vocabularies. The authors also suggested that if more nouns rather than verbs and adjectives had been taught, greater vocabulary growth may have occurred. As students gain vocabulary from teacher book readings and independently practice this oral vocabulary among their peers through rich social context, they are building background knowledge and skills for future reading and writing activities.

It has also been noted that limited vocabularies have been linked to comprehension difficulties of low-income children during middle school (Chall, 1983); therefore, introducing explicit language use during early literacy development is beneficial to a child's long term educational achievement. In this next study, Leung's (2008) project explored the depth of preschoolers' learning of scientific vocabulary from participating in small group repeated interactive read-aloud events with informational books. The researcher investigated whether children's retelling of informational books immediately after participating in read alouds activities would enhance their learning vocabulary. In addition, Leung queried whether hands-on science activities would

improve vocabulary retention. Finally, the author investigated the effects of the above activities on children's scores on standardized vocabulary measures and determined whether children's general level of vocabulary knowledge would influence the rate and ways they learned vocabulary from participating in the shared reading and retelling of children's informational books.

Thirty-seven children attending an urban YWCA child development center in the southeastern United States participated in the study. Children attending the center were from socially and economically diverse families in the community; some were children of university students and faculty and others were housed in a homeless shelter. This project involved one class of the three year olds and one class of the four year olds. Thirty-two children completed all phases of the study. Five children relocated and were dropped from the project.

Approximately 66% of the children were European American, non-Hispanic, 25% African American, 6% Asian American, and 3% Hispanic. Of the children who completed the study, 14 were in the three year old class and 18 were in the four year old class.

The study was organized into 18 weeks which included pre and post testing, read alouds, retellings, make-up work for those children who were absent, and hands-on activities. The children were identified as having high, average, or low general vocabulary knowledge based on scores of two standardized vocabulary assessments which were administered at the beginning of the study. Children's knowledge of the meaning of 32 target words that appeared in the read aloud texts was measured by a test created by the investigator. This test was a free recall format in which the child could respond with oral responses or body movements. All responses were recorded. This test was administered three times throughout the project.

Children's oral retellings were audio-taped, transcribed, and scored according to use of target words across the three retellings. Each retelling was scored and tallied for the number of weeks (four) of interactive reading. The three books used were: *What is a Rainbow?* (Arvetis & Palmer, 1983), *All the Colors of the Rainbow* (Fowler, 1998), and *The Wonder of Light* (Adkins, 1997) which was broken into two parts. Thus each child received 12 scores. Then for each child, the individual retelling scores for the first retellings of each of the four books/parts of the book were added together for a first retelling score. Likewise, individual retelling scores for the second, and then third retellings, were added together.

A picture vocabulary test was created by making color copies of illustrations from the books. This was done in order to test target words from the read alouds. Four pictures were grouped together and the children were asked to identify the picture which showed the object. The children had to associate the target word with the illustration.

A test using realia and pictures from the read alouds texts was also created. Four examples of realia were provided as prompts for children to discuss concepts and vocabulary items.

The informational books and target vocabulary's theme was light and color. The books named above were selected because they provided clear explanations of scientific concepts, had appropriate use of technical vocabulary, and they differed in style and language. A total of 32 target words were selected from the three books. Prism, bend, split, indigo, violet, rainbow were selected from *What Is a Rainbow?* (Arvetis & Palmer, 1983). Color wheel, blend, spin, blur, (indigo), (violet), (rainbow), (prism) were highlighted from *All the Colors of the Rainbow* (Fowler, 1998). From Week 1 of *The Wonder of Light* (Adkins, 1997) came light, energy, photons, frequency, vibrate, bounce, electromagnetic spectrum, visible light, radio waves, microwaves, infrared light, ultraviolet light, x-rays, and gamma rays. Reflection, refraction,

opaque, transparent, translucent, shadow, absorb, (prism) and (rainbow) were selected from Week 2 of *The Wonder of Light*. Words in parentheses appeared in more than one book.

The three informational books were read aloud three times each to groups of three or four children at the YWCA child development center. The YWCA teachers read the books to their own students. Each group had at least one child confident in oral expression to help facilitate discussion. All three levels of vocabulary knowledge were represented in each group. The books were read in this order: *What is a Rainbow* (Arvetis & Palmer, 1983), *All the Colors of the Rainbow* (Fowler, 1998), and *The Wonder of Light* (Adkins, 1997) which was divided into two weeks.

The readings took place over a 4-week period on Tuesday, Wednesday, and Thursday. Each book was read and responded to for 3 consecutive days in one week. Then the next book was read for 3 days the following week. Make-up readings and retellings occurred on Friday and Monday. All readings took place in a room separate from the regular classroom. Some of the books were modified, according to the investigator's directions, when read. Immediately after each small group read aloud, half the children participated in an individual retelling of the book just read.

Three days of hands-on activities followed the repeated readings and retellings. A scientist helped plan the activities and provided instruction and practice for the classroom teachers. The instructor of the four year olds led the activities and was assisted by the instructor of the three year olds. Children saw a demonstration of a prism and color wheel on Day 1. The concepts from Day 1 were reviewed on Day 2. Also on Day 2, a small water tank was used to demonstrate transparent and translucent. On day 3, previously demonstrated concepts were discussed, and then a light and refraction were the science activity focus.

The investigator compared the children who participated in the repeated retellings of the books and those who did not participate in the retellings using the pretest and posttest scores of the standardized vocabulary measures. There was no significant difference in scores from pretest to posttest in retelling and no retelling. A significant difference was shown between pretest and posttest for free recall target vocabulary scores for 4 year-olds who participated in retellings and those who did not retell. Also, there was a significant difference between pretest and posttest scores for three year-olds in the retelling condition.

Significant interactions occurred between children's general level of vocabulary knowledge and their retelling condition, and between the retelling condition and testing time. There were significant differences between pretest and posttest scores for children with average and high general vocabulary knowledge who took part in the retellings but not for children in any of the other groups. Means for all groups, however, increased from pretest to posttest.

Sixteen target words were selected for comparison across the three verbal recall target word tests. These words were ones the children were explicitly exposed to during the science activities, either by explanation, demonstration, or discovery. For three and four year olds who participated in retellings, there was a significant difference between pretest and posttest scores before the hands-on activities and the scores after the hands-on activities. The total number of target words used ranged from 4 to 18 words. The four year olds used more words in their retellings.

Interactive readings of informational picture books followed by hands-on science activities resulted in significant increase in participant scores on a standardized measure of expressive vocabulary. Children in this study who took part in the one-on-one book retellings were better

able to explain the meaning of target words related to science concepts. They also used more target words from the beginning retellings to the third. It seemed that some children needed the hands-on science activities in order to visualize or understand the science concepts presented in the informational books. The researcher suggests that a good practice would be to include hands-on activities immediately following the first reading of the book, in order to address or to eliminate misconceptions from the illustrations.

As a result of this study, the authors indicated that preschoolers can learn scientific names for complex concepts. They found that there are few books for young children that presented science concepts accurately and in a logical order. Results from this study support repeated readings and small group interactive discussions of concepts are important for developing vocabulary knowledge.

The articles in this section discuss how the effect of reading, whether book readings, repeated exposure to words, repeated readings, or explicit vocabulary instruction, proves children, even those from lower socio-economic status, capable of acquiring sophisticated vocabulary. Leung (2008) showed that students who participated in hands-on activities after interactive readings of informational texts were better able to explain science concepts, and some children benefit from the hands-on activities in order to visualize a concept. When these sophisticated words are added to a word wall, and used interactively as Hammer, et al. (2009) suggest, it provides the students with a scaffold for their writing.

Strategies to Improve Student Vocabulary and Writing

As students learn and understand vocabulary, gain background knowledge, and are instructed in text genre, they need opportunities to transfer their knowledge and strategies learned from teacher read alouds and modeling to independent practice. The following section discusses

various strategies which can be used to improve student vocabulary, writing, and metacognitive thinking.

Montelongo, Herter, Ansaldo, and Hatter (2010) investigated the effectiveness of using lesson cycles during teaching. They conducted an investigation of a lesson cycle consisting of four parts: vocabulary, test structuring, modified sentence completion activity, and rewriting text. The lesson cycle provided students with strategic practice of reading and writing expository texts.

Teacher educators and classroom teachers conducted the research during five weeks of summer school. The researchers developed curriculum using state adopted science and social studies textbooks. Lessons were developed to enhance student recognition of main idea and making connections between fact and opinion. These lessons promoted understanding of how to explain a main idea without using isolated sentences.

The study of text structure helped students understand the organizational pattern within expository text as well as signal words within paragraphs. Graphic organizers are used so students could see the relationships between the paragraph's main idea and the supporting details. When students knew the interrelationships among topic, main idea, and supporting details of a paragraph, they comprehended and remembered important points made by the author. Thus, students generated mental representations of the different structures in order to learn, remember, and write about information from the text.

The study consisted of 61 students. There were thirty sixth graders (20 females and 10 males) and 31 seventh graders (20 females and 11 males) in the study. The focus groups consisted of Caucasian and Latino students.

The lesson cycle began by introducing vocabulary and ended with students composing expository paragraphs. New vocabulary was introduced the first part of the lesson cycle. Words were introduced in context exercises and students predicted meanings of unknown words then verified their guess using their dictionary. Students then generated their own sentences using the new vocabulary. In the second part of the cycle, a particular text structure- generalization, sequence, compare and contrast, cause and effect, or problem and solution- was introduced as well as words that signaled that text structure. Students practiced with paragraphs that exemplified the structure, and are taught that the signal words point to details rather than the main idea. After students were introduced to new vocabulary and a particular text structure, the next part of the cycle combined these two parts of the lesson cycle in a sentence completion exercise. This is similar to a fill-in-the-blank activity and students practiced with the vocabulary words, locating main idea, and using graphic organizers. Half the sentences were related to each other and formed an expository paragraph. Teachers could scaffold the task by providing hints to the topic.

The final step of the lesson cycle was generative. Students took the paragraph and summarized its content thus demonstrating their comprehension of the text.

During the study, students improved in their ability to identify the main idea of paragraphs. Overall, there was an increase of over 30% after the five week lesson cycle intervention. The main idea in the paragraph was located both as first and last sentence in the paragraph. The results suggested that the lesson cycle is an effective method because it gave students practice with text structures, signal words, and graphic organizers. The results, however, were limited to first or last placement of main ideas.

While the previous study explained that lesson cycles which included explicit instruction in text structures, vocabulary, and writing helped students, the next study discussed how students, particularly, English language learners can attain a writing style that will not only increase student achievement in middle and high school, but also has demonstrated that they can continue on to college.

Booth-Olson, Land, Anselmi, and AuBuchon (2010), as members of the University of California- Irvine site of the California Writing Project, conducted a professional development program and longitudinal research study in order to provide teachers with strategies to explicitly teach, model, and provide practice in cognitive strategies, called Pathway Project. This was an eight year study whose aim was to help students develop academic success in school and continue their education in college. The study was conducted in a large, urban, low-socioeconomic status school district where 93% of students spoke English as a second language and 69% were designated as limited English proficiency (LEP).

During Pathway Project, the researchers administered a pre/post writing assessment in October and May of each school year to determine student growth. These assessments established a baseline of student strengths and areas of needed growth. The staff combined cognitive reading and writing strategies, which they detailed for readers and writers in a toolkit, in order to improve reading and writing abilities in the students. The researchers also introduced to those in the professional development workshops an array of approaches to use the cognitive strategies.

Teachers met to analyze student work and strategize how to scaffold reading and writing to enhance students' performance. They developed prompts which focused on setting, plot,

character, symbolism, and interpretation of theme. During the eighth year, the researchers developed prototype materials for helping students understand, analyze, and write interpretive essays about theme. Fifty-five teachers in grades 6-12 taught the theme unit for two weeks; they modified lessons for their grade level. Teachers gave students practice identifying and analyzing theme, and then the students revised their own pretest essays. As teachers guided students through reading and writing scaffolds, they used cognitive strategies of planning and goal setting, tapping prior knowledge, visualizing, and making predictions. Teachers also gave explicit instruction in how topic differs from theme. Because the cognitive strategies approach was the researchers aim throughout the entire study and they had statistically significant results for seven years, they could not claim the materials on theme were solely responsible for student gains.

To ensure validity, the same two texts and prompts were used throughout the study of approximately 2,000 participants in grades 6-12. Half took one pretest and half took the other. Each Pathway teacher was paired with a control teacher at the same school with a class at the same ability level whose students were not in the project. Fourteen pre/post pairs were randomly selected and coded to disguise all identifying information. The papers were scored by two scorers who focused on quality and depth of interpretation, clarity of thesis, organization, precise or descriptive language, and correctness of English language conventions. Both Pathway treatment and control groups had significant gains from pretest to posttest, but the Pathway group's gains were substantially greater. The students in grades 7-12 had higher gains than those in sixth grade due to the fact that many of these students had received cognitive strategies instruction for multiple years. The study's overall goal was to determine whether providing English language learner students with knowledge and practice of cognitive strategies would

improve their interpretive reading and analytical writing ability. Indeed, the study indicates that with explicit strategy instruction, modeling, coaching, and opportunities for practice, English language learners can attain the academic literacy needed to perform successfully as interpretive readers and analytical writers.

The previous study stressed the importance of students practice with expository writing. As students transitioned from narrative writing in the lower grades to primarily expository writing in higher grades, more academic content vocabulary was encountered. The researcher of the following study believed that students can still demonstrate learning, however not through expository writing, but rather through fiction.

Glenn (2007) conducted a study to investigate the connection between reading and writing in fiction. She believed students write more powerfully in fiction than any other expository mode. In addition, she believed that students who reflect and share their reactions to text further support comprehension.

The study was conducted during the spring semester in a graduate-level, young adult literature course. The focal group consisted of eight students, six female and two male, who volunteered to participate. All were education students.

The volunteers were asked to draft two pages of fictional writing each week. The writing, a graded requirement for the course, was based on reflection and revision. Completion of the writing and active participation in the classes was also a factor in grading. Students wrote a variety of pieces-short stories, chapters of novels, a mixed genre narratives of poetry and song lyrics, and historical fiction.

The participants met in two groups of four, five times during the semester. Only two volunteers shared their writing with the group each time. The researcher met with the group as a participate-observer. Presenting writers sent electronic copies to members prior to presentation so that pieces could be read prior to meeting.

In addition to the writing component, for the weekly meetings, each group member brought a two-page reflective piece that focused on observations regarding the works of the young adult authors being read for the class. Seven whole-class texts and 10 choice selections were required. The students were provided with guiding questions. The reflective pieces were collected at the end of each session and analyzed at the end of the semester.

The collected data was analyzed using the constant comparative method, and from this, themes of a writing to reading connection emerged. Student responses were assigned a color and thus color-coded. All gathered data were coded and assigned unique font size or style to allow for easy grouping. Participant reflections were grouped and collapsed into three themes (the why, the how, and the what).

The research concluded that by establishing a clear purpose for their reading which was to find examples of how authors use various techniques to convey their stories, the readers were engaged in reconstructing the author's meaning and this motivated their comprehension by asking questions, reflecting, and playing with words. The researcher also stated the act of writing improved the reading habits of the participants as well. Not only did writing in response help them better understand the text, but also the act of engaging in an authentic writing process helped the participants pay different attention to the texts they were reading, and to analyze these texts as that of a writer.

Based on the data from the above study, fiction can be used to demonstrate students' understanding of text. However, English language learner (ELL) students often struggle during classroom lessons when higher language or academic language is required for academic processes such as summarizing, evaluating, and drawing conclusions. Models such as the one discussed in the next study have been proven effective, when used with fidelity, to increase ELLs' understanding of these processes.

Echevarria, Richards-Tutor, Chinn, and Ratleff (2011) conducted a study that evaluated the implementation of research-based practices on student achievement. Their goal was to demonstrate the importance of fidelity, especially when teaching English learners, when using instruction models.

The study extended previous work by examining the “specific effect teacher implementation levels” (Echevarria et. al., 2011, p. 427) or fidelity, have on student performance. The effect of the Sheltered Instruction Observation Protocol (SIOP) Model on content area literacy and language development in science was tested on student growth in seventh grade classes (Echevarria, Vogt, & Short, 2008, 2010). Eight middle schools the same district with high numbers of English language learners were randomly assigned to treatment or control conditions. There were 649 students and eight teachers in the treatment group and 372 students and four teachers in the control group for a total of 1,021 students and 12 teachers participating in the study.

Those teachers in the intervention schools received professional development in using the SIOP Model of instruction (Echevarria et al., 2008). The SIOP Model consists of eight components with features that have been shown to improve English language learners'

performance on measures of language and literacy. Treatment teachers were provided with an intensive two-and-a-half-day training along with an overview of second-language acquisition. A SIOP observation tool was used to assess fidelity of teacher implementation. This professional development was intended to help the teachers learn about the SIOP Model and also to understand why the techniques are effective.

SIOP lessons, created by the research team, were delivered by the treatment teachers while control teachers taught the same units using the same textbook but used their own lesson plans and teaching methods. Each of the SIOP lesson plans included a state standard, lesson topic, content and language objectives, key vocabulary, motivation/background building, presentation, practice and application, and review and assessment.

In addition to having lessons created by the researchers, treatment teachers were coached to help guide their implementation of the lesson plans. In addition, they were provided with a fidelity checklist which reminded them of the importance of focusing on objectives and vocabulary development.

Both treatment and control teachers were given a pacing guide to ensure that they were teaching the same content at approximately the same time. This helped synchronize giving pretest and posttest assessments with each unit. Pretests were given to establish baseline knowledge. The assessments required students to use the science language taught during the units to respond to content questions. There were a total of four assessments that measured four units of instruction. The posttests measured growth in science content knowledge and science academic language.

It was found that some teachers in the control group were familiar with instructional needs of English language learners, and implemented SIOP features independently. Because the study focused on the fidelity of the model on student achievement, all teachers in the treatment group and the control group were included in the final analysis. Teacher SIOP scores and average growth of the students across the four assessments were plotted. Overall, the teachers who implemented the model with the greatest degree of fidelity had the highest scores, and also had students who made the greatest gains. Moreover, teachers who were high implementers and used features in an effective way, such as asking the students to read the objectives or giving students ample time to discuss questions and use quick interaction activities like think-pair-share, had higher scores for the lesson. The researchers found that the extent to which teachers implemented the SIOP Model with fidelity influenced student achievement. Consistent application of research-based practices in the classroom was directly related to student achievement, especially English language learners.

The previous study demonstrated how research-based practices improve student achievement. The following study investigated how writing and writing instruction impacts reading comprehension of both narrative and expository text.

Graham and Hebert (2011) examined the effectiveness of writing as a tool for improving students' reading by conducting a meta-analysis of students in grades 1-12. They posed three questions: 1. Does writing about material read enhance students' comprehension of text? 2. Does writing skills instruction strengthen students' reading skills? 3. Does increasing how much students write improve how well they read? (Graham & Hebert, 2011, p. 713).

The researchers developed criteria for study inclusion and exclusion. The studies included in the research met six criteria in order to be included in the review. Studies had to 1) be a true experiment or quasi-experiment; 2) involved a treatment group that wrote about what they read, were taught to write, or increased how much they wrote; 3) included at least one reading measure that assessed the impact of the writing treatment or a reading pretest measure; 4) involved students in grades 1-12; 5) was published in English; and 6) contained the statistics necessary to compute a weighted effect size (Graham & Hebert, 2011, p. 714).

Electronic searches were conducted to obtain possible studies for this review. Ninety-five of the 752 searches were ultimately included. Studies were categorized by which of the above three questions it answered then further assigned according to pre-identified instructional subcategories. All Question 1 studies had a reading comprehension outcome measure. Question 2 studies assessed the impact of process writing, text structure, and paragraph skills instruction on reading comprehension, sentence and spelling instruction on reading fluency, or spelling instruction on word reading skills. Question 3 contained studies that increase the amount of student writing. A variety of outcome measures were used to assess reading outcomes across the three questions.

The featured studies were coded by grade, type of student, number of participants, locale, treatment length, participant training, description of treatment, description of the control condition, subject, genre, outcome measures, publication type, and research design. In addition, eleven quality indicators were scored 1 (met) or 0 (not met). True experiments had a possible nine points while quasi-experiments could score eleven points.

For Question 1, it was found that writing about reading material enhances reading comprehension, as 94 % of the studies produced a positive effect size, of students in grades 2-12. The researchers also noted that writing about reading had a positive impact on the comprehension of weaker readers/writers. Sixty-eight percent of the reading material involved expository text, and slightly more than half was science and social studies content. For Question 2, all twenty-one experiments produced a positive effect size. Writing instruction, therefore, enhanced students' writing in grades 4-12 in the area of language arts. In Question 3, the researchers found that increasing writing improved writing comprehension as all studies produced a positive effect. These findings only applied to students in grades 1-6, and in the context of language arts.

The evidence from this meta-analysis showed that when students in grades 2-12 write about material they read, they enhanced their comprehension of it. This applied to narrative and expository texts. The evidence was particularly true for weaker readers or writers as well as students in general. Moreover, the study found four types of writing activities to be effective: extended writing, summary writing, note taking, and answering/generating questions, especially among middle school and high school students.

Conclusion

Research shows teachers must be cognizant of the factors that impede students from succeeding in school, and, therefore, become knowledgeable in methods to scaffold their students in vocabulary development and writing skills (Hammer et al., 2010; Monelongo et al., 2010; Robbins & Ehri, 1994; van Steensel, 2006; Zady & Portes, 2001). In order for students to acquire vocabulary, they must be provided opportunities to practice (Booth-Olson et al., 2010;

Glenn, 2007). Ultimately, teachers must explicitly teach, model, and make content comprehensible so students gain strategies, and skills that enable them to become successful readers and writers (Beck & McKeown, 2007; Echevarria et al., 2011; Graham & Hebert, 2011; Harmon et al., 2009; Leung, 2008).

While this chapter discussed research which supports the idea of building vocabulary in students which will ultimately transfer into their comprehension and written work. The next chapter will detail the procedures for my research study.

Chapter Three

Introduction

The purpose of this action research was to conduct my own research study on how the oral language used in discussion, specifically academic vocabulary, transferred to student writing. This chapter will describe the sample population participating in the study. Furthermore, it will give a description of the procedures used and data collection to determine the effectiveness of the intervention.

Description of the Sample Population

The sample used for the study was a focal group of four students, all in fifth grade, at a public charter school located in an urban, low socio-economic school in the Midwestern part of the United States. The students were between 10-11 years old. Three students from the group were assigned to the English Language Learner (ELL) roster of the researcher. The fourth was suggested as a student who could benefit from the intervention. Two of the ELL students were Hmong, who speak Hmong as their first language. The other was of Hispanic descent, and speaks both Spanish and English at home. The Limited English Proficiencies of these students were: 3, 3, and 4. All three of these students were in an ELL kindergarten classroom, and have continued with English as a Second Language services in both a push-in and pull-out setting. The fourth student in the sample is a native English speaker. He also has had intervention services under Title I.

At the school where the study occurred, students receive interventions on an as needed basis determined by placement on the assessment wall. The size of these intervention groups is capped at four students.

Description of the Procedures

During Week 1 and Week 2 of the intervention, students received their regular classroom instruction. Students did not receive explicit vocabulary instruction during this time; however, student usage of academic vocabulary was tracked. Then during Weeks 3-8, I implemented a vocabulary intervention which included discussion, definition of words, and modeling completion of text maps and graphic organizers. These interventions occurred daily in thirty minute blocks of time. The goal was to build academic language prior to writing about the content. The intervention took place during reader's workshop, in a pull out setting. Informational texts, from which sections were read aloud, or silently read independently by students, were used to introduce vocabulary to the participants. Six words were pre-selected from each text. Sticky notes were used to mark new or unfamiliar vocabulary. These words were defined during discussion. Then the words and/or pictures were written in alphaboxes, see Appendix, (Hoyt, 2002). Completed alphaboxes were use as a scaffold to co-complete an expository text map. The students then wrote about what they learned about the topic.

To provide further details of the six week intervention period, during weeks 3 and 4 of the intervention, the students were introduced to the science content of, space; specifically the moon. In order to gain the students' background knowledge about the topic, students wrote what they knew about the moon, answering the prompt: "Tell what you know about the moon. Use as many details as you can." The researcher and students then read and discussed their responses. Student academic vocabulary related to the topic was tracked. The intervention began with reading a mentor text, *Night Light: a Book about the Moon* (Rau, 2006). Target content vocabulary words were pre-selected in hopes that they would help build background knowledge during discussion. The target words were: orbit, gravity, force, phases, crater, and tides. The

students were provided with a purpose for listening. Sticky notes were used to pinpoint new vocabulary or important points. When new vocabulary words were encountered, the researcher modeled how to place a sticky note on the word. The word was written in an alphabox. After further reading or discussion, phrases or student-drawn pictures were added to the alphabox, thus defining the word and providing a concrete picture for that word. These alphaboxes were then used as a scaffold to co-author an expository text map. The students then wrote about what they learned/knew about the moon.

During weeks 5 and 6 of the intervention, students continued to explore the topic of space, focusing on the stars. Students again answered a prompt in order to gain information about their background knowledge. The prompt was: “Tell what you know about the stars. Use as many details as you can.” The researcher and students then read and discussed their responses. Student academic vocabulary related to the topic was tracked. Students read sections from the book *Stars* (Phelan, 2006). Target words were again pre-selected and were: sun, life cycle, gas, produce(s), brightness, and constellation. The students were provided with a purpose for reading. The students used sticky notes, with guidance from the researcher, to locate new vocabulary or interesting facts. Vocabulary words, along with phrases or pictures, were added to another alphabox. The researcher and students completed a group text map. The students wrote about what they learned about the stars.

During the final two weeks of the study, weeks 7 and 8, prior to vocabulary instruction, the participants answered the prompt: “Tell what you know about the sun. Use as many details as you can.” The researcher and students then read and discussed their responses. Student academic vocabulary related to the topic was tracked. Students read sections from the book *Sun Power* (Hammonds, 2004). Target words were pre-selected. The words selected were: solar, energy,

remote, absorb, reflect, and solar cells. The students were provided with a purpose for reading. The students used sticky notes, with guidance from the researcher, to locate new vocabulary or interesting facts. Vocabulary words, along with phrases or pictures, were added to another alphabox. The researcher and students completed a group text map.

When vocabulary words were encountered, the researcher would write the word on a large alphabox. The researcher and the students used context clues, text features, the glossary, or dictionary to define the words. Additional words, phrases, or pictures were written on the white board, and the students also added these, or their own independently found words, to their personal alphaboxes.

During discussion, the researcher tracked precise language used by the students. The pre-selected vocabulary words were tracked in addition to other academic vocabulary the participants used.

At the end of the eighth week, the researcher and students completed a Venn diagram comparing and contrasting the sun and moon. The students then wrote a paragraph to summarize their comparisons and contrasts.

Description of the Data Collection

During weeks 1 and 2 of the research, students received their regular classroom instruction. No explicit academic vocabulary instruction was provided; however, academic vocabulary usage by the participants was tracked.

During weeks 3 and 4, the focal group responded in writing to a prompt. They then received explicit instruction of academic vocabulary as well as in-depth discussion about the content area.

Target words used by the participants were tracked. Using their alphaboxes, students provided a written response about what they learned/knew about the topic. The number of target words was tallied.

During weeks 5 and 6, the focal group again responded in writing to a prompt. They again received explicit instruction of academic vocabulary as well as in-depth discussion about the content area. Target words used by the participants were tracked. Students provided a written response about what they learned/knew about the topic. Again, participants used their alphaboxes as a scaffold and target words were tallied.

During the final two weeks of the intervention, weeks 7 and 8, the participants again responded in writing to a prompt. They received explicit instruction of academic vocabulary as well as in-depth discussion about the content area. Target words used by the participants were tracked. Students wrote a final paragraph about what they learned/knew about the topic. Students did not use any form of graphic organizer for this writing piece. This final paragraph was also scored.

Conclusion

In summary, four students participated in a study on the use of academic vocabulary from oral discussion transferring to student writing. The study used three expository books to introduce 18 vocabulary words to the students. The first book was read in its entirety to the students, and in the remaining three books, sections were selected and read. A book was read and discussed over a period of two weeks each. The teacher completed a checklist to assess if the student used any of the target vocabulary words during discussion. In addition, every two weeks, during weeks two through eight, prompts were answered by the students. The researcher analyzed academic

content vocabulary that was transferred from discussion with the academic content vocabulary to the written work.

While this chapter described the sample population, procedures, and data collection of my action research, the next chapter will present an analysis of the data.

Chapter 4

Introduction

This study investigated the usage of students' oral academic content vocabulary and how it transferred to their writing. In this chapter an analysis of the data will be presented. The first section will present the data itself. Next, an analysis of the data will be presented, and finally, I will summarize the data.

Presentation of the Data

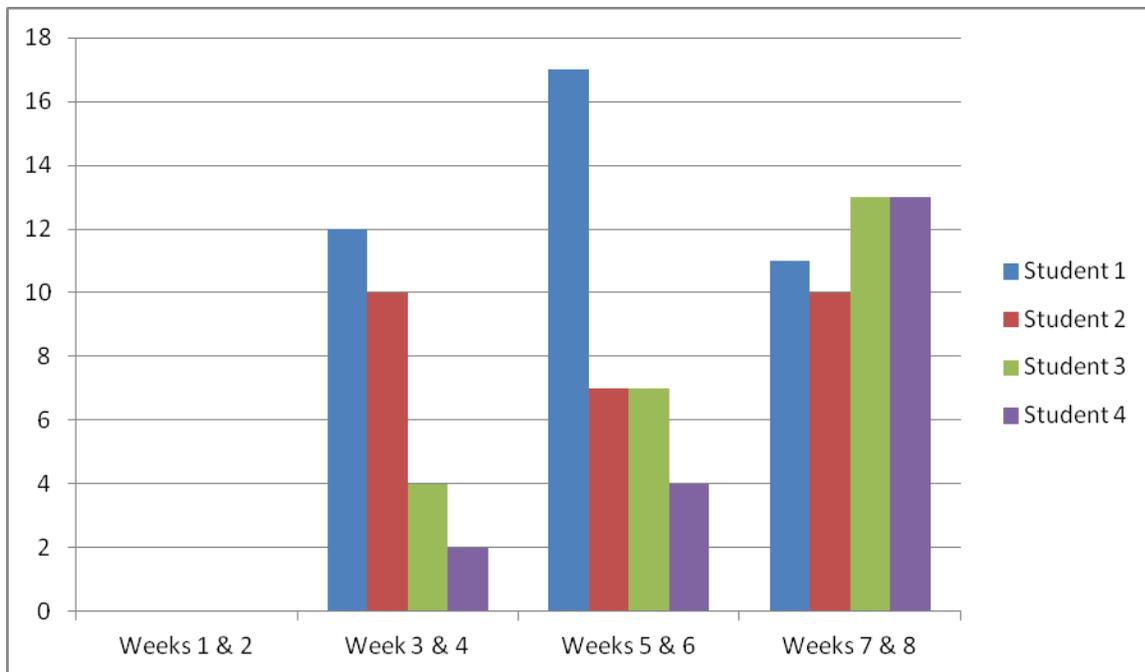
Throughout the eight-week intervention, several pieces of data were collected. During weeks 1 and 2, the researcher tracked academic vocabulary participants used during their regular classroom instruction. During weeks 3-4, an unscaffolded written prompt was first administered in order to access background knowledge of the participants. Students then read and discussed informational text. Data was collected on whether or not students used the target vocabulary words during their oral discussions. Students then wrote a paragraph about the content learned. The academic content vocabulary used by the students in their writing, both prior to discussion and after discussion, was tracked. This procedure was repeated during weeks 5 and 6, and again during weeks 7 and 8. Six target words from each informational text were pre-selected by the researcher. In this section, oral academic vocabulary used during discussion will be presented first, followed by the data on the usage of academic content vocabulary in the student writing. Finally, data pertaining to individual student usage of oral and written academic content vocabulary will be presented.

Oral Usage of Academic Vocabulary Data

During the entire intervention, the researcher tracked individual student usage of specific academic vocabulary during the oral discussions. Both target words (18 pre-determined words) and other words specific to the topic were tracked; however, only the usages of the target words were included in the data. None of the target words were used in weeks 1 and 2. It must be noted that the intervention frontloaded academic content vocabulary for an upcoming science unit; this may account for the fact that none of the target words were heard during regular classroom instruction. Table 2 displays the total number of words used by individual students during oral discussion.

Table 2

Total Number of Words Used in Discussion



The above data groups all target words used during discussions. Upon further investigation, it was observed that target words were repeated during discussions. Table 3 displays the break down of individual target words used by each student during oral discussions. The cells are color-coded to match the student data above.

Table 3

Tally of Vocabulary Words Used During Oral Discussion

Student	Weeks 1 & 2				Weeks 3 & 4				Weeks 5 & 6				Weeks 7 & 8			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. orbit	0	0	0	0	0	0	1	0	0	1	1	0	2	0	1	1
2. gravity	0	0	0	0	5	2	1	1	0	0	0	1	1	2	0	1
3. force	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
4. phases	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	2
5. crater	0	0	0	0	2	0	0	0	0	0	0	0	1	1	1	1
6. tide(s)	0	0	0	0	3	0	0	0	0	0	0	0	1	0	2	0
7. sun	0	0	0	0	0	4	1	1	7	4	5	3	3	4	1	5
8. life cycle	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
9. gas	0	0	0	0	0	2	0	0	6	2	1	0	1	1	1	1
10. produce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11. brightness	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
12. constellation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13. solar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	0
14. energy	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	1
15. remote	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16. absorb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
17. reflect	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18. solar cells	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total words	0	0	0	0	12	10	4	2	17	7	7	4	11	11	13	13

After the data were separated by individual word usage, the researcher evaluated the number of times words were used and repeated. During weeks 3 and 4, Student 1 used a total of 12 words, but after duplicate usages were eliminated, it was discovered that 4 target vocabulary words were actually used. The total numbers of words used by Student 2 were ten. It was determined that five words were actually used during discussion. Student 3 used four total

words, each word used once during discussions, while Student 4 used two words, each used once during discussions.

During weeks 5 and 6, the total number of words used overall in discussions by individual students increased. Student 1 used a total of 17 words, four of them being repeated numerous times. Students 2 and 3 both used a total of 7 words, with the same three words repeated. Student 4 used a total of 4 words with two different words used during discussions.

Weeks 7 and 8 showed the most growth in the total amount of words used by students during discussions. Moreover, the number of individual words used by all students increased. A total of 11 words were used by Student 1. Eight of those were individually used target words. Student 2 used a total of ten words with seven of those were individually used target words. Student 3 and Student 4 both used a total of 13 words. These students both used eight individual words; six of those were the same target words.

This section presented the data from the oral discussions held during the intervention. It compared the total words used by students with the actual number of words recalled and used during discussions. In the next section, the usage of academic vocabulary data will be introduced.

Academic Vocabulary Words Used in Content Writing Data

Beginning with weeks 3 and 4, and continuing through weeks 7 and 8, a written prompt related to the topic was administered prior to informational text being read and discussed. This was done to investigate the background knowledge of the focal group. The researcher then tracked academic vocabulary used by each student prior to reading informational text. At the end of each two week intervention, the same prompt was administered and the number of target

words used in the student writing was tracked. Finally the academic language used in student writing prior to the intervention was compared to the student writing sample at the conclusion of the intervention.

Table 4 displays the total number of target words written by the students prior to the intervention. The data shows that the use of the eighteen selected target words prior to explicit instruction was limited. No written intervention was conducted during weeks 1 and 2.

Table 4

Total Number of Target Words Written By Students Prior to Intervention

Student	Weeks 3 and 4				Weeks 5 and 6				Weeks 7 and 8			
	1	2	3	4	1	2	3	4	1	2	3	4
1. orbit	0	0	0	0	0	0	0	0	0	0	0	0
2. gravity	1	0	1	0	0	0	0	0	0	0	0	0
3. force	0	0	0	0	0	0	0	0	0	0	0	0
4. phases	0	0	0	0	0	0	0	0	0	0	0	0
5. crater	0	0	0	0	0	0	0	0	0	0	0	0
6. tide(s)	0	0	0	0	0	0	0	0	0	0	0	0
7. sun	0	0	0	0	1	1	0	0	0	0	0	0
8. life cycle	0	0	0	0	0	0	0	0	0	0	0	0
9. gas	0	0	0	0	0	0	0	0	0	0	0	0
10. produce	0	0	0	0	0	0	0	0	0	0	0	0
11. brightness	0	1	1	0	0	1	0	0	0	0	0	0
12. constellation	0	0	0	0	0	0	0	0	0	0	0	0
13. solar	0	0	0	0	0	0	0	0	0	0	0	0
14. energy	0	0	0	0	0	0	0	0	0	0	0	0
15. remote	0	0	0	0	0	0	0	0	0	0	0	0
16. absorb	0	0	0	0	0	0	0	0	0	0	0	0
17. reflect	0	0	0	0	0	0	0	0	0	0	0	0
18. solar cells	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	2	0	1	2	0	0	0	0	0	0

In comparison, Table 5 displays the total number of target words written by the students after explicit instruction in and discussion of the eighteen academic content vocabulary words during weeks 3 through week 8. Table 5 is shown below.

Table 5

Academic Content Vocabulary Used in Writing Post Discussion

Student	Weeks 3 and 4				Weeks 5 and 6				Weeks 7 and 8			
	1	2	3	4	1	2	3	4	1	2	3	4
1. orbit	1	1	1	0	0	0	0	0	0	1	2	1
2. gravity	1	0	1	1	0	0	0	0	0	0	0	0
3. force	1	0	0	1	0	0	0	0	0	0	0	0
4. phases	0	0	0	1	0	0	0	0	0	1	0	2
5. crater	1	0	1	0	0	0	0	0	1	0	1	0
6. tide(s)	1	2	1	2	0	0	0	0	1	2	0	0
7. sun	0	0	0	0	3	1	2	1	5	1	3	5
8. life cycle	0	0	0	0	0	0	0	0	0	0	0	0
9. gas	0	0	0	0	1	1	1	0	1	0	1	1
10. produce	0	0	0	0	0	0	0	0	0	0	0	0
11. brightness	0	0	0	0	0	1	0	0	1	0	0	0
12. constellation	0	0	0	0	0	0	0	0	0	0	0	0
13. solar	0	0	0	0	1	0	1	1	0	1	1	0
14. energy	0	0	0	0	1	0	1	1	0	2	1	0
15. remote	0	0	0	0	0	0	0	0	0	0	1	0
16. absorb	0	0	0	0	0	0	0	0	0	0	0	0
17. reflect	0	0	0	0	0	0	0	0	0	0	0	0
18. solar cells	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	3	4	5	6	3	5	3	9	8	10	9

When compared to the data in Table 4, the data in Table 5 shows that all students used more of the target content vocabulary words in their writing after informational text was read and discussed. The maximum number of target words used prior to intervention by any student was two. After explicit instruction of target vocabulary words and discussion of text read, the minimum number of words was three while the maximum number rose to ten after the eight weeks of intervention.

Individual Students' Oral and Written Usage of Academic Content Vocabulary Data

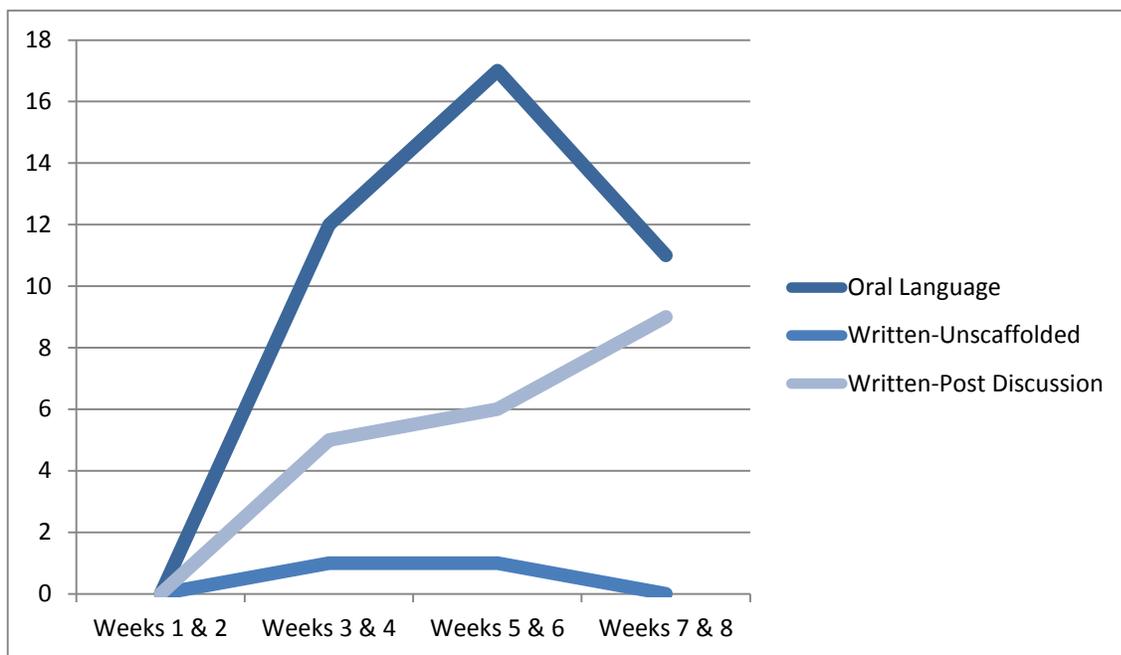
After the intervention, the researcher examined 1) the total number of words individual students used during oral discussions, 2) the maximum number of words used in unscaffolded

writing, and 3) the maximum number of words used after the informational text was read and discussed. This information was plotted and the results for each of the four students in the focal group are displayed below.

The following table displays the increase in usage of the target words in the writing of Student 1. This student used two words in the unscaffolded writing and increased to nine words by the end of the intervention. In addition, it also displays the increase in the number of target vocabulary words this student used during discussion. The data displayed indicates that this student used the greatest number of target words during discussion; however, several words were repeated.

Table 6

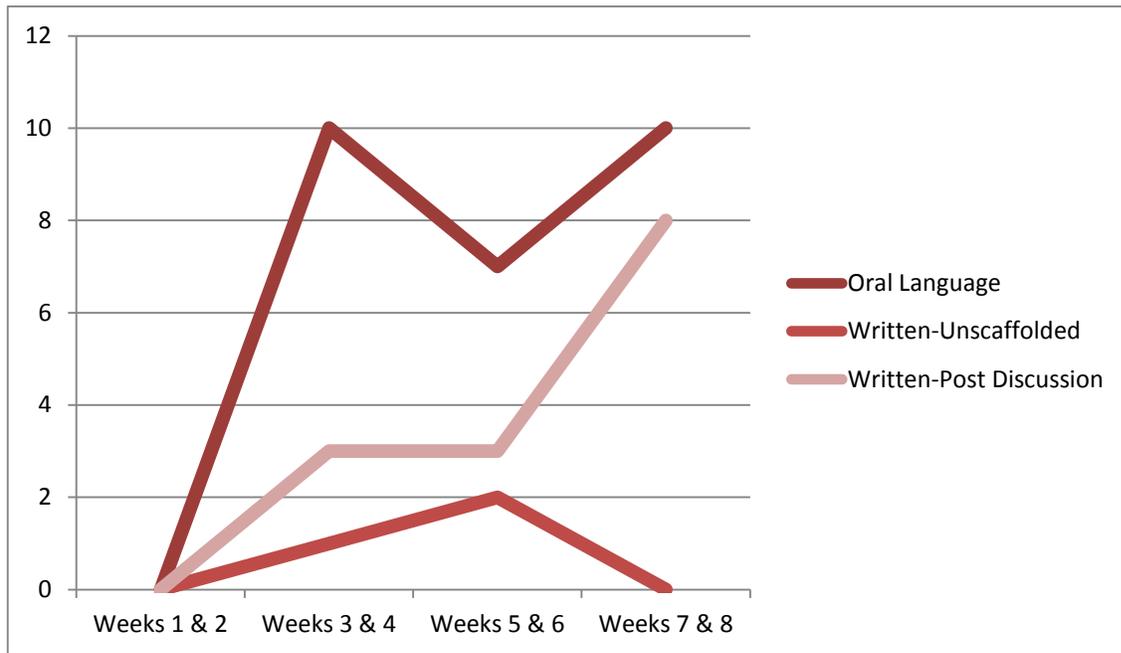
Comparison of Student 1's Oral and Written Usage of Target Vocabulary



The following table displays the increase in usage of the target words in the writing portion of the intervention of Student 2. This student demonstrated steady growth in the amount of written target words used. Student 2 used three target words prior to explicit instruction and ultimately used 14 target words in writing by the conclusion of the intervention. Also displayed is the number of target vocabulary words this student used during discussions, the mode being 10.

Table 7

Comparison of Student 2's Oral and Written Usage of Target Vocabulary

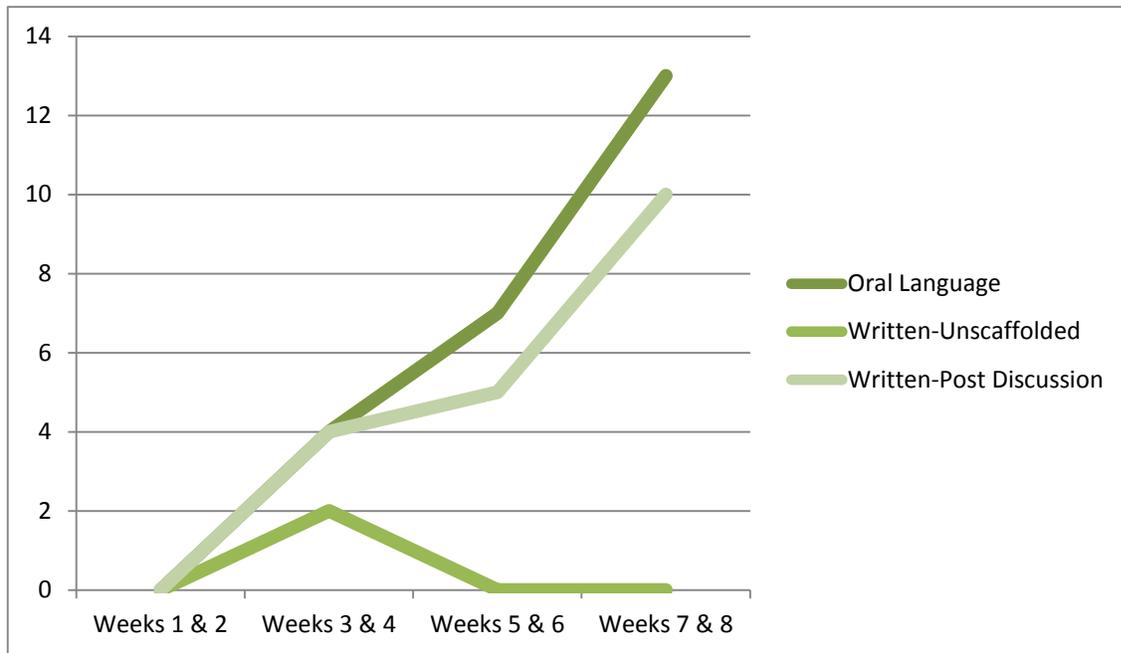


Student 3's increase in the use of the target words in the writing portion of the intervention is displayed in Table 8 below. Student 3 steadily increased the application of the target words in writing. This student used zero to two words in unscaffolded writing while proceeding to as many as ten in the writing after discussion. This student also demonstrated steady usage of the

target words during discussion, from four in weeks 3 and 4, seven in weeks 5 and 6, and thirteen in weeks 7 and 8.

Table 8

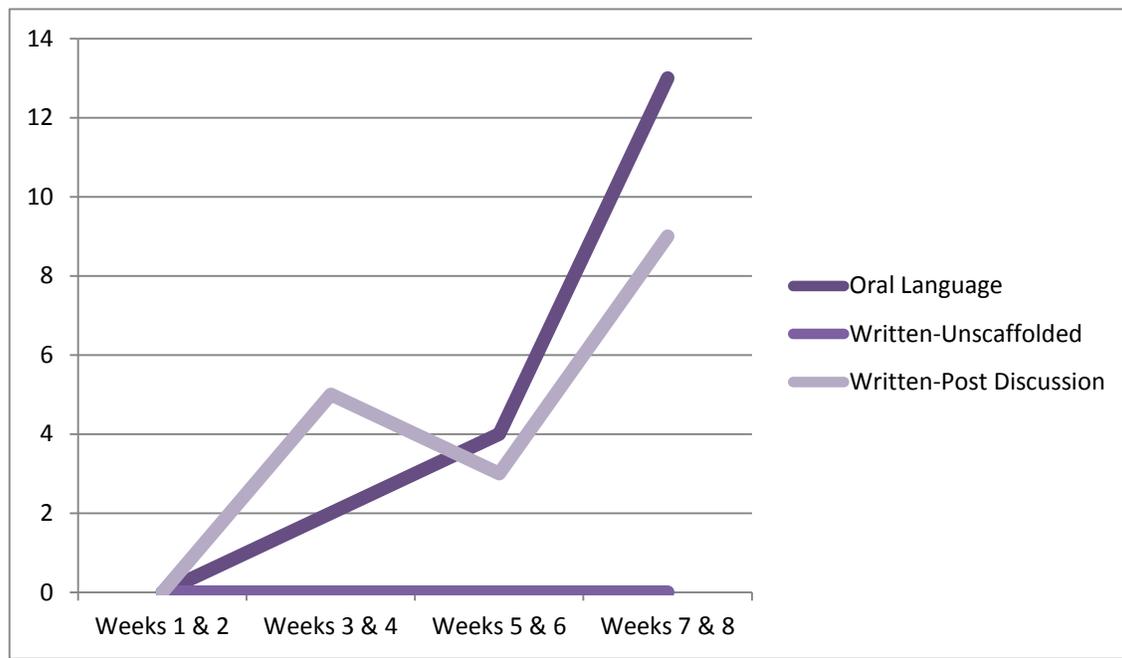
Comparison of Student 3's Oral and Written Usage of Target Vocabulary



Below, Student 4's increase in the use of the target words in the writing is displayed in Table 9.

This student used none of the target words during any of the unscaffolded writing and ultimately used ten words in the final piece of writing. This student also demonstrated steady increase in the usage of the target words during discussion.

Table 9

Comparison of Student 4's Oral and Written Usage of Target Vocabulary**Analysis of Data**

The data showed that vocabulary words used orally in discussion will be transferred to student writing. Although student usage of all the target vocabulary words was higher during discussion, the transfer and application of those words was present in student writing as is evidenced by Tables 6-9. In addition, target words learned in the earlier weeks of the intervention were also used orally during the later weeks as is evidenced by Table 5. The data from unscaffolded written prompts compared to data from post intervention prompts also demonstrates growth in the students' usage of the target words. Overall, the students used a maximum of two words in unscaffolded writing. However, after explicit instruction of the target vocabulary, the minimum numbers of target words used in student writing were three, while the

maximum number of words written by a student rose to ten. With increased target word exposure during discussion along with explicit instruction of those vocabulary words, student writing improved in regard to usage of academic vocabulary.

In order to determine how oral academic language transferred to writing, the researcher analyzed whether the target words used by the focal group in oral discussions were the same words used in their content area writing. It was determined that Student 1 used 10 of the same target vocabulary words in both oral discussions and the content area writing. They were: orbit, gravity, force, crater, tide, sun, gas, bright/brightness, solar, and energy. Student 2 used six of the same target vocabulary words in both oral discussions and the content area writing. They were: orbit, sun, gas, solar, energy, and absorb. Student 3 used eight of the target vocabulary words in both discussions and the written portions of the intervention, using orbit, gravity, crater, tide, sun, gas, solar, and energy. Student 4 used six of the target words in both oral discussions and the content area writing. The words used by Student 4 were: orbit, gravity, phases, sun, energy, and solar. All of the target vocabulary words were either used during discussions or content area writing with the exception of three (produces, constellation, and solar cell) which the students did not use in either oral discussions or content area writing.

The results are displayed below in Table 10.

Table 10

Words Used in Oral Discussion Compared to Words Used in Content Area Writing

Student	Words Used in Oral Discussion				Words Used in Content Area Writing			
	1	2	3	4	1	2	3	4
1.orbit	2	1	3	1	1	2	3	1
2.gravity	6	4	1	3	1	0	1	1
3.force	1	1	0	0	1	0	0	1
4.phases	2	0	1	2	0	1	0	3
5.crater	3	1	1	1	2	0	2	0
6. tide	4	0	2	0	2	4	1	2
7. sun	10	9	7	9	8	2	5	6
8. life cycle	1	1	1	1	0	0	0	0
9. gas	9	5	2	0	2	1	2	1
10. produces	0	0	0	0	0	0	0	0
11.brightness	3	0	0	0	1	0	0	0
12.constellation	0	0	0	0	0	0	0	0
13. solar	1	1	3	0	2	1	1	1
14. energy	1	1	3	1	3	1	1	1
15. remote	0	0	0	1	0	0	0	0
16. absorb	0	1	0	0	0	1	0	0
17. reflect	0	0	0	0	0	1	0	0
18. solar cell	0	0	0	0	0	0	0	0
Total	43	25	24	19	23	14	16	17

Conclusion

This study investigated the usage of academic oral language by students and how that language transferred to their writing. The data suggested that when learned through discussion, along with explicit instruction in academic content vocabulary words, students were capable of transferring the knowledge of oral language to their writing. The researcher's hypothesis was that students would use more of the new vocabulary words in their oral discussions than in their content area writing. This was shown to be true after tabulating the results in Table 10 which shows students' use of specific content words in their oral discussions. While this chapter presented the data and analysis of how oral language transfers to academic writing, the next

chapter will conclude the study by connecting the results to other research, discussing the strengths and limitations of the study, and offering recommendations for future research.

Chapter Five

Introduction

The purpose of this action research was to investigate how implementation of literary discussion targeting specific content vocabulary transfers to student's academic content writing. I believed I could support my students' writing development within a content area by providing explicit vocabulary instruction in order to build their vocabulary knowledge and the inclusion of academic vocabulary within their writing. After concluding the study and examining the data results, I determined that this study did have a positive effect on student learning. Not only did students increase their repertoire of academic vocabulary words, but they also increased their background knowledge through conversations. In addition, students increased the amount of academic vocabulary used in their content area writing. In this chapter, connections are made to existing research studies, strengths and limitations are examined, and recommendations for future research are presented.

Connections to Existing Research

Before beginning my research, I examined prior research studies that had been conducted, with my initial focus on improving vocabulary instruction in students from lower socio-economic status. I concentrated on these studies because my action research was to be conducted in a school at which nearly 80% of the families were considered lower socio-economic status. Next, I examined studies that focused on vocabulary instruction and oral vocabulary along with how it leads to stronger writing. Finally, I focused on strategies which lead to improved student writing.

As I delved deeper into the research of other authors, I found several studies that provided insight to my action research. Van Steensel (2006) stated that children from poor home literacy environments had the lowest scores on literacy measures. His research goals were to uncover the effects of lower literacy environments on children during their primary years of education. This research was of interest to me because the students in at my school share similar backgrounds to those in the study. While this study helped me understand the limitations my students and families face, it also helped me understand what I needed to do in order to lessen the literacy gap. Therefore, explicit vocabulary instruction and building background knowledge was an area I examined as well. Current research continues to support that students develop vocabulary knowledge through read alouds, small group discussions, and repeated readings (Beck & McKeown, 2007; Leung, 2008). In addition to explicit instruction, teacher modeling, and guided practice, students must be able to practice their skills in oral conversation. It is through active learning that students are able to practice and apply their word knowledge, and support each other in their native language. Moreover, through explicit instruction within a small group setting, teachers are able to clarify student's misconceptions as soon as they arise.

It is also recommended that students be able to interact with words and have many opportunities to discuss them with peers in order to increase their depth of understanding (Harmon, Wood, Hedrick, Vintinner, & Willeford, 2009). These authors focused their study on the use of interactive word walls. I believe that as students gain oral academic language they must have a method to support their recall of it. An interactive word wall not only actively engages the learner to develop and maintain new words, but also becomes a tool to support vocabulary for discussion and writing. As students gain oral academic vocabulary, and have a strategy to recall the new words through support of a tool such as a word wall, the students will

be better able to use the word correctly in their writing. With the ongoing author visits from Linda Hoyt at our school this year due to our focus on informational text, I chose to implement a graphic organizer she developed called an Alphabox (Hoyt, 2002).

However, it was observed that during teacher led instruction and independent student work time there is little opportunity for students at my school to interact with their peers and discuss new words or their meanings. Although regular classroom instruction at my school includes a minimum of four read alouds per day, and this is very likely when most new vocabulary is encountered, there is very little oral discussion among students. Therefore, a major goal of this action research was to provide sufficient opportunities for the focal group to have peer interaction through small group discussions, use words in a variety on contexts, ask questions, and review new vocabulary words.

In the final area of investigation for my action research, I examined studies that investigated strategies that could improve student writing. The results exhibited in Table 1 of Chapter One show that 62% of the students at my school are not proficient in writing, and thus indicated that writing was an area which needed support. Two recent studies have shown that as students become aware of different text structures and as they receive explicit strategy instruction, modeling, coaching, and opportunities to practice, students are capable of writing a response to expository texts (Booth-Olson, Land, Anselmi, & AuBuchon, 2010; Montelongo, Herter, Ansaldo, & Hatter, 2010). Although not identical skills, reading and writing are connected. Thus, enhancing a student's academic content vocabulary should improve both his/her reading of a text and writing about a text. As students gain more content-specific vocabulary, they will be able to apply those words in their writing thereby improving its depth in meaning. In addition, when students are immersed in new vocabulary through discussion, and provided opportunities

to explore the meaning of words, they are more likely to use those words, since they understand the meaning, in their writing.

While these studies formed the framework of my action research, I planned my study to provide the focal group many opportunities to have peer interaction through small group discussions, use words in a variety on contexts, ask questions, and review new vocabulary words, as well as practice injecting content vocabulary into their writing skills.

Connections to Wisconsin State Standards

My school has been converting to the Wisconsin Common Core Standards for the past years. This year our goal was to increase the use of informational text in the classroom by fifty percent so a goal of this action research was to connect the explicit instruction of vocabulary to the Common Core State Standards (Common Standards, 2010). This study meets several standards. The first standard this study addresses is regarding speaking and listening where SL 5.1 states that students will engage in a range of collaborative discussions (Common Standards, 2010). Students must build on others' ideas and express their own clearly. During this intervention the focus was on small group discussion and peer interaction within the group, thereby meeting this standard. During the intervention, another standard addressing the reading of informational text, RL 5.4, was met when students determined the meaning of academic and domain-specific words and phrases within the texts read (Common Standards, 2010). We further examined, defined, and practiced using vocabulary words during discussion. Additionally, this study supported two writing standards, W 5.2 and W 5.5 (Common Standards, 2010). With guidance and support from peers and the researcher, students developed and strengthened their writing and they examined a topic and conveyed ideas and information more clearly than prior to the intervention.

Explanation of Results

Overall the result of this study was beneficial to the focal group because it produced positive results for all students. When looking at the data presented in Chapter Four, several factors influenced the growth in student usage of academic vocabulary in oral language and content area writing.

First, when looking at the students' usage of the target vocabulary words during oral discussion during six weeks of the intervention, all students increased the number of academic vocabulary words used during the intervention. During weeks 1 and 2, the researcher did not observe any student using the target words in the classroom. Once again, the intervention provided frontloading support. However, the number of words used in oral discussions by Student 1 during weeks 3 through 8, were ten different words. During the same timeframe, Student 2 used nine target words in oral discussions. Student 3 used eleven target words in discussions while Student 4 used eight target words in oral discussions. The results show that all the students increased the amount of academic vocabulary used during oral discussions during the intervention weeks. During the six of the weeks of the intervention, students were repeatedly exposed to the target vocabulary words and had multiple opportunities to use the words in discussion. Moreover, students had opportunities to ask questions and have any misunderstandings clarified. Since content area words were often words students would not encounter in other settings, they needed more instruction in order to use and apply them in context (Beck and McKeown, 2007). I believe that this additional support and discussion helped the students use and understand the academic vocabulary encountered in their reading.

Next, the amount of academic content vocabulary used in writing post discussion increased during the intervention. Overall, during weeks 3 through 8, students increased their use of academic vocabulary in their writing. Prior to the intervention, student one used two target words, increasing to nine by the conclusion of the intervention. Students two, three, and four respectively used two, two, and zero target words while ending with eight, ten, and nine. This increase can be attributed to the amount of small group discussion in which students not only used the academic vocabulary orally, but also completed graphic organizers after reading and discussing the text. The use of graphic organizers helped the students visualize their thinking, and was a means for them to later create their written piece. Furthermore, the organizers helped students see how ideas were related to each other.

A final result is that the students did not decrease their writing proficiency on the assessment wall. Second quarter marked the beginning of the intervention, so the first quarter data from my school's assessment wall was examined. This data was documented in Chapter One. At that time, all focal group writing proficiencies were below or approaching fifth grade norms. The data from the end of second quarter showed the students' results remained the same. However, when disallowing grammar and conventions, all students increased their use of more precise vocabulary words.

Overall, with additional exposure and additional support, students increased the amount of academic content vocabulary they used in both their oral discussions and content area writing.

Strengths and Limitations of the Study

This study had both strengths and limitations. First, I believe the time spent in small group discussions greatly benefitted the students. During this half hour intervention, the students were

immersed in a literacy rich classroom where they did more than simply hear vocabulary words read aloud from informational texts. In addition to the read aloud, they discussed the definitions of these vocabulary words, used them in context, completed graphic organizers, illustrated the words, and saw demonstrations. The time spent in the intervention allowed them to have their questions answered, provided clarity to meanings, provided additional exposure to the vocabulary words, and provided plenty of opportunities for the students to practice and apply the words they were learning in both oral conversations and in their content area writing. The students received more individual support than in the regular classroom and were free from the distractions. Moreover, the small group size was conducive to learning. It allowed for a more detailed exchange of ideas and more student talk time. I believe this additional support in a small group setting contributed to the positive outcomes.

A second strength was that the small group size allowed me to keep detailed records of conversations and vocabulary words used by the students. I was able to easily track target words used during discussion. I could ensure that every student participated, thereby helping the students fully understand the vocabulary words while recording their responses. In addition, a small group was easily scheduled without disrupting regular classroom instruction, and there was ease in rescheduling when conflicts arose.

A third strength of this study was that I was able to witness growth in student content area writing skills and strategies in more ways than I anticipated. The students became more aware of word choice, often choosing stronger nouns or more descriptive adjectives. Astronaut was written instead of 'people who go to space,' and the students began to describe the sun as a sphere instead of a circle. With the additional support and explicit instruction in vocabulary, the students had larger repertoires from which to choose. In addition to developing an awareness of

word choice, student began to understand the value of peer editing. When one student couldn't remember a specific vocabulary word, often another would offer suggestions. I believe the discussions not only helped students learn new vocabulary words, but also built confidence among the students. They gained background knowledge and were capable of contributing to classrooms discussions.

The final strength of the study was in that I became a stronger teacher. During this study, I learned how much zest my students have for learning. They came every day, even though they might have missed something fun in their regular classroom. They were uninhibited, asking many questions. While planning my instruction with their interests in mind, providing prompts to support their reading comprehension, and modeling how to use graphic organizers kept them engaged, it also kept my instruction focused on both the content area and language objectives. As I listened to two students help each other in their native language, it cemented my belief that within small groups there should be at least two students who speak the same language to support each other, especially with content vocabulary. I will also advocate for more explicit vocabulary instruction within the regular classroom setting as it has been demonstrated that it can only improve overall student growth.

This study had at least two limitations. While a strength of this study, small group size was also a limitation. The data were not easily converted into percentages or tables. If a member of the focal group had been absent for an extended amount of time, it would have affected the results. Also impacting this limitation was the Comprehensive Literacy Model (Dorn & Soffos, 2012). The model used at my school limits intervention groups to four students, and follows specific intervention guidelines.

A second limitation was the eighteen pre-selected words from the informational text. After reflection, the word 'sun' could have been eliminated. This word was repeatedly used in both oral discussions and content area writing, and had higher results than some of the other words. This is a word the students hear in the weather report and in the morning announcements at school, so I do not believe the focal group truly learned this word from the intervention. I also highlighted academic vocabulary words that I thought would build background knowledge and facilitate understanding of the content area. However, the students might have found interest in different words if given the opportunity to select their own words.

While the small group size and word lists were limitations to this study, they were also strengths in that the small group size allowed for increased student exposure to and practice of the vocabulary words. In addition, the small group size allowed me to gather more detailed observation notes while at the same time seeing where my focus for future instruction should be.

Recommendations for Future Research

After looking at the strengths and limitations of this study, some recommendations can be made for future research about how oral language transfers to academic content area writing. My first recommendation would be to use a larger group size to ensure more data was collected. The data from a small group size must be generalized for an entire population. A larger sample, size, or perhaps using two small groups and comparing the data, would give more reliable results.

A second recommendation would be to use another genre in evaluating the amount of academic content vocabulary transferred to student writing. Glenn (2007) suggests students not write about what they read, but rather write a piece of fiction, a genre with which most students

are familiar. In many elementary classrooms, students at my school are assigned fiction literature, but then asked to write primarily exposition. It makes sense to have students write in an area of strength.

Conclusion

In summary, this action research investigating how oral content vocabulary language transfers to student writing has connections to other research and the Common Core Standards. The results were explained as well as the possible reasons for the outcomes of the study. This study demonstrates that when students are explicitly instructed in academic content vocabulary, and are provided plenty of opportunities to orally practice those words, not only do the number of vocabulary words increase in their oral conversations over time but the words are transferred to the students' content area writing. After completing this study, I believe oral discussion within a small group setting was an effective method of instruction of academic vocabulary words. In addition, I believe repeated exposure to the target words facilitate an understanding of the words so that the students were able to transfer the oral vocabulary to their content area writing. Overall, the outcomes of this study were successful. The students increased their repertoire of academic language, and transferred that language to their writing,

I was able to learn a great deal from this experience, and this experience will benefit all my students in the future. I look forward to the opportunity to share this study and its results with my colleagues, so they can see the benefits and begin to use this type of instruction in their classrooms as well.

Most importantly, I have a deeper understanding of the Common Core standards, and why my school decided to implement the model we use. I will be better able to support it as an intervention which allows students to become successful.

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Appendix

		A a	B b	C c
D d	E e	F f	G g	H h
I i	J j	K k	L l	M m
N n	O o	P p	Q q	R r
S s	T t	U u	V v	W w
X x	Y y	Z z	Alphaboxes	

