Vocabulary development with instructional coaching support

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Abstract
The purpose of this literature review was to examine the importance of vocabulary development among kindergarten students, identify risk factors that effect vocabulary development, recognize developmentally appropriate practices, identify best practices and interventions to promote student growth, and determine if support from an instructional coach benefits the classroom teacher’s pedagogy. Various research articles were collected and analyzed in order to find methods for closing the language gap as well as to change instruction that challenges students to reach their optimal vocabulary development range. Aside from socioeconomic status, there are several risk factors that affect vocabulary development, including age, cultural backgrounds, the amount of time spent on instruction, and the quality of instruction. Students who are taught vocabulary with direct, explicit instruction and provided authentic activities and experiences are more likely to develop their vocabulary knowledge. Additionally, teachers who diagnose learning discrepancies in vocabulary are able to implement research based interventions for students that will boost vocabulary knowledge and fill in the missing skills for students. The overarching conclusion from the literature review was the significance of instructional coaches working with educators in early childhood settings that bring about systemic change, sustain high fidelity over time, and engage in data based decision-making. The outcome of the literature review proved to be effective in providing insights on vocabulary development.

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ABSTRACT

The purpose of this literature review was to examine the importance of vocabulary development among kindergarten students, identify risk factors that affect vocabulary development, recognize developmentally appropriate practices, identify best practices and interventions to promote student growth, and determine if support from an instructional coach benefits the classroom teacher’s pedagogy. Various research articles were collected and analyzed in order to find methods for closing the language gap as well as to change instruction that challenges students to reach their optimal vocabulary development range. Aside from socioeconomic status, there are several risk factors that affect vocabulary development, including age, cultural backgrounds, the amount of time spent on instruction, and the quality of instruction. Students who are taught vocabulary with direct, explicit instruction and provided authentic activities and experiences are more likely to develop their vocabulary knowledge. Additionally, teachers who diagnose learning discrepancies in vocabulary are able to implement research-based interventions for students that will boost vocabulary knowledge and fill in the missing skills for students. The overarching conclusion from the literature review was the significance of instructional coaches working with educators in early childhood settings that bring about systemic change, sustain high fidelity over time, and engage in data based decision-making. The outcome of the literature review proved to be effective in providing insights on vocabulary development.
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CHAPTER I

Introduction

Description of Topic

Throughout a person’s life, the process by which individuals are continuously obtaining words is known as vocabulary development. Starting in infancy, babbling begins as a method of understanding our language, how to communicate our wants and needs, and comprehending the meaning of words. As the transition from babbling to spoken words evolves, the purpose of vocabulary development remains constant.

As early as six to eight weeks of age, infants begin to play with sounds. Cooing appears as a method of learning new words as infants mimic the adult caretaker. At around six to nine months, infants continue to develop speech sounds with the use of babbling. To the adult caretaker, babbling is seen as a rapid, incomprehensible speech, however, to the infant it is a method of communication. Beginning around a year old, the process of vocabulary development transitions into understanding and producing words. Vocabulary development will never become disconnected from the individual and will continue to expand until the death of the individual (Hoff, 2005).

The basis for learning any language begins with vocabulary (Brysbaert, Stevens, Mandera, & Keuleers, 2016). Vocabulary defined by Brysbaert et al (2016), is stated as all the words known and used by an individual, vocabulary develops with age and serves as a fundamental tool for understanding language, communicating with others, and comprehending the meanings of words. Understanding the English language is a complex process due to the number of words with multiple meanings as well as varying rules for spelling and pronunciation. In addition to understanding language, another use of vocabulary is to communicate among
individuals. Communicating with others allows ideas to be shared, exchanging information, and having wants and needs met. It is part of our daily lives and often determines an individual’s success.

The third use of vocabulary is to comprehend the meaning of words, which can be observed in reading, writing, speaking, and listening. Vocabulary can bring excitement and interest to articles, conversations, and other aspects of daily life. Since comprehension is the ultimate outcome of reading, one cannot underestimate the significance of vocabulary.

Rationale

Everyday within our schools, situations where students struggle to comprehend various languages around them develop learning barriers, which cause students to feel embarrassment, doubt, and inadequacy. One example of vocabulary struggle is a student coming to America from another country. This unfortunate student is helpless, scared, frustrated, and struggles to communicate with those who do not understand or can communicate with him or her. A second example is a student who has grown up in America, but he or she enters school with a very limited, basic vocabulary due to lack of exposure within the family unit. This child might be able to communicate with others and understand conversations, however, the difference in vocabularies among his or her peers varies immensely and will affect reading and writing performance. Students come to the classroom to learn, but if children’s vocabularies differ by 200 word types, it is bound to make a difference in vocabulary development (Rowe, Raudenbush, & Goldin-Meadow, 2012).

The importance of vocabulary can be observed in every aspect of a child’s life. It allows one to express new thoughts or ideas and solutions to problems. Vocabulary can bring ordinary words into works of art and bring people to tears by how the author expresses emotions. A
person can think logically and participate in conversations that could change the landscape of history. A person’s vocabulary abilities can range from never being exposed to the word, to recognizing a word from context or a person’s tone, to word fluency by understanding the meaning and using it within written and oral conversations.

In the beginning of my early childhood education master’s study, I remember reading an article that changed my outlook on vocabulary forever called “The Early Catastrophe: The 30 Million Word Gap by Age 3” by Hart & Risley (2003). The article discussed a link between children’s vocabulary development and the socioeconomic status of the family. Children who live in families on welfare are more likely to have a thirty million-word deficit when compared to peers from professional backgrounds. According to Hart & Risley (2003):

> We found we could easily increase the size of the children’s vocabulary by teaching them new words. But we could not accelerate the rate of vocabulary growth so that it would continue beyond direct teaching; we could not change the developmental trajectory. However many new words we taught the children in the preschool, it was clear that a year later, when the children were in kindergarten, the effects of the boost in vocabulary resources would have washed out. The children’s developmental trajectories of vocabulary growth would continue to point to vocabulary sizes in the future that were increasingly discrepant from those of the professors’ children. (p. 4)

From this excerpt, it is clear to see that students from lower socioeconomic status are able to increase their amount of vocabulary words with direct instruction, however the gap between students of working class families or professional families will remain constant.
The article goes on to state that 86%-98% of the vocabulary words recorded from student participants also appeared in the parents’ vocabulary (Hart & Risley, 2003). Children are comfortable using the words heard their whole lives from families. The child’s language is similar and observers notice patterns of parenting, inflections and tones, as well as types and depths of conversations.

Along with the variation in quantity of words, researchers also note a radical difference in the types and depths of parent-and-child conversations. Two types of conversational experiences were documented, including affirmative (parent offers encouraging words) and prohibition (parent gives discouragement or commands). An average child living in a professional family background accumulates thirty-two affirmative type conversations and five prohibition conversations within an hour, a 6:1 ratio. In a working-class family, a child would be exposed to twelve affirmative and seven prohibition type conversations, a 2:1 ratio. Unfortunately, a child living in a family on welfare can experience up to five affirmative and eleven prohibition conversations, a ratio of 1:2 (Hart & Risley, 2003).

While professional families offer more nurturing and thoughtful environments, they also provide a greater depth of knowledge within those conversations. Scholars, problem solvers, and higher order questioning skills surround children in professional families. Parents are more likely to carry on “why” and “how” conversations which pass on the love of deep thinking to their children. At the other end of the spectrum, low-income families trying to survive day-to-day life making ends meet, are stressed and show more opportunities to give discouragement to their children. The depth of conversations is limited to, “not now” and “stop that.”

Hart and Risley’s (2003) article affirms a three-year-old child, who is discrepant from peers in the area of vocabulary, predicted how that child would perform on language
development measures by third grade. There is so much happening in a child’s life during the first few years when they are totally dependent upon the family unit for experiences, nurturing, and language. I remember the feeling of panic that set in when I finished reading the article. It was all so intense that I broke down and cried. My set of triplets were going to turn three in a couple months and the mom guilt washed over me. As a worried parent, I hoped I had given my children opportunities to develop their vocabulary through rich language conversations, exploring the world around them, and reading a variety of books, and as their parent in the 3 short years of life, I prepared them for a school career with strong, rich vocabulary.

To address my concerns, I found a class on vocabulary through my local Area Education Agency that supported teachers with best practice strategies for teaching students vocabulary. I learned that vocabulary had three tiers or levels of words. At the basic level (Tier I), students use everyday common language to express ideas and new learning. This core vocabulary is the most universal within human experiences, such as labeling activities, body parts, and places, but rarely require direct instruction. Basic vocabulary is most often understood by a majority of students in the classroom.

Tier II contains high frequency and multiple meaning words that can occur in a variety of educational domains, such as reading, writing, social studies, and science. Tier II words can be observed within adult conversations and throughout literature passages making them fundamental for reading and speaking comprehension. In Tier II, teachers’ direct instruction of vocabulary words would increase students’ progress throughout school. Direct instruction allows the teacher to guide students’ learning with lectures, demonstrations, and activities, at the same time providing effective ongoing feedback.
Vocabulary words placed in Tier III are considered context-specific and low frequency words. Tier III words occur within specific educational domains such as science, technology, and geography. Even though these words provide new understandings and concepts in a field of study, they are also the most challenging for students to learn since they appear less in conversation and print and have a narrow area of focus. Gaining knowledge of the three tiers of vocabulary allowed me to spark my interest of how children learn more academic terms and acquire a deeper level of understanding.

**Purpose of Review Results**

With new educational laws and federal mandates in place, it is imperative that educators and other stakeholders align curricula, strategies, and district literacy objectives with a focus on closing the vocabulary language gap. There is ongoing research and current knowledge on vocabulary development that can support the efforts. This section will look at the history and outcomes on schools due to federal mandates.

In 2002 our federal government, under the direction of President George W. Bush, changed how schools educate students and how the government supports K-12 schools, with the *No Child Left Behind Act*. Although schools had flexibility on how to spend educational funds, it was evident new achievement standards put in place would hold teachers and students accountable for reaching high academic outcomes for all types of learners. In an idealistic world, educators would reach struggling learners getting them back at grade-level equivalency. Conversely, not all students will be able to meet the high standards set in place for them. Students with learning difficulties and even English Language Learners (ELLs) struggle with learning the English vocabulary. The academic levels at which students arrive at school can
differ largely. The goal of the *No Child Left Behind Act* appeared to push students back into the one-size fits all mold (NCLB, 2002).

In 2009, states developed Common Core State Standards that included authentic and consistent learning goals, with the outcome that all children, regardless of their location, would be prepared with their next step after graduating high school. One benefit that the Common Core State Standards and the *No Child Left Behind Act* accomplished was to motivate educators and other stakeholders to discover new research-based literacy strategies to reach all types of learners, besides over assessing or using skill-and-drill methods (CCSSI, 2017).

In 2015, *Every Student Succeeds Act* (ESSA), signed by President Barack Obama, altered much of the *No Child Left Behind Act*. ESSA’s main focus is teacher quality, appropriate testing, and flexible spending for low-performing schools which provided more liberty at the state-level for setting accountability plans (Klein, 2016). Unlike NCLB, educators will no longer have evaluations based on their students’ outcomes. Also states can now apply for other nationally recognized assessments as well as setting a cap on testing. This will limit the amount of educational time throughout the year that students spend on assessments. It is most likely that both changes, teacher quality and standardized testing, will ease pressure off of having students perform only for high-stakes assessments.

According to the ESSA law, states will intervene if a school falls to the bottom 5% of performing schools, which is identified every three years. Low-performing schools in the bottom 5% will be required to set up an intervention plan and gather evidence-based artifacts to monitor the school’s progress. However, if a school continues to be unsuccessful after four years, the state is required to step in and take action, either by replacing staff, changing over to a charter school, or closing the school altogether (Klein, 2016).
Importance of Review

My intention is to display vocabulary development as a crucial part of a child’s life-long learning and literacy success, to identify poor vocabulary knowledge as a contributing factor for struggling readers, and to highlight several effective strategies that support vocabulary development. Children, as early as 15 months of age, may demonstrate a significant word deficit that can follow them not only in primary grades, but also throughout high school years and beyond (Neuman & Wright, 2014). Shockingly, Neuman and Wright (2014) also stated:

By age 4, a child’s interaction with his or her family has already produced significant vocabulary differences across socioeconomic lines, differences so dramatic that they represent a 30 million word ‘catastrophe’ (i.e., children from high-income families experience, on average, 30 million more words that children from low-income families).

(p.4)

It is deeply saddening to think that students who are entering their first day of preschool are already reading “failures” because of their prior family history.

For students, vocabulary is essential for academic success, particularly in literacy, and allows them to understand and make sense of the world around them in order to become successful adults. Students with a broad, rich vocabulary are more likely to show proficiency on reading achievement tests. Additionally, vocabulary benefits all individuals by making communication less complicated, choosing words with greater accuracy, and provides opportunities for greater occupational success.

Significantly, this paper discusses current research trends, myths and misconceptions of vocabulary development, as well as effective and ineffective practices of vocabulary development. My objective is to provide educators with best practice strategies for all students.
Furthermore, I aim to concentrate on the factors that limit student achievement in reading and learning gaps effect on literacy education.

**Terminology**

To support the reader’s understanding of vocabulary development, I am utilizing the following terminology and definitions throughout my literature review paper:

- **Oral Vocabulary**- Sharing information, advice, and ideas through language that is spoken or heard. Examples could be conversations, lectures, movies, etc.

- **Print Vocabulary**- Any symbols or letters that are written on a page or surface that correspond to sounds and words in the English language. Examples would be texts, books, posters, signs, etc.

- **Receptive Vocabulary**- All the vocabulary words within a person’s language bank in which all words can be understood through spoken, written, and sign language. Usually, receptive vocabulary is the first to appear in the process of language development and can be larger than expressive language.

- **Peabody Picture Vocabulary Test-III**- A quick standardized assessment that measures receptive language in people 2 to 90+ years of age.

- **Expressive Function**- Refers to words that a person can produce or express through speaking and writing.

- **Executive Function**- Controlled by the frontal lobe of the brain, executive function is a set of mental skills that help you get things done. Executive function allows you to manage time, switch focus of tasks, pay attention, plan and organize as well as remember details.
- Systematic Vocabulary Instruction- When a teacher provides direct, clear, and concise vocabulary instruction for targeted words, by providing a student friendly definition and examples through repetitive, multiple exposures. Systematic instruction does not include memorizing the word and definition for the test and quickly forgetting it thereafter.

- Embedded Vocabulary Instruction- Vocabulary instruction provided during a story or text where the teacher provides a synonym for the term, actions or role playing activity for students and pointing to an illustration that demonstrates the meaning for each target word.

- Incidental Exposure- Opposite of direct teacher instruction, incidental exposure is unplanned and accidental learning within a formal or informal activity. Sometimes referred to as informal learning, students can demonstrate incidental learning through problem solving on a computer, social interactions with peers, or observations at lunch or on the playground.

- Direct Instruction- A formal type of instruction in which an educator provides explicit, targeted instruction on a set of specific objectives, usually through a lecture or presentation. Direct instruction provides teachers with a more organized instructional time and groupings as well as continuous opportunities for assessment. Students benefit from direct instruction when there is active engagement (students answer, teacher feedback), an increase of choral responses, and a brisk teaching pace.

- Interventions- A teacher’s response to a student struggling with a specific skill, with an action step to increase performance of the intended targeted skill. Interventions can be a combination of strategies from pre-teaching and re-teaching to additional practice time or educational programs to support student learning.
Research Questions to be Answered

When analyzing research on vocabulary development in early childhood education, I considered the following questions:

1. What are best practices in vocabulary education in Kindergarten?

2. What factors affect students who are not performing at grade-level?

3. What methods can teachers use to close the learning gap in vocabulary development?

4. What role can an Instructional Coach play in improving teachers' best practices?
CHAPTER II

Literature Review

Risk Factors that Effect Vocabulary Development

Vocabulary development occurs throughout a person’s lifetime in numerous subject areas, from direct teaching to incidental exposure. However, there are several significant factors that can affect vocabulary development of a child. Factors such as age of the child, type of vocabulary instruction, curricula used, cultural locations or background, and the amount of child engagement can alter how a child may learn vocabulary. Students faced with learning disabilities might have difficulty with listening skills, active working memories, or comprehension delays. One of the most highlighted risk factors among research on vocabulary development has been a child’s socioeconomic status, particularly a child’s access to an extensive amount of rich language (Snell et al., 2015). In this section, I will discuss research articles that discuss the risk factors of early childhood students that widen the growth rate of vocabulary development.

In a longitudinal study conducted by Al Otaiba and Fuchs (2006), 104 students ranging from kindergarten to first grade were labeled in a previous study as “unresponsive” to initial vocabulary interventions. The researchers target what issues make a student a “nonresponder” to a vocabulary intervention and what effective method of remedial teaching can take place for students who are labeled as “nonresponsive.” The researchers began training five graduate students prior to implementing phoneme segmentation and oral reading fluency assessments to ensure reliability of testing. Children tested individually in a quiet setting both in the fall and spring of kindergarten to gather baseline data, as well as to gather growth data after the intervention was in place. Al Otaiba and Fuchs (2006) note the characteristics of nonresponsive
students, which are observed on nine assessments that measure responsiveness. Assessments range from vocabulary, word discrimination, segmentation and sequencing of words. Results show students who were labeled at “nonresponsive” were located in a classroom where the quality of instruction was weaker and lesson fidelity was lacking. Students were found to be more responsive when paired with highly engaging lessons. The students in this study performed better on Peer Assisted Learning Strategies (PALS) phonics intervention and Kindergarten Ladders to Literacy phonics curriculum intervention, however, both intervention programs are still not robust enough to improve student growth and keep students out of special education.

Helf, Cooke, and Konrad (2014), assembled 303 kindergarten students, within one North Carolina school district that implemented Open Court reading curriculum, who met the criteria of being labeled a “strategic” learner due to a combination of scores on Dynamic Indicator of Basic Early Literacy Skills (DIBELS) subtests and showed no signs of a learning disability. Researchers wanted to find out if there is a difference in reading gains for kindergarten students who receive supplemental reading instruction in Early Reading Tutor (ERT) when compared to students who receive teacher-designed or teacher-selected activities. Additionally, they sought out a difference in percentage of students who showed a decrease in need for supplemental instructional support from winter to spring ERT. The 303 kindergarten students were separated into two groups (111 students in the treatment condition and 192 students in the treatment condition) and were administered two subtests from the DIBELS assessment in the winter and spring benchmark testing periods, which were the Phoneme Segmentation Fluency (PSF) and Nonsense Word Fluency (NWF). For the PSF, each student breaks apart individual sounds from the word that was presented orally from the test administrator. In NWF assessment, students
read a list of nonsense words for the test administrator. For each subtest, correct sounds per minute were recorded. The outcome of the study showed that students who participated in the Early Reading Tutor instruction at the Behavior and Reading Improvement Center show greater literacy gains on standardized test (PSF 9.06 sounds in winter to 50.87 sounds in spring; NWF 10.14 sounds in winter to 39.31 sounds in spring) due to highly structured word instruction. The comparison group made improvements as well (PSF 11.55 sounds in winter to 43.49 sounds in spring; NWF 9.06 sounds in winter to 31.63 sounds in spring), however, the teacher-designed and self-selected instruction was less effective for student growth. Students at risk for reading difficulties grow from supplemental reading instruction and should benefit even more when instruction is highly structured.

Rowe, Raudenbush, and Goldin-Meadow (2012) also looked at variation of growth rates in vocabulary among young children. In the study 62 children between the ages of 14 to 46 months, along with their primary caregiver, were selected to represent the greater Chicago area. Researchers examined three areas of focus, which were to analyze the vocabulary word gap among children, collect longitudinal data to examine if early childhood vocabulary growth trajectories could predict success in school, and to discover what the role of socioeconomic status and parent input has on children’s vocabulary growth rate. Each family participated in nine videotaped home visits every four months for 90 minutes each session. Analysis of video transcripts was collected to gather data of child-parent interactions, along with the Peabody Picture Vocabulary Test-III (PPVT-III) to gather receptive vocabulary assessments on each child before entering kindergarten. The average difference between a low and high socioeconomic status is approximately 200 learned words by the age of 48 months. The relationship between early vocabulary skills and later language development shows children from low-income
families who start discrepant when compared to peers are more likely to remain discrepant throughout their school career. Children with vocabulary word gaps will grow with explicit word instruction, but will not be able to close the word gap in order to catch up to peers who come from professional family backgrounds.

Wright (2012) wanted to know if quality and quantity of vocabulary instruction in kindergarten is unbiased among schools of varying socioeconomic status along with looking at the extent of vocabulary instruction in kindergarten classrooms and analyzing how teaching strategies align with research based practices. Fifty-five kindergarten teachers in a range of urban to rural socioeconomic settings were participants of the study. Ten trained researchers spent four three-hour periods in all-day kindergarten classrooms to observe teachers' vocabulary instruction. Each teacher observation period consisted of notes collected on laptops and audio
recordings of teachers’ instruction of vocabulary, which were then coded and analyzed for vocabulary instructional episodes using an observation protocol system. In order to be used for coding, each vocabulary episode required a clear, student-friendly definition, examples and non-examples, categorization of words, or varying lengths of conversations. Results show that educators in low-income schools provide limited daily vocabulary instruction and when there is an opportunity for instruction, the vocabulary episodes are brief and almost never discussed again. On the contrary, educators in high socioeconomic schools displayed several opportunities for explaining challenging words in depth with several opportunities to review and practice target words. Teachers in low socioeconomic settings spent on average less than 11 minutes per day on literacy vocabulary, about two minutes per day on science vocabulary, and one minute per day on social studies vocabulary.

Wright and Neuman (2013) focused on four most common kindergarten curricula, which account for about 52.3% of the total literacy market in 2009-2010. The focus allowed researchers to analyze the influence a kindergarten curriculum has on amount and quality of classroom vocabulary instruction, based on instructional features it contains. The four core reading programs, Houghton Mifflin Reading, Scott Foresman Reading Street, Harcourt Trophies, and Treasures, were assigned an anonymous letter for the study. Each curriculum contained a scope and sequence that included vocabulary target-words for a five-day structured lesson and documentation analysis for a 12 week, mid-year period looked at instructional practices, identification, and usage of the vocabulary target-words. Two certified research assistants coded, analyzed, and calculated data to show mean and percentage scores, as well as provided curricula examples to illustrate results. The number of words taught ranged from 2-20+ words within a week’s time of classroom teacher instruction. There was no observable pattern
for how each curriculum chose target vocabulary words and instructional practices ranged from teaching definition for word meanings, providing verbal examples, to occasionally presenting illustrations for vocabulary words. The difficulty of target vocabulary words shows 75% of curricula words were identified as simple or common words with little or no room for deeper student understanding. Review opportunities were practiced within the same week in which target word was introduced instead of ongoing practice and review episodes. After observing one-third of the year’s oral vocabulary instruction, taking place within four of the most popular kindergarten curricula, indicators show few opportunities to learn challenging words, limited direct and explicit instruction provided, and little or no opportunities for review to enhance retention of target words.

In 2014, Wright and Neuman conducted a study in which 55 kindergarten teachers, in varying socioeconomic classrooms (25% to 50% free and reduced lunches), were observed in order to view extent of oral vocabulary instruction in kindergarten. The quality and quantity of vocabulary instruction was analyzed among kindergarten classrooms with varying socioeconomic status. Since vocabulary is vital to student’s early literacy skills, it is essential to understand how instruction affects learning and growth of a child. Teachers took part in discussions on consistency of oral vocabulary, teacher questionnaires, and 12 hours of research observation periods to collect qualitative data in each classroom. Each observation session was coded, but due to vocabulary instruction opportunities being limited in time, depth, and student engagement, the coding method was dismissed and researchers refocused on quality and quantity. Results of the study indicate number of vocabulary episodes averaged to 8.14 times per day of observations, with a lower number reported in schools with lower socioeconomic status and higher number reported in schools with higher socioeconomic status. Similar results
were noted in number of vocabulary words taught. The average number of words taught in a classroom, during the 12-week observation period, is 7.44 different words per day. Again, the number of vocabulary words kindergarten teachers targeted per day was larger in schools of higher socioeconomic status and were smaller in schools of low socioeconomic status.

**Developmentally Appropriate Practices in Vocabulary Instruction**

Developmentally Appropriate Practice (DAP) is a teaching approach, based on research that focuses mainly on early childhood’s optimal development and learning practices. In DAP teachers align instructional strategies and materials to each child’s stage of development. Achievable learning goals for individual student growth, as well as being part of a school community are establish and monitored. There are three important considerations to DAP. The first one is to understand the sequence of learning within child development. Secondly, teachers make observations and collect formative assessments about student’s interests, developmental stages, and academic abilities, in order to find out what is individually appropriate. Thirdly, when educators have background knowledge about school community, student’s families, and cultural background, teachers are able to make connections and understand factors that shape students’ lives and cultural experiences. Student’s educational plans might be similar or vastly different (NAEYC, 2017).

Researchers Bassok, Latham, and Rorem (2016) focused on developmentally appropriate practices in kindergarten. The research questions asked were an important part in looking at why kindergarten has changed in the last decade as well as the reasoning behind first grade curriculum being pushed down into kindergarten. Two kindergarten cohorts using Early Childhood Longitudinal Study (ECLS-K) participated in data collection, one in 1998 and another in 2011. Surveys from principals, parents, and teachers were collected for both cohorts as well
as ECLS-K assessments. The ECLS-K explored five areas from a teacher’s perspective (a) beliefs about school readiness (b) materials for the classroom (c) purpose and use of curriculum (d) teaching style and (e) assessment practices. On a scale from 1-5 (1-not important; 5-essential), teachers assessed areas of student readiness to learn. Percentage of 4’s and 5’s were reported out in the study. Classroom materials concentrated on ten specific items found for student use, such as a sensory table, math manipulatives, dramatic play area, or science area. Percentages were collected from kindergarten teachers on the items they had from the list. Frequency of subject areas (reading, math, etc.) and topics of curriculum were reported out for purpose and use of curriculum section. The amount of time students spent on child-selected activities compared to teacher-directed activities was collected and reported out for the pedagogical approach. Lastly, assessment behaviors looking at student effort, cooperativeness, and performance, were scored and results from the study indicate differences in kindergarten classrooms from 1998 to 2010. In the area of Kindergarten readiness and learning to read, teachers’ scores increased sharply from 31% (1998) up to 80% (2010). Interestingly, classroom materials went downward in almost all items. The biggest decline within kindergarten classrooms was noticed in dramatic play area (86% in 1998 to 60% in 2010). Results for curriculum showed an increase of time spent on reading and math and a decrease in social studies, science, music, movement, with the biggest decline in daily art curriculum from 27% to 11%. The style of teaching changed from hands-on activities to a more sit at a desk and have the teacher lecture with textbooks and worksheets (28% in 1998 to 45% in 2010). There were several areas of assessments that remained constant, such as student effort, classroom behavior, cooperativeness, and following directions. However, changes can be observed on the importance teachers place on achievement tests. Teachers who consider a student’s achievement based on
local or state standards rose from 57% to 79%. Additionally, an increase of importance was observed on whether teachers grade students based on how they compare with their peers.

Bryant, Clifford, and Peisner (1991), researched developmentally appropriate practices in kindergarten classrooms. The specific focus was looking into the increase of student retention and use of transitional kindergarten classrooms. The population chosen at random consisted of 103 kindergarten classrooms across one state. Data collected consisted of 90% teacher and principal questionnaires plus two classroom observations of each kindergarten classroom.

Modified to fit kindergarten students, the Early Childhood Environment Rating Scale (ECERS) was used during the two three-hour observations sessions. The ECERS, ranging from a score of 1 (inadequate situation) to a 7 (excellent), was scored for six areas such as fine and gross motor, language-reasoning experiences, personal care, creative activities, and social development. A similar observational tool used that contained 32 yes/no questions, was the Checklist of Kindergarten Activities (CKA), which focused on seven classroom instructional areas, like cognitive development, language, social development, self-esteem, self-regulation, physical development, and attitude to learn. Additionally, the CKA data included 21 yes/no question section about academic materials present within the classrooms. Five researchers filled out ECERS and CKA assessments for each classroom observation he or she conducted and a follow up phone conversation was made in the spring to collect data on how many students did not enter first grade. Results from the observation of developmentally appropriate practices in kindergarten using ECERS were displayed on a graph. The criterion score was a 5.0 and served as a “good” rating on the ECERS. Only 20% of the 103 randomly selected kindergarten classrooms met the criterion score of 5.0 or better for displaying developmentally appropriate practices. Classes that scored high were high in all areas, while ones that scored low were very
low in all areas. Furthermore, on the CKA scale the total mean score (classroom activities and materials) was 38.49 points out of 53 points possible. Additional responses from the CKA showed that 83.5% of classrooms use worksheets, 50.5% use workbooks, and 22.8% use basal readers. When looking at the breakdown of time, students spend about 44% in large group activities and 51% in small groups. Among the kindergarten classrooms in the study, 88% were teacher-led, while 2% were both student and teacher-led, and 10% of classrooms were mostly child-led. When looking at retention data from the study, it shows that 8.6%, 115 out of 1,330 students did not go on to first grade.

In a study conducted by Bowne, Yoshikawa, and Snow (2015), interpretations and guidelines for how to improve literacy skills including oral language through use of explicit instruction were suggested. The three research questions below are addressed within the study: 1. What is the structure of vocabulary development within kindergarten classrooms located in Chile? 2. How does the coach-based training resource, Un Buen Comienzo (UBC) influence time spent in literacy, particularly on vocabulary? 3. How does UBC training effect explicit vocabulary instruction teachers provide to students? Participants included 64 kindergarten teachers in Chile that were trained in UBC literacy instructional practices. In the method phase of research, teachers were surveyed prior to the study, provided educator training, given a pretest and posttest, as well as observed during the study by researchers who coded the evaluation system used. As a means of preventing bias, a cluster-randomized evaluation study was conducted so no participant would realize if they were in the particular control group. After extensive trainings and observations, the quantity and content of explicit vocabulary instruction showed student growth in all subjects throughout the four-hour school day, however not a substantial amount. Average explicit vocabulary instruction was only 4.9 minutes. When
analyzing the structure of vocabulary in kindergarten, classrooms were generally organized into teacher-directed activities, students alone at their seats, or in whole group activities. Whole group activities lasted for about an hour of the four-hour day, direct instruction lasted about 36 minutes, and differentiated centers and small group activities were non-existent. Results show that educators spend about 16 minutes of whole-group time offering explicit vocabulary instruction. During direct, explicit instruction approximately 25 words were included within the timeframe, some ranging from a few seconds to several minutes of vocabulary instruction.

Looking at the second research question on the UBC coaching impact, researchers noted that vocabulary instruction increased by 26% in the area of literacy, due to UBC training. On the other hand, opportunities for vocabulary instruction in other subject areas significantly decreased, by almost 25%. The final research focus analyzed how UBC impacted teachers’ explicit vocabulary instruction for their students. Bowne and researchers (2015) state:

UBC training did not show any significant impact on the total amount of vocabulary support provided, either when calculated with number of words or number of minutes of vocabulary support.” However, “UBC training shows a significant, negative impact on the quantity of conceptual information and dense vocabulary support provided about words (p. 35).

Best Practices of Vocabulary Instruction

In the field of education, best practice is an expert method of teaching or instructional strategy that has a high effect-size on student growth. Upon exploring various articles, I found several effective research-based strategy models that support vocabulary development and would be considered, best practice. Wright (2013) lists five strategies that support content-rich vocabulary instruction. The first strategy is to incorporate nonfiction or informational texts into
the curriculum and teach vocabulary instruction among all subject areas (i.e., science, math, social studies). A second strategy is for educators to use explicit instruction when teaching vocabulary in addition to purposefully selecting words to fit with the concepts of the text. Child-friendly definitions and visuals should be provided so students are effectively able to make vocabulary connections. Finding and labeling graphics is the third strategy that can improve student vocabulary knowledge. Maps, photographs, charts, diagrams, and timelines naturally provide visuals a student needs to make connections with their own experiences and background knowledge. A fourth strategy reveals that students should review and practice words continually over time with activities that are authentic. One final strategy discusses the importance of student assessments when determining mastery of words taught. By keeping on-going data, educators can provide immediate feedback, support, and instruction to struggling learners on a daily basis.

Research conducted by Coyne, McCoach, Loftus, Zipoli, and Kapp (2009) investigated if the amount of vocabulary instruction would affect students’ understanding of target words. The intention of the study was to compare two approaches, direct vs. embedded instruction, to see if either strategy provided depth or breadth to increase vocabulary words learned. Consent forms were sent home for participation and 42 kindergarten students (69% Hispanic; 24% Black; 6% White) were selected in a school where 65% of the population is on free and reduced lunch. Additionally, researchers wanted to provide educators with best practice vocabulary instructional strategies in order to make data based decisions that would benefit students. Highlighting the pros and cons of each strategy may help educators decide which method is a “good fit” for their classroom and groups of students. As a way to limit research factors, all students participated in both types of study groups, (a) type of instruction and (b) time factor of instruction. A read-aloud text was selected with nine unfamiliar Tier II (high-frequency; multiple meanings) target
vocabulary words chosen. Target words were divided into three groupings and matched up with three different experimental group designs (extended, embedded, incidental). Each kindergarten participant listened to the read-aloud story three times; in different large and small group settings, with all nine target words taught. Sessions lasted for a total of 30 minutes, which was split in half for book reading and vocabulary instruction. Fidelity checklists were developed and implemented during each session by the project director and were required to demonstrate 90% reliability. Posttests and delayed posttests were also administered in extended instruction, embedded instruction, and incidental exposure groups. Findings of the study illustrate that extended instruction outscored both embedded instruction and incidental exposure. Additionally, when comparing expressive and receptive knowledge, students scored better on receptive yes and no types of questions about their target words instead of being able to express the definition aloud to demonstrate learning. When analyzing posttest and delayed posttest data, student scores dropped significantly (3.79 to 1.82) on extended instruction expressive definitions. Similar results were noted in the embedded instructional expressive group as seen in Figure 2.2. In all three groups however, receptive definitions slightly increased from posttest to delayed posttest.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Extended Instruction</th>
<th>Embedded Instruction</th>
<th>Incidental Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Expressive definitions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>3.79</td>
<td>2.06</td>
<td>1.47</td>
</tr>
<tr>
<td>Delayed posttest</td>
<td>1.82</td>
<td>1.78</td>
<td>1.11</td>
</tr>
<tr>
<td>Receptive definitions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>3.07*</td>
<td>1.38</td>
<td>3.58*</td>
</tr>
<tr>
<td>Delayed posttest</td>
<td>4.06*</td>
<td>1.37</td>
<td>3.61*</td>
</tr>
<tr>
<td>Context/full knowledge</td>
<td>7.54*</td>
<td>1.79</td>
<td>6.34</td>
</tr>
<tr>
<td>Context/partial knowledge</td>
<td>7.85*</td>
<td>1.75</td>
<td>6.90*</td>
</tr>
</tbody>
</table>

*Range = 0 to 6.
Range = 0 to 12.
*Scores above chance level ($p < .0033$).

Figure 2.2 (Coyne et al., 2009)

Focusing on effective vocabulary instruction and intervention for at-risk students, Cuticelli et al. (2015) analyzed a multi-tiered system of support (MTSS) in order to identify
components of rich interventions to combat the growing urgency to improve students’ vocabulary development in primary grades. Cuticelli et al. (2015) commented on the need for vocabulary instruction:

It is important for researchers and practitioners to look beyond early code-based skills and to determine how other areas of literacy, specifically, vocabulary, can be supported through a multi-tiered approach. Students who are at risk for literacy difficulties often have fewer experiences with language before entering school, resulting in less-developed vocabulary knowledge. These children are less likely than their peers with higher vocabulary skills to benefit equally from Tier 1 instruction by itself. (p. 151)

Tier 1 is a classwide direct instructional strategy that contains several components of effective vocabulary instruction, such as context support for target words, use of authentic experiences and literature to use in writing samples, student-friendly definitions and examples of vocabulary words, and ongoing opportunities to apply and review target words. Through MTSS protocol, students who need additional vocabulary support can be served under the Tier 2 intensive vocabulary intervention. Tier 2 intensive supports for students at-risk, should be provided within small group settings, administered in a quiet setting, and provided only by trained staff. Results state intensive interventions administered to students at-risk must contain direct, explicit instruction, extensive teacher modeling, feedback that supports varying levels of content difficulty, and ongoing opportunities to practice in order to close the vocabulary learning gap. Students labeled at-risk who scored in the 30th percentile and below on Peabody Picture Vocabulary Test (PPVT) took part in a Tier 2 intensive intervention for thirty minutes, four days a week. Weekly progress monitoring was collected on both Tier 1 and Tier 2 intervention students for a period of twenty-two weeks. Results indicated that at-risk students understood
substantially more target vocabulary when compared to students who were only grouped in Tier 1 intervention. The MTSS protocol begins to neutralize the achievement gap by implementing best practices for students at-risk in vocabulary development.

McKeown and Beck (2014) studied vocabulary in younger children and explored interactive and repetition approaches to find out which strategy had greater impact. Researchers assessed 131 Kindergarten students (67 boys, 64 girls) from a school that had 50% free and reduced lunch. Participants in the study were students and kindergarten teachers from the eight classrooms. Students were divided into three groups: control, repetition, and interactive. The control group was exposed to each story once as classroom teacher read it uninterrupted with incidental exposure of targeted vocabulary words. The repetition strategy had repeated readings of text, pauses for explaining meaning of each target word, and review activities refocused on word definitions. The interactive group was read each story once and provided activities in which kindergarten students could think about, work with, and respond to experiences surrounding vocabulary words. Ten words were chosen from the three stories, totaling 30 Tier 2, high frequency words with multiple meanings. Data was scored, analyzed, agreed upon and reported out. While the findings were expected, researchers conveyed that both interaction and repetition scored superior compared to the control group. By comparing strategies against each other, researchers noted that interactive instruction allows students to apply and integrate vocabulary into writings, as well as allow students to use context clues in order to pair up meanings with illustrations and thoughts. Although the repetition strategy offered several exposures to the context and meanings, it scored just below the interactive instruction.

Smeets and Bus (2012) investigate the role interactive electronic storybooks have in teaching vocabulary to Kindergarten students. The two experiments conducted within the study
looked at if children learn and apply vocabulary when questions are included e-books and if student engagement in e-books enhances vocabulary development. Twenty Dutch, junior kindergarten students (eleven boys, nine girls) between the ages of four to five years were the participants in this study. Student participants all scored in the average range on Peabody Picture Vocabulary Test (PPVT). There were a total of five electronic stories that all students heard on the eBook (one read only story, two stories that were paused for multiple choice questions, and two uninterrupted stories with multiple choice questions at the end). Eight target words were chosen from each leveled book and divided into two groups (words paired with instruction and words posed without instruction). During the two-and-a-half-week electronic storybook intervention, each story was read twice to the participant and supportive feedback followed each multiple-choice question a student answered. Results from the first experiment showed that students learned one of the four uninstructed vocabulary word and 2.5 out of four instructed vocabulary words. The biggest area of growth was visual when students were instructed on vocabulary words and the multiple-choice questions were offered during the storybook reading.

The second study of Smeets and Bus (2012) included similar participants for the experiment. Twenty-seven different junior kindergarten students between the ages of four and five, from middle-class Dutch families, with average vocabulary development participated. All participants read each of the five stories twice (one time read-only; two times interrupted with multiple choice questions, and two times with hotspots and word definitions). Several times throughout the story a magnifying glass or “hotspot” will highlight a section of illustration in order for the child to click on to learn additional content. When a hotspot opportunity appears in a story, students are asked a question about a word definition or synonym and expected to highlight the portion of the illustration that demonstrates the given vocabulary word. Results
from the second experiment showed that students learned 1.5 of the four uninstructed vocabulary words and 2.5 out of four instructed vocabulary words. Best practices were noticed in instructed expressive vocabulary with questions on more difficult target words when students averaged three out of four words learned.

**Student Improvement and Interventions for Struggling Students**

Educators understand that when students enter the classroom a wide spectrum of abilities will exist, even in literacy. Teachers use several instructional methods to reach students at their performance level, however some students will not show growth with extra scaffolding, accommodations, and differentiated activities. When students do not respond academically to teacher strategies, an instructional intervention needs to be put into place for the struggling student. An intervention is a set of explicit steps that create change in students’ academic behaviors to support the area persistently at risk. Interventions can take place in various settings (within classroom, pullout, special education classroom, home settings, etc.), as well as one-on-one, small groups, or class wide interventions.

Each intervention needs to be a “good fit” for the student. Interventions cannot be too fast or slow, too complex or easy, or too short or long for the student. An intervention is designed to track student’s progress on an individual goal or area of need and is an ongoing process in which the intensity depends upon the student’s ability to learn as well as the severity of need in a particular academic area. Often times a school district has a specific protocol in place called Response to Intervention (RTI) in which an intervention process is set up for a struggling student (Dept. of Ed, 2017). The first step for an educator would be to identify the area of concern. Each teacher should be able to identify a student’s general area of concern. The second step is to administer a diagnostic test to the student that will fine tune the focus and
provide a narrow area of instructional skills. A diagnostic test, usually given by the classroom teacher, will highlight discrepant areas where the student falls out in the particular skills. After the diagnostic test is complete the area of concern is assessed and baseline data is collected for the student. This will help establish a goal and timeline of academic progress for the student. Next a “good fit” intervention is chosen for the student as well as the setting, amount of time, frequency of the intervention, and educator in charge of administering the intervention. When providing an intervention to students, it needs to be conducted at a fast pace, contain plenty of chances for student engagement, and administered with high fidelity. The intervention needs to follow the procedures exactly as written each time with students in order to maximize effectiveness and improve student growth. At a set time in the protocol, usually every two weeks, student growth data is collected through a quick progress monitoring assessment. Data based decisions are made for the student from the assessment and the intervention is continued, ended, or changed. This ongoing reflection of student growth is important for the success of a student. A teacher should end an intervention as soon as the student bridges the learning gap and performs at grade level. Returning to the universal core instruction is the ultimate goal of an intervention and ongoing student assessments should be administered to diagnose learning gaps along the way (PRESS, 2017).

A study conducted by Pollard-Durodola et al. (2011) focused on the effect an explicit book-reading intervention has on vocabulary development in students already targeted at-risk. One hundred and twenty-five preschool students were randomly assigned to study groups (experimental intervention or typical practice group). The experimental group reviewed a shared reading strategy call WORLD, which stands for Words of Oral Reading and Language Development. WORLD is an intervention that focuses on language strategies in order to.
enhance background knowledge and accelerate vocabulary development. The curriculum responds to supports needed for at-risk students with superior language practices. WORLD incorporates fiction and informational texts into a home and school connection, active student engagement, planned list of targeted words, and student discussions about real-world experiences and concepts. Six teachers were randomly assigned to the intervention or control group and all classrooms present in schools of lower socioeconomic status. Researchers developed pretests and posttests with a focus on receptive and expressive vocabulary development. Receptive development was collected with the Peabody Picture Vocabulary Test-III. Students were recorded on language development when he or she pointed to a correct object stated by the examiner. Expressive vocabulary was collected using the Expressive One-Word Picture Vocabulary Test (EOWPVT). Students were asked to verbally name each picture in an illustration while the test administrator estimates expressive vocabulary. Another data collecting piece for scoring expressive vocabulary was the Research-Developed Expressive Picture Vocabulary Test (RDEPVT), which measured vocabulary growth in the WORLD intervention. Pretests showed 25% of students in the intervention group and 28% of students in the comparison group showed little knowledge of vocabulary words. In the posttest, after twelve weeks of research, 77% of students in the intervention group learned the vocabulary words and only 31% of the control group learned the vocabulary words. More student vocabulary growth was observed in the WORLD intervention group.

A research study on vocabulary interventions for kindergarten students, conducted by Coyne, McCoach, and Kapp (2007), looked at the comparison between extended vocabulary instruction against incidental exposure and embedded instruction of vocabulary words. Only 31 Kindergarten students (15 male, 16 female) from a small town in the Northeast were selected for
the comparison study. Consent forms were sent out to parents and the Peabody Picture Vocabulary Test (PPVT) was administered as a pretest to participants who were cleared to be included in the study. The group mean score was 98.5 on the PPVT. Trained interventionists administered the instructional strategies, which averaged out to about ten to twenty minute sessions. Students listened to three readings of a read-aloud book that contained six target words in the text. The target words were supported with additional story text that could allow students to infer the meanings of the target words. Coyne et al. (2007) state, “Critical components incorporated into the fidelity checklist included whether or not interventionists (a) delivered each instructional element, (b) modeled procedures appropriately, (c) maximized opportunities to respond, (d) provided error correction, and (e) read storybooks with enthusiasm” (p.77). By conducting fidelity checks on the interventionists, the implementation rate averaged 90% for each person administering the strategy. Posttests were administered within a week after the three readings, and followed up eight weeks later with a delayed posttest. Results from pretest indicate that students were unable to provide meanings for target words without prior experiences with the vocabulary. In the first part of the study when comparing extended instruction to incidental exposure, students were eight times more likely to express the definition of a target word having extended instruction verses incidental exposure by only hearing the words within the read-aloud story. Posttest scores showed extended instruction averaged out to 4.45 vocabulary words and incidental exposure averaged to .58 words. The delayed posttest showed a slight decrease (4.45 to 3.10) in the six target words retained, however the incidental exposure group made a slight increase (.58 to .74) but was still far below the extended instruction group. Results from second part of the study compared extended vocabulary instruction and embedded instruction. The findings illustrate extended instruction was three times higher on the
posttest than embedded instruction. Students in extended instruction averaged 3.61 words on expressing the target word definition. In the embedded instruction group, students scored an average of 1.03 words. In the delayed posttest, looking at students retaining knowledge eight weeks later, both extended and embedded instructional groups increased the average of vocabulary words. Extended instruction rose to 3.75 and embedded instruction rose to 1.59 words indicating that students were continually learning and understanding target vocabulary words after initial study.

Zipoli, Coyne, and McCoach (2011) analyzed how instruction can become prominent and valued in early childhood classrooms, and examined differences in learning target words paired with embedded review versus semantically related review. Eighty kindergarten students from three urban, public elementary schools containing a majority of at-risk students from low socioeconomic families were chosen for the participants in this study. Interventionists read a grade-level text twice each week to at-risk students for about eighteen weeks of school. Each week three new target words, which were randomly assigned to an intervention strategy (no review, embedded review, and semantically related review), were introduced to students from the grade-level text. No review target words were only introduced for the first and second readings of the book. Embedded review focused on each target word when the interventionist introduced the vocabulary word with a student-friendly definition, reread the sentence from the storybook, and then restated the meaning including synonyms to the students. Semantically related review words were introduced the same method as the embedded review words during the read aloud, except several follow up activities and practice opportunities were included to demonstrate a connection among all target words. A Target Word Knowledge Measure (TWK) was created to measure participants’ vocabulary knowledge on 37 chosen target words. Pretest
results displayed students understood 1.94 words in the no review strategy, 2.45 in the embedded review strategy, and 1.32 words in semantically related review strategy. Overall, researchers gathered that participants were unfamiliar with the chosen target words. TWK scores at posttest were 10.99 words for no review, 18.96 for embedded review, and 23.98 words for semantically related review (see Figure 2.3). Target words paired with semantically related review outscored embedded and no review strategies.

![Figure 1. Average Target Word Knowledge composite score at pretest and posttest by condition](image)

**Figure 2.3 (Zipoli et al., 2011)**

In an early childhood research study analyzing the implementation of Response to Intervention (RTI), Greenwood et al. (2011) examined the importance, implementation, and benefits of RTI. The study of RTI’s implementation in early childhood settings (birth to five year olds), was reported by directors and coordinators at the state level through accomplishments, surveys, and research. Benefits of RTI include meeting the needs of students quicker in early literacy skills and social-emotional experiences. Additionally, RTI ensures that
students with disabilities are served earlier with intensive educational interventions and services. To investigate the process of implementing RTI into early childhood settings, researchers sent out an annual survey and received data back from Washington D.C., 46 states, and several territories. The most important question on the survey was how implementation of RTI was progressing within early childhood settings. A six-point scale was used, with one signifying no discussion or implementation and a six was fully implemented. Changes were noticed in several areas of the questionnaire. When examining if RTI professional development had begun in schools, data from the study indicated an increase from 16% to 23%. Schools that had implemented some programs of practice, increased from 21% to 30% of participating schools. Furthermore, the schools that had only conducted beginning discussions about RTI significantly decreased from 43% to 24%, indicating that more schools are implementing stages of RTI. With the development and implementation of RTI in early childhood settings, interventions based on students' needs have been put into action. Students are receiving intervention supports earlier and more aligned to their specific learning needs.

**Instructional Coaching Support for Teachers on Vocabulary Instruction**

Instructional coaches (IC) provide various benefits for educators, staff, and students as they collaborate with teachers on instructional practices, set goals with teachers and students, observe classrooms, collect and analyze data, reflect on prior experiences, and establish new learning goals. According to Bean and Deford (2012), effective coaches have a vast knowledge of core content, research-based strategies, and current methods to use for implementation. IC adapt for varying situations, whether teaching large groups, small groups, or individual adult learners and establish trust and a good rapport foremost with all learners. Collaboration among teachers and an instructional coach is most effective through the use of conferencing, modeling...
lessons, classroom observations, and co-planning in order to enhance teacher practices and increase student growth. The use of instructional coaches ensures instructional abilities and sustainability of instructional practices over time as well as an increase of teacher expertise, quality of instruction, and in turn an increase in student achievement (Bean and Deford, 2012).

A study by Reddy, Dudek, and Lekwa (2017) looked at instructional coaching support through Classroom Strategies Coaching (CSC) Model. CSC is a data based, decision making process that integrates multiple observations, reflections, and questioning conversations in a four-session model in order for the teacher to set a personal classroom goal and increase student success. Collectively this process will generate additional opportunities for growth and instructional change within the classroom. Although, there are several types of coaching approaches, this research study looks at Classroom Strategies Coaching (CSC) Model. Eighty-nine teacher participants from New York and New Jersey were randomly assigned to one of the two study groups: wait-list (WL) control group or immediate coaching. Baseline data as well as post session observations were collected and recorded for the study. A Visual Performance Feedback (VPF) graph provided teachers a visual bar graph showing academic and behavioral classroom growth throughout the CSC process (Figure 2.4). Participants in the immediate coaching group began to improve after the first session, which aimed towards instructional and behavioral management strategies (feedback, student response opportunities, concept reviews). Contrary to immediate coaching, the wait-list control group showed little signs of improvement. It wasn’t until after their CSC session began that growth was noted on VPF graphs. The teachers’ feedback collected after the CSC Method study was positive and provided evidence that the four session intervention was highly effective.
Teemant (2014) investigated a mixed-method study on the implementation of an instructional coaching model that focused on five standards of instruction, which used one trained instructional coach working with 36 urban elementary teachers. The instructional coaching model looked at the implementation of productive activity between teacher and students, language and literacy development across the curriculum, contextualization by making meaning and connections between school and daily lives, challenging activities for students, and teaching through instructional conversations. The five standards were rated on a five-point scale ranging from not observed to integrating daily. Teachers first participated in a 30-hour training workshop along with a 12-week phase for working with small group student activity centers. Next teacher participants took part in seven coaching sessions including a preconference, observation, and post conference, which equaled to 15 contact hours with the instructional coach across a school year. Qualitative and quantitative data were collected to demonstrate that teacher
pedagogy could (a) be transformed with an instructional coach, (b) sustain high fidelity of instructional implementation over time, (c) improve teacher response to professional development, and (d) interpret instructional coaching outcomes. Based on the five standards instructional coaching model, findings indicate that all four areas of research improved with the use of an instructional coach (Teacher transformation increased from 7.40 to 17.67 points; Sustainability increased from 7.34 to 17.31). Teachers' qualitative responses improved from the beginning of study to completion indicating that coached teachers had positive qualitative and quantifiable outcomes in the study.

Thomas, Bell, Spelman, and Briody (2015) studied the behaviors of 26 PreK-3 grade teachers from five urban, private schools that participated in a three-year university partnership study in order to see if there was a significant transformation among the types of coaching conversations that instructional coaches had with their teachers. Educators attended planned professional development trainings, met with their instructional coach for 90 minutes of coaching time per week, and kept notes from collaborative conversations among peers. Researchers collected quantitative data that trained instructional coaches collected from three time periods using the Woodruff's Instructional Coaching Scale (Figure 2.5) to determine types of coaching conversations occurring between teachers and the instructional coach.
### Instructional Coaching Scale

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Did not see—Teacher may have been absent or an unforeseen event may have occurred (such as a drill, school cancellation, assembly, etc.)</td>
</tr>
<tr>
<td>1</td>
<td>Enrollment Conversation—No implementation yet—Dialogue about instructional practice or innovation is initiated by the coach. (With technology, teachers may not have an awareness of the various tech tools, so this conversation is important in building awareness)</td>
</tr>
<tr>
<td>2</td>
<td>Change conversation—Focused dialogue about use of new practice or innovation initiated by the teacher. (One awareness is created by coach, teacher initiates this next discussion)</td>
</tr>
<tr>
<td>3</td>
<td>Implementation Conversation—Evidence of the new practice, curriculum, or technique being used: dialogue about its use occurs.</td>
</tr>
<tr>
<td>4</td>
<td>Preconference—A conversation in preparation for going into the classroom to model a lesson or observe a teacher. (Co-construct an observation form)</td>
</tr>
<tr>
<td>5</td>
<td>Model Lesson—Done by coach in the classroom on an agreed upon technique, practice, or content.</td>
</tr>
<tr>
<td>6</td>
<td>Co-taught Lesson (as a step before Observed lesson)</td>
</tr>
<tr>
<td>7</td>
<td>Observation &amp; Feedback Conversation (low fidelity)</td>
</tr>
<tr>
<td>8</td>
<td>Observation &amp; Feedback Conversation (high fidelity)</td>
</tr>
<tr>
<td>9</td>
<td>Strategic Integration—Lesson observed is highly developed—Ex: Multiple techniques developed and infused with “real” content.</td>
</tr>
<tr>
<td>10</td>
<td>Refocusing/Adaptation—Teacher analyzing what students need and asking for it. This could be someone who tweaks the new practice or technique while maintaining the integrity of it.</td>
</tr>
</tbody>
</table>

Figure 2.5 (Thomas et al., 2015)

In Period 1, the average Instructional Coaching Scale score was 3.22 suggesting that teacher-coach interactions focused on new content, routines, techniques, and practices for their classrooms. Period 2 averaged 5.22 indicating that teacher-coach conversations increased to conversations that focused on inviting the instructional coach into the classroom in order to model new lessons and strategies for the classroom teacher. In Period 3, the average score was 6.52, which suggests that teacher-coach interactions focused on additional opportunities to utilize co-teaching and conversations about the observation or implementation of new practices. In conclusion to their study, researchers established a significant difference among the types of coaching conversations between the teacher participants and their instructional coach.
CHAPTER III
Conclusions and Recommendations

Conclusions

When analyzing early childhood educational research, I determined several conclusions about vocabulary development. Since vocabulary development is transformed throughout a person’s lifetime based on their age, location, and cultural background, etc., it is apparent that individuals will not come together in a classroom or career with the same experiences and vocabulary knowledge, which are the factors that affect grade-level performance. The relationship between vocabulary knowledge and reading comprehension is inseparable and affects the student’s reading abilities, as well as reading fluency and accuracy. However, literacy best practices and instructional teaching strategies that teachers implement within their classrooms can improve vocabulary development and close the learning gap. Additionally, support from an Instructional Coach improves teachers’ professional knowledge, instructional and physical classroom changes, and implementation of best practices in all instructional areas. Once an educator embraces the pivotal role vocabulary has on literacy, they can begin collecting research-based instructional techniques and implementing vocabulary development strategies in the classroom. Although difficult at times, educators need to teach word knowledge since it is a core component of literacy instruction and by pairing vocabulary instruction along with research-based strategies, struggling readers can begin to close the learning gap and become the readers who are approaching proficiency.

Identify & Synthesize Insights

Students must understand written and oral vocabulary in order to comprehend word meanings, which become more challenging as the amount and difficulty of text increases.
Several research studies (Al Otaiba and Fuchs, 2006; Helf et al., 2014; Rowe et al., 2012; Wright, 2012; Wright and Neuman, 2013; Wright and Neuman, 2014) have proven risk factors, such as socioeconomic status, social and emotional development, amount of time spent on instruction, and the quality of vocabulary instruction affect a child’s vocabulary development. Research also indicates vocabulary development occurs at a higher rate during the preschool and kindergarten years which is beneficial to intervene at the first signs of a student’s reading difficulty. Current student performance and growth in oral vocabulary development can predict future reading abilities in the areas of accuracy, fluency, and reading comprehension (Neuman and Wright, 2014).

Many studies (Bassok et al., 2016; Bryant et al., 1991; Bowne et al., 2015) prove developmentally appropriate practices (DAP) indicate how children learn at various ages in order to promote optimal learning. DAP at the Kindergarten level are specific age appropriate activities that offer authentic experiences in which children participate at their own reading level, use logical thinking to explore different types of hands-on activities, and demonstrate personal responsibility. Additionally, children should engage in positive social opportunities that are flexible, open-ended and display respect towards students’ feelings, ideas, and differences. Educators should purposefully include DAP activities that have flexible learning expectations based on abilities, provide specific feedback and redirection, and use ongoing assessment data to drive further teaching practices and activities. Implementing DAP will encourage students to achieve curriculum goals, take educational risks in order to grow academically and socially, as well as create a caring community of learners.

When it comes to best practices in vocabulary instruction, researchers (Wright, 2013; Coyne et al., 2009; Cuticelli et al., 2015; McKeown and Beck, 2014; Smeets and Bus, 2011;
Reddy et al., 2017) confirm that there are tactics educators should understand and implement in order to gain optimum student vocabulary growth. Vocabulary instruction should include direct, explicit teacher modeled routines on a specific list of target words, student friendly definitions that relate to students’ learning experiences, and a varied difficulty of Tier 2 and Tier 3 words. Students should engage in vocabulary best practices when drawing illustrations or symbols, exploring vocabulary practice activities, creating authentic reading and writing samples, and continually practice review activities and games.

Studies (Pollard-Durodola et al., 2011; Coyne et al., 2007; Zipoliti et al., 2011; Greenwood et al., 2011) have shown how vital high-quality interventions are for struggling students to improve vocabulary skills. The Response to Intervention (RTI) protocol supports educators’ abilities to make data based decisions in order to match interventions to students’ learning targets. First teachers assess student’s learning gaps with a diagnostic test and analyze any areas where discrepancies occur. Then a “good-fit” intervention is chosen and implemented in a quiet, small group setting in order to fill the literacy-learning gap. Ideally progress monitoring scores should be collected weekly to observe fluctuations in student performances and bimonthly data reviews conducted to look for changes in interventions so they can remain effective. Once the learning goal is met, an additional diagnostics test should be administered to look for other learning gaps. If another skill is uncovered the student will take part in a different RTI cycle. Students improve vocabulary development when high-quality interventions are in place, which target the right skills and difficulty level, with ongoing review and adjustments.

The value of educators being able to work with an Instructional Coach (IC) was demonstrated in several research articles (Reddy et al., 2017; Teemant, 2014; Thomas et al., 2015) to benefit the implementation of best practice strategies and highly effective teaching
methods within classrooms. Instructional Coaches have many roles and areas of support they can provide a teacher. One role of an IC is to be a resource provider in order for the teacher to use a variety of resources to improve students' engagement and instruction. A curriculum or instructional specialist ensures that the districts adopted curriculum is implemented, along with aligning the curriculum to the needs of all students. The IC is an ongoing learner and school leader that works collaboratively with educators and staff in order to challenge current practices, set educational goals, and support both the teacher and classroom of students at each step as the goals are met. Instructional coaches empower teachers by building capacity and reflecting on instruction, so they can adapt effective learning strategies, create deeper cognitive thinking, and develop high student expectations. Additionally, Instructional Coaches provide a non-evaluative, unbiased, outside perspective that is focused on teacher's best practice goals with the intention to strengthen quality of instructional.

**Recommendations**

My review of research about vocabulary development and instructional coaching has provided me a list of recommendations to guide kindergarten teachers as well as instructional coaches. These recommendations are as follows:

1) Literacy curriculum should be developmentally appropriate and grade-level aligned to include vocabulary best practice activities for students (Bassok et al., 2016; Bryant et al., 1991; Bowne et al., 2015).

2) High-quality, effective vocabulary routines should become a daily part of literacy instruction at all age and grade levels (Coyne et al., 2009; Cuticelli et al., 2015; McKeown and Beck, 2014).
3) Children ranging in age from one to four year olds should have early access to literacy services that offer incentives such as gift cards, food, and supplies to parents for attending vocabulary learning sessions (Al Otaiba and Fuchs 2006; Rowe et al., 2012).

4) Educators should be trained or certified to implement interventions to small groups of students using high fidelity (Al Otaiba and Fuchs, 2006; Pollard-Durodola et al., 2011; Coyne et al., 2007).

5) In order to provide high-quality vocabulary instruction, school-age students showing signs of discrepancies, should immediately be paired up with an interventionist for daily teacher observational notes, weekly collection of progress monitoring scores, and bimonthly adjustments to current intervention (Coyne et al., 2007; Zipoli et al., 2011; Greenwood et al., 2011).

6) Instructional Coaches should be accessible to all buildings and settings providing support to educators and staff in order to bring about a systemic change for the benefit of the students (Reddy et al., 2017; Teemant, 2014; Thomas et al., 2015).

**Future Projects and Research**

In the future, additional research studies on vocabulary development should be conducted with a focus on the effects of implementing word routines earlier in a child’s life (toddler years) compared to starting an intervention in early elementary school. Another focus for future research would be to study the best ways to transform traditional professional development sessions into usable, productive collaborative conversations. Staying current on the best practices for educational leadership would benefit teachers’ instruction and students’ growth. Upon completion of my vocabulary development assessment, I intend to share my new knowledge of best practices, developmentally appropriate practices, interventions, student
growth, and instructional coaching for all types of learners within my Preschool-5th Grade elementary building. As an Instructional Coach, I will enroll teachers into the coaching cycle for the benefit of their students by providing current effective resources, modeling best practice lessons within their classrooms, exploring collected data for instructional decision making, and supporting their emotional wellbeing.

**Educational Policies**

As the demands for teacher accountability increase in regards to student improvement, educators are in need of more support than traditional professional development sessions. Educational lawmakers need to realize the vitality of the instructional coaching role and mandate that all educators have access to the support, resources, and learning that instructional coaches can provide to bring about positive systemic changes. Educators can no longer survive within their classrooms without a collaborative team all working towards the goal of student growth.

**Teacher Practices of Self and Others**

With more pressure put on how teachers teach and what students learn due to the occurrence of No Child Left Behind (NCLB) and Every Student Succeeds Act (ESSA), districts are looking for best practices to support teachers. My teaching experience encompasses the sequence of change, pressure of accountability, and the need for new and better methods of support.

When I started my career as a kindergarten teacher, in the early 2000’s, I was excited by the activities and centers that children could pick from, the amount of time students would interact with myself and each other, and the sense of community I felt within my classroom. During my time as a classroom teacher, which was more than a decade, I felt the climate of the room shift slowly. Little by little the classroom community started to break apart, seat time and
data-collecting assessments were implemented, and the dramatic play area and science centers were packed up and put away. The more pressure I felt as a classroom teacher, the less fun teaching became. I was frustrated with the educational system for several reasons. One reason was having greater demands put on my role as a teacher. I understood serving each student to my fullest potential, however the demands became enormous and they overshadowed the student-choice activities. Another issue was time and the struggle it took to accomplish the daily tasks required of me as a kindergarten teacher. If I did have extra time, my focus quickly turned to the mandates of my job and less on interacting with and discovering my students’ academic interests. I desperately wanted to become better, a more effective teacher, and see my students become excited to learn and develop. Thirdly, I felt the community of educators within our elementary school breaking apart, as it did within my classroom. Teachers didn’t have the time to collaborate, observe each other’s teaching, and offer implementation supports. I have always loved education, but with the additional stress and frustration, I was beginning to wonder if I was cut out for the job and how was I going to stay motivated for my students until retirement. Lastly, I felt due to the lack of interaction among staff, the emotional support I needed to combat my doubts of being an effective teacher grew.

A couple years ago, I switched roles from a kindergarten classroom teacher to an instructional coach. Since the role of instructional coach was new to the district, I wasn’t sure of my job descriptions. It was my hope that I could provide resources, teaching strategies, and effective methods for every classroom within our building. I wanted to bring teachers together in order to support one another’s efforts to work more efficiently by collaborating together. Additionally, I wanted to be part of systemic change toward the implementation of best practices. Reading research about instructional coaching, Jim Knight (2007) stated:
After interviewing more than 150 teachers across the United States about their views on professional development, I have concluded that teachers do not resist change so much as they resist poorly designed change initiatives. Teachers engage in professional development every day—they just don’t do it with professional developers… Our experience has shown that when teachers receive an appropriate amount of support for professional learning, more than 90% of them embrace and implement programs that improve students’ experiences in the classroom (p. 3-4).

With traditional professional development methods only about 10% of educators implement practices and strategies that were presented. Teachers are critical of professional development with no implementation support or follow-up from administrators or consultants. This is where the implementation of instructional coaches (IC) can be a vital asset to educational systems transformations (Knight, 2007).

Instructional coaching provides one on one or small group professional development that ultimately focuses on practical teaching strategies that can be implemented into classrooms immediately. IC’s meet with an educator and through a pathway of questioning techniques alters teachers’ behaviors within their classroom based on his or her own self-reflections. When you are an IC, there are several qualifications you must possess. One characteristic of an IC’s role is trust. Teachers need to feel protected when they collaborate with an IC on professional and personal issues. Instructional coaches need to listen attentively and maintain confidentiality. Only when a teacher can trust an IC, can maximum potential be reached. Another characteristic of an IC is appreciation for your teachers. An IC should respect and celebrate differences that teachers have in how they educate students. Coaches should be flexible in how they lead, question, and offer suggestions to teachers. This is where knowing your staff is valuable. An IC
should meet the teacher where he or she is currently at in the learning and growing process. A third characteristic an IC should possess, is to always have a growth mindset for oneself.

Coaches should attend ongoing trainings and workshops in order to build new knowledge in all areas of learning. Lastly, an IC should always lead collaboration conversations with data. By using student work, observations, video samples, assessments and progress monitoring data, teachers and the IC can focus the attention on student learning and not on the teacher’s deficits. Instructional coaches can provide the support needed to educators by working together towards a common outcome in order to increase student learning (Bean and DeFord, 2012). As I complete my second year being an instructional coach, I find my passion for teaching rekindled as well as my drive to awaken our elementary team. As an instructional coach, I choose to be a catalyst for change!
References


Iowa Department of Education (Dept. of Ed). (2017). Retrieved from


