TEACHER'S BELIEFS AND PERCEPTIONS ABOUT VOCABULARY INSTRUCTION

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. The work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification. This is a true copy of the thesis, including any required final versions, as accepted by my examiners.

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Abstract

Vocabulary is a fundamental component of reading comprehension. Vocabulary are the words that are recognizable within a learner's lexicon. Notwithstanding the well-defined importance of vocabulary, there is limited research on useful vocabulary instructional strategies and how the information is conveyed to students. This study addresses how educators perceive and feel towards vocabulary and vocabulary instruction as well as the effectiveness of commonly known strategies. The results of this study identified that educators teaching between grades 2 and 5 believe practicing phonics, read alouds, spelling tests, word fixes, and word sorting to be effective strategies to teach vocabulary. Educators also believe that they should present vocabulary words and allow for practicing by learners. This study addresses an important first step in understanding how educators approach vocabulary instruction in the upper elementary years.

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Chapter I: Literature Review

Comprehension is defined as how meaning is made from the text (Clarke et al., 2010). It is crucial to teach strong comprehension skills in school, since limited comprehension skills can impact students' reading level or long-term success. Comprehension is the end goal when it comes to fluent reading and adequate comprehension shows that the child is sufficiently skilled to understand the words and decode the text. Struggles in comprehension can stem from problems understanding vocabulary, creating meaning, and making inferences.

One essential element of reading comprehension is a student's vocabulary (Reading Rockets, 2021). Vocabulary can be defined as a set of familiar words within an individual's language for expressive and receptive use. Expressive vocabulary means the words that an individual can use to express or produce language in speaking or writing, and receptive vocabulary means the words that can be understood in written, spoken, or signed words (Burger & Chong, 2011). In reading, words need to be recognized accurately and rapidly to understand the text correctly. That means both translating the print to oral language through the process of decoding, and understanding the meaning of that oral language through vocabulary. Children begin to manipulate words and translate the words to and from print as early as kindergarten by learning about phonemes and sight words, but learning the meaning of word begins at birth and continues throughout their lifetime. Educators should continue to teach vocabulary because it allows children to expand their knowledge of words and create additional meaning.

Another critical factor in reading comprehension is inferencing. Typical texts do not include all the information required for comprehension; instead, the reader must make inferences to connect ideas and draw conclusions. Inferences are made by integrating general knowledge about the context, including background knowledge, contributing to solid predictions for inferencing (Cain et al., 2001). Because background knowledge varies from

person to person, this can allow for significant individual differences regarding inferencing. Children with adequate comprehension skills can create deeper connections to the topic and more inferences. Children with poor comprehension skills struggle to make deep connections and cannot make as many references as those with good comprehension. However, if children are taught about a specific knowledge base, including a shared vocabulary, they can acquire the same background knowledge and reduce individual differences in reading comprehension. This makes educators' instruction of background knowledge, including vocabulary instruction, a crucial issue throughout schooling.

Despite the clear importance of vocabulary, there is limited research on useful vocabulary instructional strategies and how the information is conveyed to students using these strategies. This study aims to examine the vocabulary instruction and practices of elementary educators, and responds to the various vocabulary teaching practices throughout different elementary grades and educators' perceptions of vocabulary instruction. In comparison, Marulis and Neuman (2010) conducted a meta-analysis of the effects of vocabulary instruction in pre-and kindergarten students. They found that vocabulary training affected word learning in pre-and kindergarten students and the beneficial use of explicit word learning instruction or a combination of both implicit and explicit word learning instruction. However, fewer studies have examined vocabulary instruction in older age groups and educators' perceptions of vocabulary learning for children throughout the elementary years. Learning instruction on vocabulary is what the current study is set to examine.

The Simple View of Reading (SVR) consists of two components that explain what reading is and that the main goal of reading is to comprehend and understand the meaning of the text (Nation, 2019). SVR consists of decoding and language comprehension. Decoding includes sounding out words and recognizing written language on sight. Language

comprehension includes general language knowledge, like vocabulary and grammar. Deficits in either of these two components can affect comprehension and suggests that children can struggle to make inferences or connect to the text. For educators to succeed in teaching reading comprehension, there needs to be an instructional focus on decoding and language comprehension (Nation, 2019). Without teaching the two, children will not be able to efficiently decode meaning from words or understand the meaning of words. The SVR is a valuable framework for breaking down the complex reading process into two main facets. According to the SVR, as an essential component of language comprehension, vocabulary is therefore essential to reading.

Vocabulary and Comprehension

Vocabulary learning enables children to gain extensive knowledge of words. The words can connect to concepts once children understand the word's context. This means that vocabulary instruction can benefit comprehension since children would understand and learn the context or meaning. Although it is possible to learn words implicitly from context (Fukkink, Blok, & de Glopper, 2001), vocabulary, particularly specialized vocabulary, is often learned much more deeply and efficiently with direct and intentional instruction (Marulis & Neuman, 2010). Without explicit vocabulary instruction, there may be limited growth in vocabulary and comprehension.

Storing Meaning

In order to understand the importance of vocabulary instruction, it is essential to understand how words are learned and stored in memory. Words learned by young children can be encoded based on their semantic features within a lexico-semantic network model. Peters and Borovsky (2019) identified four different semantic feature categories for words. *Functional features* allow categorization to depend on the function and motor details for how individuals interact with an object; for example, a soccer ball is used for soccer. *Perceptual*

features allow categorization to be dependent on the senses; for example, a dog has fur. *Taxonomic features* depend on the hierarchal information for the word or object. Finally, *encyclopaedic features* rely on facts or data that do not fit into the other three elements (Peters & Borovsky, 2019, pp. 763-764). Perceptual features may be beneficial towards teaching new vocabulary to infants as they tend to rely on perceptual features first. Further research could also explore how new vocabulary in older children are categorized. For example, Peters and Borovsky (2016) argue that a word may be learned through thematic processing to begin with, but the understanding may shift to a taxonomic processing as time goes on. The lexico-semantic network that Peters and Borovsky (2019) discussed shows the importance of using semantics to understand the properties of an object and word. A lexico-semantic network shows that meaning is crucial to creating a text's definition and understanding.

One way that vocabulary storage can affect comprehension is apparent in children with communication disorders. If children struggle to comprehend what they have read, they can struggle with their vocabulary because they may have difficulty understanding the word's meaning. Lucas and Norbury (2014) explained that children with language impairment (LI) often have difficulty acquiring spoken, signed or written language due to their reduced vocabulary, and thus they struggle with comprehension. Lucas and Norbury (2014) explained that children with LI have limited knowledge of sentence structure and discourse and further explained that limited research has been completed on the role inferencing has towards children with LI or comprehension difficulties.

Children who struggle with inferencing might not make a necessary inference while reading, and even so, children with an LI may struggle with both literal and inferential inferencing (Lucas & Norbury, 2014). *Literal inferencing* is where responses come from the text, and *inferential inferencing* is where the response does not come from the text and can be

dependent on another knowledge. Inferential inferencing is beneficial to educators because it allows educators to see that the students are making further connections to the text. Inferential inferencing shows a contribution to reading comprehension as children can respond to text-based on external knowledge, including vocabulary.

Lucas and Norbury (2014) proposed that oral language competency is vital for inferencing as oral language is operated by the verbal working memory that allows the individual to integrate recall information. The verbal working memory may not be incorporated while educators are teaching inferencing. This shows that vocabulary is essential because inferencing cannot occur without learning different words or understanding the meaning of words. This will also show the difficulty of recalling information if vocabulary is not retained successfully.

Understanding how meaning is stored can assist educators to teach based on the semantic features for storing vocabulary (Lucas & Norbury, 2014). If vocabulary instruction focuses on the different linguistic or semantic features, vocabulary can be retained and recalled successfully (Lucas & Norbury, 2014). Vocabulary instruction strengthens language development in children (Marulis & Neuman, 2010). Using semantic features enables the expansion of context towards vocabulary. It enables children to develop connections towards different words as they learn to read and have the ability to make inferences.

Semantic Processing and Vocabulary

In order to understand a text, a child needs to understand the language rules and have the capability to speak orally at an age-appropriate level (Ouellette, 2006). Ouellette's (2006) study attempted to understand the role of oral language at the extent and complexity point in vocabulary knowledge. Ouellette (2006) stated that children could store a word in their lexicon that contributes to their vocabulary. Over time, the meaning of a word is redefined and provided additional information or context towards the complete understanding of the

word. This relates to Nation and Snowling's (1998) study on the importance of using semantics in phonology because a child's lexicon can expand and redefine over time; thus, by knowing the meaning in pronunciation, more information on the meaning of a word could be retained. Comprehension is dependent on vocabulary because language development relies on vocabulary. Marulis and Neuman (2010) explained that comprehension skills are beneficial in vocabulary to allow children to understand the word's meaning.

There can be individuality in semantic processing towards English compound words, which can create semantic transparency, the measurement of the context to the compound word to the context of the compound's parties (Schmidtke et al., 2018). Schmidtke et al. (2018) explored the idealization of the cognitive processes that attribute to semantic transparency. Schmidtke et al. (2018) identified that semantic transparency could be "sped up" when there is a close semantic relationship through the meanings of the total compound and its elements. Semantic transparency can relate to Nation and Snowling's (1998) study because if semantic knowledge is used for understanding phonology, then transparency enables quick recognition of compound words and faster recall. In addition, Schmidtke et al. (2018) explained that when semantic transparency is sped up, recognition of the compound word is more significant. The breakdown to find the elements of the compound word is completed at a faster rate. However, Schmidtke et al. (2018) highlight conflicting reports when speeding up semantic transparency, but this can be due to the measured differences of tasks and behaviours. By observing compound words, it shows that compound words may be helpful for children to retain. However, the training of compound words could be a beneficial part of vocabulary instruction.

When looking at semantic transparency and its role in compound words, Schmidtke et al. (2018) found that semantic transparency can affect compound word recognition. More visual recognition of compound words through semantic transparency can connect to how

children recognize words in their visual awareness. Although Schmidtke et al. (2018) studied college students, it would be interesting to understand further how the meaning of a compound word connects to the elements of the compound word. Schmidtke et al.'s (2018) work is similar to Peters and Borovsky's (2019) discussion of which semantic feature is used the most. However, Schmidtke et al. (2018) explore semantic transparency towards the semantic processing of compound words and their constituents.

Fluency enables the child to read accurately and proficiently. This stage allows the reader to confirm the words known to them (Kuhn & Stahl, 2003). Kuhn and Stahl (2003) stated that fluency is vital for reading as fluency helps create meaning of the text. Fluency enables the recognition of words and is the beginning of comprehension; meaning that children who have begun to read cannot yet engage in comprehension until they have recognition towards known words. Kuhn and Stahl (2003) discussed the development of sight word proficiency and that any word can become a sight word based on the orthographic structure of the word; the identification of a sight word includes understanding the word's spelling, pronunciation and meaning. Kuhn and Stahl (2003) identified that prosody, or rhythmic pattern, plays a role in fluency; this would mean that a reader needs to be fluent enough to understand the meaning of a word to consider the tone or rhythm for that sentence. Kuhn and Stahl (2003) further explained that children who are not fluent in reading often read word-by-word and cannot achieve prosody.

Repeated reading enables prompt recognition in reading and the development of understanding the meaning of the text (Kuhn & Stahl, 2003). While Kuhn and Stahl (2003) do not highlight the importance of vocabulary in fluency, it is vital to note that repeated reading is used to assess the understanding of vocabulary in comprehension. With fluency, repeated reading shows fewer miscues. This could show that children may comprehend new vocabulary faster with repeated reading of vocabulary to determine comprehension.

Vocabulary relies on context and must be taught in a continuing pattern for connections to be made and ensure that vocabulary processing occurs in order for children to be successful for comprehension and the development of language (Kuhl & Stahl, 2003). Semantic processing enables inferences to be made because children can process the meaning and semantic features of a word (Peters & Borovsky, 2019). However, semantic processing relies on the storage and understanding of vocabulary; without understanding several words, inferences may lack substance or be incomplete.

Inferences and Comprehension

Working memory can cause and influence the inferencing and understanding of vocabulary. Currie and Cain (2015) explored the role of working memory and vocabulary in inferencing and stated that text comprehension requires a reader to know word meanings and explained that vocabulary could be related to reading and listening comprehension. Currie and Cain (2015) further mentioned that inferencing could rely on background knowledge and the relations between words regarding specific word meanings. Currie and Cain (2015) explored two types of inferences stemming from working memory: local coherence and global coherence inferences. *Coherence inferences* can be defined as inferring why an event occurred and adding valuable information that was not in the text (Barnes, 1996). *Local coherence inferences* rely on cues of pronouns, categories, and synonyms. *Global coherence inferences* use external information from the text and the text's overall theme. These inference types are similar to are similar to literal and inferential inferencing. Literal inferencing connects to local coherence inferencing and inferential inferencing connects to global coherence inferencing. Coherence enables the inferences to connect to different understandings of the text. The use of background knowledge helps support the coherence based on what the reader knows and has implied from their background knowledge.

Working memory is also associated with the ability to generate local and global inferences (Currie & Cain, 2015). This shows that vocabulary knowledge enables inferencing by understanding word meanings and the memory processes of vocabulary knowledge: Barnes (1996) confirmed that coherence inferencing improves with age. Barnes (1996) suggested that the knowledge to create an inference can be available within the semantic memory since inferencing relies on retrieving information about the context quickly and the amount of knowledge about the known context.

Elaborative inferences allow for content from the story to be amplified and add information to how the event occurred in the story (Barnes, 1996). Barnes (1996) stated that while elaborative inferences allow for embellishment, the inferences can support long-term memory about the text and allow concepts to be more established. Barnes (1996) explored knowledge-based inferencing and suggested that when there is a shared knowledge base in different age ranges, there can still be developmental adjustments regarding inferencing.

Coherence and elaborative differences have various processing strategies. If a young child has difficulty making inferences, it can be challenging to process the information and contributes to a lack of reasoning skills (Barnes, 1996). Barnes (1996) proposed that elaborative inferences are encoded less frequently than coherence inferences. Barnes (1996) further stated that coherence inferences are seldom affected by diminished reasoning skills but are essential for the use of knowledge accessibility and further implied that memory can start a vital and intense search to locate the pertinent information if the knowledge is not easily accessible. Elaborative inferences can allow the memory to fill in the gaps that were not retained in the text. Perhaps, inferencing relies on the storage of word meaning vocabulary and inferencing improves over time due to the extensive search made in coherence inferences.

Individual differences can be created in the text when background knowledge is used. However, the relationship between children's comprehension skills and their ability to make inferences shows that children who are less skilled in reading could make inferences but do not generate as many inferences as skilled readers are capable of (Cain et al., 2001). Cain et al. (2001) further explored the development of comprehension skills and inferencing; specifically, how poor comprehension readers have difficulty with global and local coherence inferences.

Cain et al. (2001) incorporated the procedure in their research to have the children learn about specific knowledge of the book or topic they would read. Cain et al. (2001) consider an inference to be made when the specific knowledge was easily recalled. Cain et al. (2001) used a multi-episodic story that was read to 8 and 9-year-old children. Cain et al. (2001) found a strong predictor between comprehension skills and the ability to make inferences. Children who had difficulty in comprehension did make fewer inferences than children with strong comprehension skills. This showed that children with strong comprehension skills could obtain new knowledge and create more representations from the new knowledge to general information.

In contrast, children with limited comprehension skills may struggle to develop those representations. Cain et al. (2001) suggested that memorization regarding the text learned did not account for the group differences for inference and suggested that future studies observe the quality and detail of the recall for the inferences made. Exploring the quality and details in an inference could identify the difference in comprehension between children with good and poor comprehension skills.

Inferencing is necessary for comprehension, but vocabulary knowledge is essential for inferencing as it is an important component of background knowledge. This means that vocabulary is crucial to be taught throughout a child's life.

Vocabulary and Attention Shifting in Reading

At home, adults often do not explicitly teach children further knowledge about the context of reading (Evans & Saint-Aubin, 2013), allowing for children to learn to identify pictures more than written words. Evans and Saint-Aubin (2013) explained that during read alouds, parents do not stop to explain the meaning of words in the story, causing children to lack the ability to identify the low-frequency words in stories. In typically developing children, having exposure to vocabulary without explaining the meaning can expand their lexical-semantic network, but more slowly than if words were explicitly explained. Evans and Saint-Aubin (2013) explored what children do cognitively during storytelling. Those children focus 93% of the time on the illustrations during storytelling and spend the remaining time focusing on some words. This finding shows that children can often recall the pictures over the text in the story.

Evans and Saint-Aubin (2013) explored the relationship that eye movement has on vocabulary in a French story and whether children focus more on the illustrations or text when the same story is read to them repeatedly by assessing the understanding of the vocabulary to determine what the children pay attention to during the readings. Different age ranges were also explored as Evans and Saint-Aubin explained that children tend to read along and follow the text in the story as they get older. Evans and Saint-Aubin (2013) hypothesized that if the same book is read to the children repeatedly, their attention may shift from the images to focusing on the text to read along; this was tracked through an eye movement tracking device. For example, four-year-old children spent more time on print by the seventh session in assessing the attention span on the text or images (Evans & Saint-Aubin, 2013). Evans and Saint-Aubin further identified that the focus on the illustrations decreased to 76.79%, and the focus on text increased to 10.18% by the seventh session. This shows that the children's attention shifted from the images to the text over the seven sessions,

which could be because the children have seen the same images repeatedly which may no longer be attractive to the children. They also found that after repeated readings, children focused more on the illustrations representing low-frequency words before the word was announced and directed their attention to the word. This finding could suggest that children were beginning to understand the word and make sense of the word's context through the several reading sessions. Evans and Saint-Aubin (2013) suggested that current vocabulary can develop through repeated readings.

The phenomenon of attention shifting shows that children focus on words throughout repeated readings, but this only happens after children understand and encode the word's meaning (Kuhn & Stahl, 2003). However, word learning happens in piecemeal fashion, with children often building full knowledge of a word over time (Evans & Saint-Aubin, 2013). Attention shifting shows that children can comprehend and create meaning of unfamiliar words over repeated activities, but this success is aided by a pre-existing understanding of familiar words (Evans & Saint-Aubin, 2013). Children who struggle with familiar words can struggle to shift their attention towards illustrations for various reasons. This shows that understanding vocabulary is crucial for children to create context and a deeper understanding of a word.

In summary, comprehension is a challenging process that requires different elements of the brain, such as learning vocabulary, storing meaning, semantic processing, creating inferences and attention shifting in reading. All of these elements rely on vocabulary knowledge, making vocabulary vital for comprehension.

Vocabulary Instruction

Specific teaching processes for comprehension can influence a student's comprehension skills (Marulis & Neuman, 2010). Boubris and Haddam (2020) identified that an educator's beliefs towards reading will affect how the educator teaches and assesses

reading. Boubris and Haddam (2020) explained that through the traditional approach for assessment (i.e., exams or tests), there is no mechanism to promote student improvement. They suggest that an alternative approach to assessment can be beneficial and allied for reflective practices. However, the educator's beliefs need to be addressed for improvement in assessment. Marulis and Neuman (2010) similarly highlighted that vocabulary instruction depends on teacher training because educators may focus on strategies that may not ultimately be useful for students' vocabulary learning. Vocabulary instruction relies on the knowledge and beliefs that the educators have on the subject, because this influences how the teacher educates the students.

Although vocabulary is determined to be essential for reading instruction, there is limited understanding of how vocabulary instruction is used in schools; there is a gap in the research that does not address how to teach meaningful vocabulary instruction. Allen (2006) addresses areas of literature that identify what is known about teaching vocabulary, the fact that more vocabulary knowledge creates better readers, the notion that knowing a word requires more than knowing the definition, and the idea that teaching definitions will not necessarily improve comprehension. Allen states, “Learners need generative vocabulary instruction so they are learning how to learn new words they encounter during independent literacy experiences” (Allen, 2006, p. 17). Allen (2006) suggests that vocabulary instruction needs to be meaningful and can be accomplished by incorporating prediction, using academic vocabulary, and assessing understanding.

Manyak et al. (2021) completed three longitudinal studies and reflected on the experiences and considered the implementation of vocabulary instruction from educators. Manyak et al. (2021) recommended that educators should address vocabulary instruction’s quality, quantity, and strategies. *Quality-focused* vocabulary instruction can rely on teaching a word and the outcome to develop a deep understanding of the word. Manyak et al. (2021)

identified that for quality-orientated instruction to occur, there needs to be activities or teachings to incorporate active processing. Manyak et al. (2021) did identify that this may only be effective for target words, yet this begins the understanding of critical words for learners. *Quantity-focused* vocabulary instruction relies on the number of words learners need in order to learn and methods to introduce the unfamiliar word. Manyak et al. (2021) explained that with this dimension, learners might go back and forth between general and deep understanding of vocabulary learning which also supports the learners' general knowledge. *Strategy-focused* vocabulary instruction addresses those words taught through explicit teaching, allowing for inferences to be made.

Further evidence in support of explicit teaching of vocabulary comes from Bowne et al. (2016), who stated that strategies like implementing the use of target words, the use of cues, and the recognition of morphemes in a word are beneficial for improving the long-term memory of words. Manyak et al. (2021) identified that using multifaceted vocabulary instruction around activities that focus on these three dimensions can create consistency in vocabulary learning and the use of vocabulary throughout the school day. Manyak et al. (2021) further addressed that different words other than sight words should be incorporated into vocabulary instruction and not only rely on target words. Other strategies that Manyak et al. (2021) noted were the use of visuals in teaching and its enhancement to learning and the benefit of being word conscious within the classroom. Visuals allow for concrete understandings of words and deepen the connection. Word consciousness enables learners to be interested and aware of words and their meanings; positively reinforcing a learner's recognition of words can allow for both learners and educators to be word conscious, and when developing word consciousness, it can allow for learners to focus on words used during the school day (Manyak et al., 2021).

In addition to the focuses that Manyak et al. (2021) addressed, Bowne et al. (2016) suggested that instructional approaches to vocabulary in kindergarten are most beneficial when they focus on elaboration, comparing and contrasting, repetition, using words in different contexts, and providing explanation or experience of the word to allow for more opportunities for learners to interact with and understand the word. It is not as beneficial when learners are provided with the definition, learners need the opportunities to digest the words they have heard and learned.

In a Chilean context, Bowne et al. (2016) found that when educators or learners provide conceptual information about word meaning, the students' development of vocabulary improved. Further, by allowing for conceptually focused instruction and during conversations, the students showed improvement towards the end-of-year vocabulary knowledge (Bowne et al., 2016). Bowne et al. (2016) explained that when educators directly teach content knowledge, the content can provide rich conceptual information and elaboration, whereas indirect methods such as read alouds do not allow for rich conceptual information or elaboration. With this, vocabulary instruction may focus on quality, quantity, and strategies while promoting the use of experiences with new words and incorporating conceptual information and discussions.

Maynard et al. (2010) discussed that effective vocabulary instruction improved vocabulary learning when children received explicit and direct vocabulary instruction with scaffolded activities and copious amounts of feedback. They stated that multiple exposures with multiple contexts were helpful for vocabulary learning. Also, the use of repeated reading in storybooks was functional between groups for incidental and non-incidental exposure. Bromley (2007) also stated the importance of direct instruction, and with thoughtful and methodical instruction for vocabulary, the instruction will influence comprehension by understanding and learning to read unfamiliar words.

This literature review has demonstrated that vocabulary is essential for many elements of reading comprehension and that children's attention during reading is often guided by their vocabulary. The reviewed research has also shown that explicit, thoughtful, and elaborative vocabulary instruction is the optimal way to build students' vocabulary knowledge. Importantly, research suggests that educators' beliefs about reading and teaching influence their practice of teaching.

The goal of the current study is to examine educators' beliefs and practices about vocabulary instruction in the elementary years. To that end, the current study addressed the following questions:

1) What are the different vocabulary instruction strategies used by elementary educators?
2) What are the educators' perceptions and beliefs towards vocabulary instruction?
3) What is the relationship between educators' beliefs about vocabulary and their vocabulary instructional strategies?
4) What is the relationship between experience, Professional Development (PD), and vocabulary instruction?

Chapter II: Method

Participants

Twenty-eight educators were recruited in Northern Ontario through school boards and through social media posts. The survey was sent to educators teaching between grades 2 to 5; six participants were not teaching within these grades and were omitted during the data analysis. The percentage of educators who taught each grade level is seen in Table 2.1.

Table 2.1.

Percentage of Participants Teaching at Each Grade Level

Grade Taught	Percentage of Participants[1]
2	40.8
3	40.7
4	31.7
5	36.2
6+	27.2

Note. [1] Percentages total equals over 100% because several participants indicated they taught more than one grade.

Materials

Beliefs about vocabulary instruction. Educators were given an anonymized survey to evaluate their beliefs about vocabulary instruction using a Likert scale (See Appendix A). The survey asked participants 14 questions on the topic of addressing attitudes of teaching vocabulary and assessing their beliefs on vocabulary instruction. The survey was adapted from Borg and Burns (2008), who surveyed educators on their beliefs of integrating grammar in adult ESL classrooms. Borgs and Burns' (2008) survey was adapted to meet the needs of this study as the questions were focus around teaching beliefs towards grammar; with that the survey was adapted to focus on the beliefs around vocabulary instruction. The survey was

initially developed and analyzed as a series of individual questions rather than an integrated scale. In order to determine whether I could summarize responses as a scale, I used Cronbach's alpha to establish the internal consistency of the adapted scale; this procedure yielded a result of .414. Due to the low internal consistency of the adapted beliefs scale, we did not treat is as a unified scale, and instead examined questions individually, in line with Borg and Burns (2008).

Vocabulary teaching strategies. Participants were then asked to rank the effectiveness and usefulness of the 12 various teaching strategies on a Likert scale. This instrument was also not considered a scale, and each strategy was examined individually.

Demographics. Participants were asked to provide information on the grade(s) they teach, the amount of additional training they have completed on literacy instruction, the number of years they have been teaching, and the number of hours they teach vocabulary in a week.

Procedure

Educators were provided with a SurveyMonkey™ link that contained all the elements described in the Materials section that were intended to evaluate their knowledge and beliefs about vocabulary and vocabulary instructional methods. Educators were asked to complete the survey within 4 weeks.

Data Analysis

Descriptive statistics were used to analyze educators' attitudes towards vocabulary alongside strategies for vocabulary instruction. Chi squared analyses were used to establish relationships between beliefs, practices, and experience.

Chapter III: Results

This chapter presents the results of the current research study. Results are organized into sections for each of the research questions. Participants in this study were experienced literacy educators, haven taken formal professional development courses, some of which were 'Additional Qualification' courses that are recognized by the Ontario College of Teachers and are formally added to educators' teaching licences. The average number of Professional Development or Additional Qualifications courses on literacy was 7.91 courses with a standard deviation of 9.17. Overall, educators in this study reported a range of duration of vocabulary as part of their weekly instruction in literacy. Table 3.0.1 presents the distribution of educators' responses. Most notably, nearly half (40.9%) reported that they focused on vocabulary instruction for 3-4 hours per week. Participants identified that they have been teaching on average for 10.95 years, with a standard deviation of 8.482.

Table 3.0.1.

Hours Teaching Vocabulary in a Week

Hours Teaching Vocabulary in a Week	Percent (%)
0-1	13.6
1-2	36.4
3-4	40.9
4-5	4.5

1. What are the different vocabulary instruction strategies used by elementary educators?

In the survey, participants were asked a series of questions to determine their beliefs around effectiveness of specific instructional strategies for vocabulary.

Table 3.1.1 presents educators' perceptions of effective strategies by examining their agreement with the degree of effectiveness of each instructional strategy presented. Educators ranked the effectiveness of practicing phonics: 90.9% stated they were effective or very

effective; similarly, with read alouds (72.7%). Practicing phonics and read alouds were rated most highly with spelling tests rated most lowly; other strategies had broader ranges of responses.

Table 3.1.1.

Perceived Effectiveness of Selected Instructional Strategies

Vocabulary Strategy	Not Effective (%)	Least Effective (%)	Somewhat Effective (%)	Effective (%)	Very Effective (%)	I Don't Use This Strategy (%)
Word Wall	9.1	0	40.9	18.2	18.2	9.1
Read alouds	0	0	22.7	18.2	54.5	0
Word Box	0	4.5	9.1	13.6	13.6	54.5
Vocabulary Notebooks	0	9.1	50.0	18.2	4.5	13.6
Practicing Phonics	0	0	4.5	36.4	54.5	0
Vocabulary Cartoons	4.5	0	0	13.6	4.5	72.7
Spelling Tests	22.7	18.2	27.3	13.6	4.5	9.1
Word Sorting	0	4.5	18.2	45.5	4.5	22.7
Word Maps	4.5	4.8	22.7	31.8	4.5	27.3
Word Fixes	0	0	18.2	40.9	4.5	31.8
Word Cards	4.5	4.5	9.1	18.2	9.1	50.0
Computer-Based Games	0	4.5	36.4	18.2	22.7	13.6

Next, I explored the percentage of participants who used each instructional strategy. The most commonly used strategies are Practicing Phonics (68.2%), Read alouds (54.6%), Computer-Based Games (54.5%) and Word Maps (45.5%) (see Table 3.1.2).

Table 3.1.2.

Percentage of Participants who Used Each Instructional Strategy

Vocabulary Strategy	Never (%)	Often (%)	Sometimes (%)	Always (%)
Word Wall	13.6	31.8	40.9	9.1
Read alouds	0	40.9	18.2	36.4
Word Box	54.5	9.1	31.8	0
Vocabulary Notebooks	77.3	13.6	4.5	0
Practicing Phonics	4.5	22.7	31.8	36.4
Vocabulary Cartoons	77.3	13.6	4.5	0
Spelling Tests	40.9	18.2	31.8	4.5
Word Sorting	22.7	31.8	40.9	0
Word Maps	31.8	18.2	45.5	0
Word Fixes	36.4	18.2	40.9	0
Word Cards	50.0	18.2	18.2	9.1
Computer-Based Games	22.7	18.2	50.0	4.5

2. What are the educators' perceptions and beliefs towards vocabulary instruction?

In order to understand the participant's perceptions and beliefs towards vocabulary instruction, the percentage of each response from the Likert scale is shown in Table 3.2.1. All participants agreed or strongly agreed with the first three statements, suggesting that educators between grades 2 and 5 recognize the importance of vocabulary learning.

Table 3.2.1.

Belief Statements in Percentages

Statement	Strongly Disagree (%)	Disagree (%)	Neither Agree Nor Disagree (%)	Agree (%)	Strongly Agree (%)
Statement #1: Educators should present vocabulary to learners before expecting them to use it.	0	0	0	40.9	59.1
Statement #2: Learners who are aware of vocabulary can use the language more effectively than those who are not.	0	0	0	31.8	68.2
Statement #3: Exercises that get learners to practise vocabulary help learners develop fluency in using vocabulary.	0	0	0	45.5	54.5
Statement #4: Teaching English vocabulary directly is more appropriate for older learners.	9.1	31.8	50.0	9.1	0
Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before	9.1	59.1	27.3	0	4.5
Statement #6: Vocabulary should be taught separately, not integrated with other skills such as reading and writing.	27.3	50.0	9.1	9.1	4.5
Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.	18.2	54.5	18.2	4.5	4.5
Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.	0	4.5	13.6	45.5	36.4
Statement #9: In teaching vocabulary, a teacher's main role is to explain the meaning of the words.	4.5	31.8	31.8	27.3	4.5
Statement #10: It is important for learners to know vocabulary.	0	0	0	59.1	40.9
Statement #11: Correcting learners' vocabulary errors in English is one of the teacher's key roles.	0	22.7	50.0	22.7	4.5
Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.	9.1	22.7	27.3	31.8	9.1

Statement	Strongly Disagree (%)	Disagree (%)	Neither Agree Nor Disagree (%)	Agree (%)	Strongly Agree (%)
Statement #13: Indirect vocabulary teaching is more appropriate with younger than with older learners.	9.1	45.5	31.8	9.1	4.5
Statement #14: Formal vocabulary teaching does not help learners become more fluent.	27.3	50.0	13.6	4.5	0

Most participants were neutral or disagreed with questions 4 to 8: responses to questions 4 and 6 suggest that educators see vocabulary instruction as a practice to be integrated throughout other activities, for question 7, educators believed that vocabulary should be directly taught to students. Similarly, responses to question 14 emphasize the perceived importance of formal instruction. Interestingly, participants either agreed or strongly agreed that repeated practice is beneficial for students to use words (see question #8). Participants were neutral towards question 11, 12, and 13. Taken together these results may suggest that while educators agree that vocabulary instruction is important, they remain unclear or uncertain of which methods yield the best results.

In order to further explore these results, I isolated statements that showed variability in response, with the idea that responses to these statements were not guided by "conventional wisdom" but instead may be influenced by other factors, like experience teaching vocabulary. I then examined whether educators' responses to these statements may be related to amount they report teaching vocabulary each week. The following sections present the Chi Square analyses and crosstab analyses for statement responses by educators reported weekly duration of vocabulary instruction.

Table 3.2.2.

Crosstab Analysis for Statement #4

	Teaching English vocabulary directly is more appropriate for older learners.					
Hours	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
0-1	0	0	2	1	0	**3**
1-2	0	0	5	3	0	**8**
3-4	0	2	4	2	1	**9**
4-5	0	0	0	0	1	**1**
Total	**0**	**2**	**11**	**7**	**2**	**21**

Statement #4: Teaching English vocabulary directly is more appropriate for older learners.

For the relationship between statement 4 and hours teaching vocabulary, a crosstab analysis was conducted, and the relationship was not significant, χ^2 (12) = 16.706, p = .160. Table 3.2.2 presents a neutral belief towards the notion of vocabulary instruction appropriate for older learners. This may suggest that educators' beliefs on age-appropriateness of vocabulary instruction may not be related to the amount they actually teach vocabulary.

Table 3.2.3.

Crosstab Analysis for Statement #5

Hours	During lessons, a focus on vocabulary should come after reading tasks, not before.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
0-1	0	0	1	1	0	**3**
1-2	0	0	1	1	1	**8**
3-4	0	0	4	4	1	**9**
4-5	1	0	0	0	0	**1**
Total	**1**	**0**	**6**	**13**	**2**	**21**

Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before.

A crosstab analysis was conducted for the relationship between this statement and hours of teaching; the relationship was significant, χ^2 (12) = 25.369, p = .013. Educators who spent more hours teaching were more likely to disagree that vocabulary instruction should come after reading, rather than before.

Table 3.2.4.

Crosstab Analysis for Statement #7

	A communicative approach, in which vocabulary is not taught directly, is most effective.					
Hours	Strongly	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
0-1	0	0	2	1	0	**3**
1-2	0	0	2	6	1	**8**
3-4	1	1	0	3	4	**9**
4-5	0	0	0	1	0	**1**
Total	**1**	**1**	**4**	**12**	**4**	**21**

Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.

For the relationship between this statement and hours teaching vocabulary, crosstab analysis was conducted, and the relationship was not significant, χ^2 (16) = 17.111, p = .378.

Table 3.2.5.

Crosstab Analysis for Statement #8

Hours	In learning vocabulary, repeated practice allows learners to use words fluently.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
0-1	0	1	1	1	0	**3**
1-2	1	6	1	0	0	**8**
3-4	6	2	1	0	0	**9**
4-5	1	0	0	0	0	**1**
Total	**8**	**10**	**3**	**1**	**0**	**21**

Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.

A crosstab analysis was conducted examining the relationship between the statement and hours teaching vocabulary and the relationship was not significant, χ^2 (12) = 17.414, p = .134.

Table 3.2.6.

Crosstab Analysis for Statement #12

Hours	Vocabulary learning is more effective when learners work out the meaning of words for themselves.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
0-1	0	3	0	0	0	**3**
1-2	0	2	4	2	0	**8**
3-4	2	2	2	2	1	**9**
4-5	0	0	0	0	1	**1**
Total	**2**	**7**	**6**	**4**	**1**	**21**

Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.

Next, I examined the relationship between Statement 12 and hours teaching vocabulary. A crosstab analysis was conducted, and the relationship was not significant, χ^2 (16) = 25.026, p = .069.

Table 3.2.7.

Crosstab Analysis for Statement #14

	Formal vocabulary teaching does not help learners become more fluent.					
Hours	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	**Total**
0-1	0	1	0	2	0	**3**
1-2	0	0	2	3	3	**8**
3-4	0	0	1	5	2	**9**
4-5	0	0	0	0	1	**1**
Total	**0**	**1**	**3**	**11**	**6**	**21**

Statement #14: Formal vocabulary teaching does not help learners become more fluent.

Finally, I examined with the relationship between statement 14 and hours teaching vocabulary. The relationship was not significant, χ^2 (16) = 14.153, p = .587.

Only one statement, #5, showed a significant relationship with the hours reported for teaching vocabulary; this indicated that educators believe a focus on vocabulary should occur before a reading activity. Given no significance was found for the other statements examined, it may suggest that additional, unexamined, variables may be influencing educators' beliefs.

3. What is the relationship between educators' beliefs about vocabulary and their vocabulary instructional strategies?

For this research question, I again used the noteworthy statements identified in the previous section and examined their relationship with the following instructional strategies using chi^2 analyses: read alouds, practicing phonics, spelling tests, word sorting, and word

fixes. I selected these strategies to show a range of beliefs of effectiveness and popularity of usage.

- Read alouds were labelled as both effective and used often; practicing phonics was identified as effective, but showed variability in usage with some using it often and some never.
- Spelling tests showed a range of responses in both effectiveness and usage; word sorting showed a range of responses in effectiveness but was not used often.
- Word fixes were identified as effective but not often used.

One participant was omitted entirely during this analysis because they did not answer the questions around their vocabulary strategies.

Practicing Phonics

There were no significant relationships between the noteworthy statements and the instructional strategy of practicing phonics for teaching vocabulary (Statement #4: χ^2 (8) = 8.843, p = .182; Statement #5: χ^2 (6) = 1.823, p = .935; Statement #7: χ^2 (8) = 12.747, p =.120; Statement #8: χ^2 (6) = 9.188, p =.163; Statement #12: χ^2 (8) = 9.635, p =.291; Statement #14: χ^2 (6) = 4.4909, p =.610). Again, this may be the result of the overwhelming belief in the effectiveness of this strategy.

Read alouds

There were no significant relationships between the noteworthy statements and beliefs in the effectiveness of read alouds as an instructional strategy for vocabulary (Statement #4: χ^2 (6) = 5.923, p = .431; Statement #5: χ^2 (6) = 8.342, p = .214; Statement #7: χ^2 (8) = 5.688, p =.682; Statement #8: χ^2 (6) = 6.713, p =.348; Statement #12: χ^2 (8) = 9.254, p =.321; Statement #14: χ^2 (6) = 3.378, p =.760). There might be little variation due to most reporting that participants believed read-alouds to be effective. Tables presenting the results

of crosstab analyses for each notable statement by reported effectiveness of read alouds can be found in Appendix D.

Spelling Tests

When examining the interactions with spelling tests and beliefs statements, statement #5 (During a lesson, a focus on vocabulary should come after reading tasks, not before) was identified as having a significant relationship with spelling tests as an instructional strategy, χ^2 (15) = 28.554, p = .018. This may indicate that educators who believe vocabulary should come before rather than after reading activities do not believe spelling to be an effective vocabulary teaching strategy. All other statements did not interact with the effectiveness of spelling tests as an instructional strategy (Statement #4: χ^2 (15) = 22.814, p = .088; Statement #7: χ^2 (20) = 22.917, p =.292; Statement #8: χ^2 (15) = 13.971, p =.527; Statement #12: χ^2 (20) = 25.550, p =.181; Statement #14: χ^2 (15) = 26.989, p = .288).

Word Sorting

There were no significant relationships noted between the statements and word sorting as an instructional strategy for vocabulary instruction (Statement #4: χ^2 (12) = 13.030, p = .366; Statement #5: χ^2 (12) = 11.112, p = .519; Statement #7: χ^2 (15) = 7.493, p =.942; Statement #8: χ^2 (12) = 15.050, p =.238; Statement #12: χ^2 (16) = 13.800, p =.613; Statement #14: χ^2 (12) = 9.067, p =.697).

Word Fixes

There were no significant relationships between the statements and word fixes as an instructional strategy for teaching vocabulary (Statement #4: χ^2 (9) = 7.636, p = .571; Statement #5: χ^2 (9) = 16.917, p = .050; Statement #7: χ^2 (12) = 14.706, p =.257; Statement #8: χ^2 (9) = 9.898, p =.358; Statement #12: χ^2 (12) = 20.437, p =.059; Statement #14: χ^2 (9) = 9.857, p =.362).

4. What is the relationship between experience, PD, and vocabulary instruction?

In order to address the fourth research question, I first examined the relationship between the years a participant had been teaching and their beliefs in the effectiveness of different vocabulary instruction strategies. One participant was omitted during this portion of the data analysis for failing to respond to the strategy question. There were no significant relationships found between years teaching and beliefs in effectiveness for each of the listed instruction strategies: Word Wall: $\chi^2(52) = 54.153$, $p = .392$.; Read alouds: $\chi^2(26) = 23.858$, $p = .584$; Word box: $\chi^2(52) = 51.042$, $p = .511$; Vocabulary notebooks: $\chi^2(52) = 60.322$, $p = .200$; Practicing phonics: $\chi^2(52) = 60.322$, $p = .200$; Vocabulary cartoons: $\chi^2(39) = 37.990$, $p = .515$; Spelling tests: $\chi^2(65) = 77.233$, $p = .142$; Word Sorting: $\chi^2(52) = 44.100$, $p = .773$; Word maps: $\chi^2(65) = 72.267$, $p = .250$; Word fixes: $\chi^2(39) = 42.153$, $p = .336$; Word cards: $\chi^2(65) = 64.909$, $p = .479$; Computer-based games on vocabulary: $\chi^2(52) = 57.283$, $p = .285$. The crosstab analyses tables can be found within Appendix D.

Next, I explored the relationship between the number of years participants have taught and the hours they teach vocabulary in a week. There was no significant interaction, $\chi^2(39) = 40.590$, $p = .400$.

Table 3.4.1

Crosstab Analysis for Years Teaching with Hours Teaching Vocabulary in a Week

Years Teaching	Hours Teaching Vocabulary in a Week				
	0-1	1-2	3-4	4-5	**Total**
1-2	1	1	1	0	**3**
4-7	1	4	4	0	**9**
10-11	0	1	1	0	**2**
14-15	0	1	2	0	**3**
19-20	0	1	0	1	**2**
28	0	0	1	0	**1**
30	0	0	1	0	**1**
Total	**3**	**8**	**9**	**1**	**21**

Strategies and Additional Training Sessions

In this section, I will explore the relationship between training experience and the vocabulary strategies. There were no significant relationships related to the number of additional training sessions taken by participants to strategies (Word wall: χ^2 (44) = 51.771, p = .196; Read alouds: χ^2 (22) = 18.696, p = .664; Word box: χ^2 (44) = 49.438, p = .265; Vocabulary notebooks: χ^2 (44) = 38.739, p = .696; Practicing phonics: χ^2 (22) = 19.177, p = .634; Vocabulary cartoons: χ^2 (33) = 26.578, p = .777; Spelling tests: χ^2 (55) = 53.929, p = .515; Word sorting: (44) = 38.063, p = .723; Word maps: χ^2 (55) = 47.517, p = .753; Word fixes χ^2 (33) = 43.736, p = .100; Word cards: χ^2 (55) = 59.778, p = .306; Computer-based games on vocabulary: χ^2 (44) = 37.158, p = .756). The crosstab analyses can be found within Appendix D.

Next, I analyzed whether the number of training sessions was related to the number of hours that participants taught vocabulary in a week. There was no significant relationship, χ^2 (33) = 34.684, p = .387.

Table 3.4.2

Crosstab Analysis for Additional Training Sessions Taken with Hours Teaching Vocabulary in a Week

Additional Training Sessions Taken	Hours Teaching Vocabulary in a Week				
	0-1	1-2	3-4	4-5	**Total**
0	1	1	1	0	**3**
1-7	1	6	4	1	**12**
10	0	0	0	0	**1**
15	1	1	1	0	**1**
20	0	1	1	0	**2**
30	0	0	2	0	**2**
Total	**3**	**8**	**9**	**1**	**21**

Taken together these results suggest that although perceptions about the beliefs in the effectiveness of different strategies varies, these beliefs do not seem to be influenced by factors like years teaching or additional training sessions. With additional training sessions, there is more understanding of the effectiveness for strategies and implementation within the classroom.

Chapter IV: Discussion and Conclusions

This study proposed to answer the following questions:

1) What are the different vocabulary instruction and practices used by elementary educators?
2) What are the educators' perceptions and beliefs towards vocabulary instruction?
3) What is the relationship between educators' beliefs about vocabulary and their vocabulary instructional strategies?
4) What is the relationship between experience, PD, and vocabulary instruction?

Although statistical analysis with the Chi-square test determined that most of the interactions between various factors did not meet the threshold of statistical significance, this study allows further understanding of the perceptions and beliefs for vocabulary instruction and the effectiveness and usage of selected vocabulary strategies that may be incorporated within the classroom. This chapter presents my interpretation of the most relevant results and how they answer the research questions.

1. What are the different vocabulary instruction and practices used by elementary educators?

The most commonly used strategies identified by participants were practicing phonics (68.2%), read alouds (54.6%), computer-based games (54.5%), and word maps (45.5%). Participants indicated that they felt practicing phonics (90.9%) and read alouds (72.7%) to be the most effective strategies for teaching vocabulary.

Practicing Phonics. Participants identified practicing phonics to be an effective strategy for teaching vocabulary (90.9%) and noted that they frequently used the strategy within the classroom (68.2%). To further understand the use of phonics in vocabulary instruction, it is beneficial to explore the use of phonics on its own and connect it to vocabulary. Ehri (2020) addresses the theory of word identity; specifically, when the word is seen, connections are activated in the memory to read the word. By incorporating phonics

within the classroom, learners can create and activate cognitive connections to read and recognize a word; however, word recognition does not equate to a deeper understanding of vocabulary words and their meanings. Phonics may allow a learner to connect a printed word to its pronunciation, but the learner may or may not know the meaning of that word. While participants reported phonics was an effective strategy for vocabulary instruction, there is limited research to support the use of phonics as a strategy for improving vocabulary knowledge (Nation, 2019).

Read alouds. Participants identified read alouds as a second effective strategy (72.7%) and frequently used it (54.6%) within a classroom. Kindle (2010) observed the practices educators use on read alouds between kindergarten and grade 5 and how the practices can develop vocabulary. Kindle (2010) identified that educators use various techniques during read alouds, but do not always provide explicit definitions or synonyms, which were found to be the most effective methods. This suggests that read alouds alone may be most effective when used in combination with other techniques.

Silverman et al. (2013) explained that there are opportunities for using read aloud extension activities that may benefit learners with limited vocabulary knowledge. Extension activities can allow for the reinforcement of words that have been taught and can occur in morning meetings, centres, or small-group instruction (Silverman et al., 2013).

The effectiveness of read alouds is dependent on the characteristic and amount of interaction between the child, their parents or educators (Silverman et al., 2013. p.100). Dialogic reading is one of the well-known interventions for read alouds. Silverman et al. (2013) identified that when asking questions, an extension of conversation, and providing feedback, children are supported to participate and learn through context; they further identified that the use of rich explanations such as: pointing at an illustration, giving a definition or synonym, making a gesture when necessary or using the word in a new context

supported vocabulary development. When read alouds are conducted effectively and repeatedly, the strategy allows learners to have reinforced learning of the vocabulary being taught. In short, read alouds can be effective when used effectively.

Computer-Based Games. With technology evolving and finding increasing use in classrooms (Zou et al., 2021), and, in particular, these participants' classrooms, many teachers turn to games and apps to help teach and reinforce vocabulary skills. More than half of participants (54.5%) identified that they use computer-based games as a strategy for teaching vocabulary. 36.4% of participants identified computer-based games to be somewhat effective, 18.2% identified them as effective, 22.7% identified them as very effective, and 13.6% of participants indicated that they do not use the strategy. These various responses can show uncertainty with this strategy.

Recent attention to vocabulary-based instructional games for learning has shown benefits from their use. Specifically, Zou et al. (2021) conducted a meta-analysis of digital game-based vocabulary learning; they noted that computer-based games on vocabulary have gained attention in recent years and may be beneficial to promoting the short-term and long-term learning of vocabulary but, there is limited research based on digital game-based vocabulary learning. Jalali and Dousti (2012) explored the use of computer-based games in the retention and knowledge of vocabulary and grammar for EFL teachings. Jalali and Dousti (2012) concluded no significant differences between the control and experimental groups but noted that learners showed enthusiasm and positive attitudes toward learning in the computer condition.

Overall, computer-based games on vocabulary are increasing in popularity for learning, but limited research has examined their effectiveness. Results from the current study suggest that despite this limited research, many educators are enthusiastic about the potential benefit of computer-based games for vocabulary learning.

Word Maps. Forty-five percent of participants identified word maps to be commonly used in their practice. Word maps can allow learners to create a network of knowledge around a word and to gain knowledge to use the word. Word maps allow for connections to be formed and to connect to other known words (Rosenbaum, 2001). This strategy allows the learner to be engaged, and they can process the words. Rosenbaum (2001) stated this strategy is beneficial as learners can retrieve a word from a book and find its definition, synonym, expression, and antonym with their rendition of a word map.

Rosenbaum (2001) identified that word maps could allow for deep processing and understanding of words as learners were capable of associating known words, comprehending the words and generating words that connect to the known word. Word maps allow learners to demonstrate their understanding of vocabulary and the connection between concepts they represent. While this strategy was used less commonly than others for the participants in this study, this strategy may show potential for a deep and enriching understanding of vocabulary.

In summary, educators identified several strategies for teaching vocabulary, but the effectiveness of these strategies remains an open question that merits further study.

2. What are the educators' perceptions and beliefs towards vocabulary instruction?

The results showed that participants either agreed or strongly agreed with statements about the importance of teaching vocabulary, but their response to specific strategies and the importance of direct instruction was much more mixed and may indicate the participants lacked familiarity towards some strategies or may not be using them frequently.

Silverman et al. (2013) identified that one effective strategy for incorporating read alouds as a tool for vocabulary instruction is explaining the meaning of words. With the responses to statement 8, participants either agreed or strongly agreed that repeated practice is beneficial for students to learn and use new words. In statement 9, participants were indifferent to the primary role of an educator to explain the meaning of words, however,

63.6% of participants disagreed or were neutral towards the statement. Statement 9 also connects to statement 11 as participants were indifferent towards the belief that vocabulary instruction is not dependent on educators to explain the meaning of words and correct learners. This means that participants felt correcting learners on their errors is not a key role in teaching vocabulary. This finding may suggest that they believe that explaining the meaning of a word or correcting learners is not the prominent role of the educator in the teaching of vocabulary or underestimate the importance of the strategy for word learning.

Notably, statement 12 addresses whether vocabulary learning is more effective when learners independently work out the meaning of words. Participants either disagreed (22.7%), agreed (31.8%), or were neutral (27.3%) to the statement. This finding may suggest that participants disagree as to the amount of vocabulary that should be learned implicitly vs. explicitly. Comparably, responses to statements 13 and 14 emphasize the apparent importance of formal and direct instruction to learners. This suggests that participants identified that direct learning is beneficial for older learners and that formal and direct instruction may be appropriate as a strategy for teaching vocabulary.

Overall, the responses to the statements may suggest that although educators agree that vocabulary instruction is essential, their beliefs about teaching strategies for vocabulary are not uniform and could show that additional training or resources for vocabulary instruction may help identify beneficial strategies for teaching vocabulary.

3. What is the relationship between educators' beliefs about vocabulary and their vocabulary instructional strategies?

For this analysis, I selected the strategies of read alouds, practicing phonics, word sorting, and word fixes based on participants' responses to effectiveness and usage. There were very few statistically significant relationships between educators' beliefs and their chosen strategies, but this does not mean there were not connections. This finding may be

because of near-universal agreement on certain strategies or may result from educators' general uncertainty about effective strategies for teaching vocabulary in the later elementary years in which further research could help to explore. Indeed, the only significant association was with spelling tests. I found that the participants who feel that a vocabulary focus should occur before a reading task find spelling tests ineffective as a vocabulary teaching strategy. This finding is also well established in the research, as literature identifies spelling tests as only meaningful for reinforcing word recognition skills rather than for learning the meaning of words (Ehri, 2020).

In short, although educators indicated strong beliefs about vocabulary instruction, these beliefs do not seem to be directly related to their choices of strategy in the classroom. Further research is necessary to unpack why educators choose the strategies they do.

4. What relationship is between experience, PD, and vocabulary instruction?

As noted previously in the results, there was no significant interaction between the years taught and the belief in effectiveness of any of the strategies in the survey. This finding suggests that length of teaching experience does not determine the perception of effectiveness of vocabulary strategies; however, given the small sample size, there was no fair scale for comparison between the years taught as 12 participants stated they have taught between 1-2 and 4-7 years. Further research could consider allowing more participants from various ranges or types of experience.

When Mardali and Siyyari (2019) explored the practices and beliefs of teaching vocabulary in English as a Foreign Language educators, they also found limited connection between beliefs and teaching practice, yet, they noted differences between externally observed practice and self-perceived beliefs or practices. Mardali and Siyyari (2019) found that educators with more teaching experience had higher self-perceived beliefs than new educators, which means that more experienced educators may have either consciously or

unconsciously inflated their beliefs based on their experience and thus may not accurately reflect their practices. Mardali and Siyyari (2019) also noted that the externally observed practices between new and experienced educators were lower than their self-perceived beliefs and self-perceived practice scores. This shows that the perceived beliefs from educators may not reflect their actual teaching practice. As observed in this study, educators emphasized the importance of teaching vocabulary but indicated a disconnect between the listed vocabulary strategies in this study to their beliefs.

McDonald-Connor et al. (2005) explored the influences of student learning on vocabulary and reading skills within the first grade. One of the influences explored was teacher qualification, with an emphasis on the educator's credentials, years of education, and experience. McDonald-Connor et al. (2005) found that when educators were involved in academic activities in the classroom and also responsive to students; the students gained more understanding towards vocabulary skills. Educators that had more education tended to have students with weaker reading skills; meaning educators with well-adverse tools and strategies can identify solutions for students with reading difficulties. This finding might show additional training may not influence student achievement in vocabulary, but perhaps being involved in their academic activities may be beneficial.

Taken together, the current study supports this body of research suggesting that educators may perceive their teachings to be more valuable than what is observed in the classroom. Their beliefs on the topic of vocabulary and strategies may not reflect their actual use of strategies in the classroom. Further research is needed to explore educators' actual in-classroom behaviour, and how it connects with their beliefs about vocabulary and their perceptions of effectiveness of strategies. Unfortunately, an observational study was not possible due to pandemic restrictions and resulting school closures.

Study Limitations

Although this study shows some important findings about educators' perceptions of vocabulary instruction for elementary-aged children, there are some important limitations. First, the sample size for this study was small. Future research is needed to replicate these findings with a larger sample. Additionally, I purposefully did not define or explain the individual strategies, allowing participants to define those concepts for themselves. That methodological decision means that participants may have indicated that a strategy was not effective due to a different interpretation of what the strategy is than other participants may have. As noted in the discussion about vocabulary instructional strategies, there are several ways to incorporate and use any strategy. Future research could explore how educators actually implement these strategies in the classroom through the use of in-class observation and reflective interviews or journaling, to provide additional clarity.

Furthermore, COVID protocols for the university and the local school divisions prevented direct classroom observation, so I had to rely on teacher self-report as the primary method of data collection. Self-report measures are often vulnerable to desirability effects, where participants respond as they believe they should or in a way that they believe might be most aligned with the researcher's perspective (McDonald-Connor et al., 2005). Future research should include some measure of direct observation for confirmatory purposes.

Practical Application

Given the observed disconnect between educators' beliefs about the importance of vocabulary and their implementation of different vocabulary learning strategies, educators may benefit from professional development training surrounding the use of specific vocabulary strategies with older elementary learners. With more focus on training and educating educators to use effective vocabulary learning strategies, upper elementary students

would experience more effective and efficient instruction that meets their needs. If educators have better training in how to teach vocabulary, their use of strategies may begin to align with their beliefs about the importance of vocabulary instruction overall and of specific instructional strategies. This training could be introduced in teacher preparation programs, learning resources, or professional development.

Conclusion

This study has addressed its research questions by identifying that educators between grades 2 and 5 perceive practicing phonics, read alouds, spelling tests, word fixes, and word sorting to be effective strategies to teach vocabulary. This study also showed that educators believe that they should present target vocabulary words and develop activities for learners/students to practice them. There was inconsistent support among educators for allowing learners to work out the meaning of words independently. There was also inconsistent support in the importance of formal instruction, with the majority of participants saying both that formal instruction was important yet denying that educators should directly instruct vocabulary. I found no direct connection between reported beliefs about specific vocabulary strategies and either experience teaching or history of extra training through additional qualification courses.

This study has made an important first step in understanding how educators approach vocabulary instruction in the older elementary years – a process largely marked by confusion and a mismatch between their beliefs and their understanding and use of specific beneficial strategies for teaching vocabulary. Given the importance of vocabulary for crucial academic skills like reading comprehension, helping educators meet their goals in vocabulary instruction is an important part of preservice teacher education and continuing professional development for experienced educators.

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Appendix A: Survey on Beliefs and Perceptions of Vocabulary Instruction

1. What grade are you currently teaching?

2. Please indicate how many years you have been teaching:

3. Please indicate how many additional training sessions (e.g. PD/AQ) have you taken in language and literacy?

Questions 4-17:
For each statement below, please select whether you (1) Strongly Agree (2) Agree (3) Neither Agree or Disagree (4) Disagree (5) Strongly Disagree

4. Educators should present vocabulary to learners before expecting them to use it.
5. Learners who are aware of vocabulary can use the language more effectively than those who are not.
6. Exercises that get learners to practise vocabulary help learners develop fluency in using vocabulary.
7. Teaching English vocabulary directly is more appropriate for older learners.
8. During lessons, a focus on vocabulary should come after reading tasks, not before.
9. Vocabulary should be taught separately, not integrated with other skills such as reading and writing.
10. In a communicative approach to language teaching vocabulary is not taught directly.
11. In learning vocabulary, repeated practice allows learners to use words fluently.
12. In teaching vocabulary, a teacher's main role is to explain the meaning of the words.
13. It is important for learners to know vocabulary
14. Correcting learners' vocabulary errors in English is one of the teacher's key roles.
15. Vocabulary learning is more effective when learners work out the meaning of words for themselves
16. Indirect vocabulary teaching is more appropriate with younger than with older learners.
17. Formal vocabulary teaching does not help learners become more fluent.

Questions 18-29:
For each statement below, please select whether you
(1) Not Effective (2) Least Effective (3) Somewhat Effective (4) Effective (5) Very Effective (6) I Don't Use This Strategy and;

How often the strategy is used:

(1) Never (2) Sometimes (3) Often (4) Always

18. In your own experience, please rank the effectiveness of the following strategy: WORD WALL
19. In your own experience, please rank the effectiveness of the following strategy: READ ALOUDS
20. In your own experience, please rank the effectiveness of the following strategy: WORD BOX

21. In your own experience, please rank the effectiveness of the following strategy: VOCABULARY NOTEBOOKS
22. In your own experience, please rank the effectiveness of the following strategy: PRACTICING PHONICS
23. In your own experience, please rank the effectiveness of the following strategy: VOCABULARY CARTOONS
24. In your own experience, please rank the effectiveness of the following strategy: SPELLING TESTS
25. In your own experience, please rank the effectiveness of the following strategy: WORD SORTING
26. In your own experience, please rank the effectiveness of the following strategy: WORD MAPS
27. In your own experience, please rank the effectiveness of the following strategy: WORD FIXES (on purpose errors)
28. In your own experience, please rank the effectiveness of the following strategy: WORD CARDS (cue cards)
29. In your own experience, please rank the effectiveness of the following strategy: COMPUTER BASED GAMES ON VOCABULARY
30. Please indicate how often you teach vocabulary in a week:

0-1 HOURS 1-2 HOURS 3-4 HOURS 4-5 HOURS NOT APPLICABLE

31. Are there any strategies for vocabulary you have been wanting to implement in the classroom?

YES NO

32. If yes, explain the strategy:

Appendix B: Information Letter

Education Department
e: smbrown1@lakeheadu.ca

Letter of Information

Dear Potential Participant:

I would like to invite you to participate in a new research project conducted by me, Samantha Browne, a Masters of Education student, along with my supervisor, Dr. Tanya Kaefer, with the Faculty of Education at Lakehead University. In this research project, entitled "Teacher's Beliefs and Perceptions Towards Vocabulary Instruction", I am examining teacher beliefs and perceptions towards vocabulary instruction and vocabulary instructional strategies from Grades 2 to 5.

PURPOSE

Vocabulary instruction has shown to be beneficial for younger children in comprehension, since children would understand and learn the context or meaning. Yet, there is limited research to understand how vocabulary instruction helps the older grades. This study will examine how you as an educator feel towards vocabulary instruction and practices. Your perspective will be very helpful in this research study. You will not be asked to identify individual students, but rather only asked about your perspectives and experiences as a classroom teacher.

WHAT INFORMATION WILL BE COLLECTED?

If you agree, you will participate in a single online survey. During the online survey, you will answer questions on a scale, ranked from effective to not effective. The survey will last about 10-20 minutes.

WHAT IS REQUESTED OF ME AS A PARTICIPANT?

For this study, the survey consists of 32 questions that will cover different beliefs towards vocabulary, vocabulary instruction and your experience on effectiveness for selected instructional strategies. I will also collect demographic information like grade teaching, additional training, and years teaching in order to accurately report on the sample.

WHAT ARE MY RIGHTS AS A PARTICIPANT?

Your principal and school board will have no knowledge whether you are participating in this study or not, and your decision to participate or not in this study will have no impact on your employment. There are no risks or direct benefits associated with the study.

Your permission and participation are entirely voluntary. You may decline to participate or stop participating in the study at any time. You have the right to refuse to answer any question or questions.

Education Department
e: smbrown1@lakeheadu.ca

WHAT ARE THE RISKS AND BENEFITS?

There are no risks or direct benefits associated with the study.

HOW WILL MY CONFIDENTIALITY BE MAINTAINED?

This is an anonymized survey and information is only ever reported in group statistics. Your privacy and identity will be carefully protected. None of the results will ever be linked with your name or any other identifying information. While data is being analyzed it will be stored on a password protected server.

Please note that the online survey tool used in the study, Survey Monkey, is hosted by a server located in the USA. The US Patriot Act permits U.S. law enforcement officials, for the purpose of anti-terrorism investigation, to seek a court order that allows access to the personal records of any person without the person's knowledge. In view of this we cannot absolutely guarantee the full confidentiality and anonymity of your data. With your consent to participate in this study, you acknowledge this.

WHAT WILL MY DATA BE USED FOR:

Through this research project, I hope to identify what vocabulary instruction and practices are implemented between elementary teachers as well as identify vocabulary teaching practices throughout different elementary grades.

WHERE WILL MY DATA BE STORED?

Once the study is complete, all data will be stored on a hard drive that is password protected. The hard drive is stored within a locked room (Dr. Kaefer's office), and will be maintained for a minimum of 5 years.

HOW CAN I RECEIVE A COPY OF THE RESEARCH RESULTS?

The findings from this study may be published for academic and professional audiences. To receive a copy of any presentations or publications stemming from this research project, please email Samantha Browne, smbrown1@lakeheadu.ca or Tanya Kaefer, tkaefer@lakeheadu.ca, and a document will be sent as soon as possible

WHAT IF I WANT TO WITHDRAW FROM THE STUDY?

Anonymous surveys cannot be withdrawn.

RESEARCHER CONTACT INFORMATION:

Samantha Browne, smbrown1@lakeheadu.ca or Tanya Kaefer, tkaefer@lakeheadu.ca

Education Department
e: smbrown1@lakeheadu.ca

RESEARCH ETHICS BOARD REVIEW AND APPROVAL:

This research study has been reviewed and approved by the Lakehead University Research Ethics Board. If you have any questions related to the ethics of the research and would like to speak to someone outside of the research team, please contact Sue Wright at the Research Ethics Board at 807-343-8283 or research@lakeheadu.ca.

I have read and agree to the above information and consent to proceed to the online survey https://www.surveymonkey.com/r/5DYGWJ6

Appendix C: Consent Form

Education Department
e: smbrown1@lakeheadu.ca

First Page of Survey

Dear Potential Participant:

I would like to invite you to participate in a new research project conducted by me, Samantha Browne, a Masters of Education student, along with my supervisor, Dr. Tanya Kaefer, with the Faculty of Education at Lakehead University. In this research project, entitled "Teacher's Beliefs and Perceptions Towards Vocabulary Instruction", I am examining teacher beliefs and perceptions towards vocabulary instruction and vocabulary instructional strategies from Grades 2 to 5.

PURPOSE

Vocabulary instruction has shown to be beneficial for younger children in comprehension, since children would understand and learn the context or meaning. Yet, there is limited research to understand how vocabulary instruction helps the older grades. This study will examine how you as an educator feel towards vocabulary instruction and practices. Your perspective will be very helpful in this research study. You will not be asked to identify individual students, but rather only asked about your perspectives and experiences as a classroom teacher

WHAT IS REQUESTED OF ME AS A PARTICIPANT?

If you agree, you will participate in a single online survey. During the online survey, you will answer questions on a scale, ranked from effective to not effective. The survey will last about 10-20 minutes.

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WHAT ARE MY RIGHTS AS A PARTICIPANT?

Your principal and school board will have no knowledge whether you are participating in this study or not, and your decision to participate or not in this study will have no impact on your employment. There are no risks or direct benefits associated with the study.

Your permission and participation are entirely voluntary. You may decline to participate or stop participating in the study at any time. You have the right to refuse to answer any question or questions.

Education Department
e: smbrown1@lakeheadu.ca

WHAT ARE THE RISKS AND BENEFITS?

There are no risks or direct benefits associated with the study.

HOW WILL MY CONFIDENTIALITY BE MAINTAINED?

This is an anonymized survey and information is only ever reported in group statistics. Your privacy and identity will be carefully protected. None of the results will ever be linked with your name or any other identifying information. While data is being analyzed it will be stored on a password protected server.

Please note that the online survey tool used in the study, Survey Monkey, is hosted by a server located in the USA. The US Patriot Act permits U.S. law enforcement officials, for the purpose of anti-terrorism investigation, to seek a court order that allows access to the personal records of any person without the person's knowledge. In view of this we cannot absolutely guarantee the full confidentiality and anonymity of your data. With your consent to participate in this study, you acknowledge this.

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Through this research project, I hope to identify what vocabulary instruction and practices are implemented between elementary teachers as well as identify vocabulary teaching practices throughout different elementary grades.

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HOW CAN I RECEIVE A COPY OF THE RESEARCH RESULTS?

The findings from this study may be published for academic and professional audiences. To receive a copy of any presentations or publications stemming from this research project, please email Samantha Browne, smbrown1@lakeheadu.ca or Tanya Kaefer, tkaefer@lakeheadu.ca, and a document will be sent as soon as possible

WHAT IF I WANT TO WITHDRAW FROM THE STUDY?

Anonymous surveys cannot be withdrawn.

RESEARCHER CONTACT INFORMATION:

Samantha Browne, smbrown1@lakeheadu.ca or Tanya Kaefer, tkaefer@lakeheadu.ca

RESEARCH ETHICS BOARD REVIEW AND APPROVAL:

Education Department
e: smbrown1@lakeheadu.ca

This research study has been reviewed and approved by the Lakehead University Research Ethics Board. If you have any questions related to the ethics of the research and would like to speak to someone outside of the research team, please contact Sue Wright at the Research Ethics Board at 807-343-8283 or research@lakeheadu.ca.

I have read and agree to the above information and consent to proceed to the online survey https://www.surveymonkey.com/r/5DYGWJ6

Appendix D: Crosstab Analysis from Research Question 3 & 4

Table 3.3.1.

Crosstab Analysis for Statement #4 with Practicing Phonics

Effectiveness of Practicing Phonics	Statement #4: Teaching English vocabulary directly is more appropriate for older learners.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	0	1	0	**1**
Effective	0	0	7	1	0	**8**
Very Effective	0	2	4	4	2	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**0**	**2**	**11**	**6**	**2**	**21**

Table 3.3.2.

Crosstab Analysis for Statement #5 with Practicing Phonics

Effectiveness of Practicing Phonics	Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	0	1	0	**1**
Effective	0	0	2	5	1	**8**
Very Effective	1	0	4	6	1	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**1**	**0**	**7**	**12**	**2**	**21**

Table 3.3.3.

Crosstab Analysis for Statement #7 with Practicing Phonics

Effectiveness of Practicing Phonics	Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	1	0	0	**1**
Effective	0	1	3	2	2	**0**
Very Effective	1	0	4	9	2	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**1**	**1**	**4**	**11**	**4**	**21**

Table 3.3.4.

Crosstab Analysis for Statement #8 with Practicing Phonics

Effectiveness of Practicing Phonics	Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	1	0	0	0	**1**
Effective	2	2	3	1	0	**8**
Very Effective	6	6	0	0	0	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**8**	**9**	**3**	**1**	**0**	**21**

Table 3.3.5.

Crosstab Analysis for Statement #12 with Practicing Phonics

Effectiveness of Practicing Phonics	Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	1	0	0	0	**1**
Effective	0	5	1	1	1	**5**
Very Effective	2	1	5	3	1	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**2**	**7**	**6**	**4**	**2**	**21**

Table 3.3.6.

Crosstab Analysis for Statement #14 with Practicing Phonics

Effectiveness of Practicing Phonics	Statement #14: Formal vocabulary teaching does not help learners become more fluent.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	0	1	0	**1**
Effective	0	1	5	1	1	**8**
Very Effective	0	0	2	4	5	**11**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**0**	**1**	**3**	**10**	**6**	**20**

Table 3.3.7.

Crosstab Analysis for Statement #4 with Read alouds

Effectiveness of Read alouds	Statement #4: Teaching English vocabulary directly is more appropriate for older learners.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	1	2	2	1	**5**
Effective	0	1	2	0	1	**4**
Very Effective	0	0	7	4	1	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**0**	**2**	**11**	**6**	**2**	**21**

Table 3.3.8.

Crosstab Analysis for Statement #5 with Read alouds

Effectiveness of Read alouds	Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	2	2	1	**5**
Effective	0	0	3	1	0	**0**
Very Effective	1	0	1	9	1	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**1**	**0**	**6**	**12**	**2**	**21**

Table 3.3.9.

Crosstab Analysis for Statement #7 with Read alouds

Effectiveness of Read alouds	Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	0	3	1	**4**
Effective	0	0	1	4	0	**5**
Very Effective	1	1	3	4	3	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**1**	**1**	**4**	**11**	**4**	**21**

Table 3.3.10.

Crosstab Analysis for Statement #8 with Read alouds

Effectiveness of Read alouds	Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	1	3	0	1	0	**5**
Effective	2	2	0	0	0	**4**
Very Effective	5	4	3	0	0	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**8**	**9**	**3**	**1**	**0**	**21**

Table 3.3.11.

Crosstab Analysis for Statement #12 with Read alouds

Effectiveness of Read alouds	Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.					
	Agree	Disagree	Neither Agree or Disagree	Strongly Agree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	3	1	1	0	0	**5**
Effective	0	1	3	0	0	**4**
Very Effective	4	2	2	2	2	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**7**	**4**	**6**	**2**	**2**	**21**

Table 3.3.12.

Crosstab Analysis for Statement #14 with Read alouds

Effectiveness of Read alouds	Statement #14: Formal vocabulary teaching does not help learners become more fluent.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	0	3	2	**5**
Effective	0	0	0	2	1	**3**
Very Effective	0	1	3	5	3	**12**
I Don't Use This Strategy	0	0	0	0	0	**0**
Total	**0**	**1**	**3**	**10**	**6**	**20**

Table 3.3.13.

Crosstab Analysis for Statement #4 with Spelling Tests

Effectiveness of Spelling Tests	Statement #4: Teaching English vocabulary directly is more appropriate for older learners.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	2	3	0	0	**5**
Least Effective	0	0	2	2	0	**4**
Somewhat Effective	0	0	3	2	1	**6**
Effective	0	0	1	2	0	**3**
Very Effective	0	0	0	0	1	**1**
I Don't Use This Strategy	0	0	2	0	0	**2**
Total	**0**	**2**	**11**	**7**	**2**	**21**

Table 3.3.14.

Crosstab Analysis for Statement #5 with Spelling Tests

Effectiveness of Spelling Tests	Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	2	3	0	**5**
Least Effective	0	0	0	3	1	**4**
Somewhat Effective	0	0	3	2	1	**6**
Effective	3	0	0	0	0	**3**
Very Effective	1	0	0	0	0	**1**
I Don't Use This Strategy	0	0	1	1	0	**2**
Total	**1**	**0**	**6**	**9**	**2**	**21**

Table 3.3.15.

Crosstab Analysis for Statement #7 with Spelling Tests

Effectiveness of Spelling Tests	Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	1	0	0	4	0	**5**
Least Effective	0	0	2	1	1	**4**
Somewhat Effective	0	0	0	3	2	**6**
Effective	0	0	0	2	1	**3**
Very Effective	0	0	1	1	0	**1**
I Don't Use This Strategy	0	1	1	0	0	**2**
Total	**1**	**0**	**4**	**12**	**4**	**21**

Table 3.3.16.

Crosstab Analysis for Statement #8 with Spelling Tests

Effectiveness of Spelling Tests	Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	1	2	1	1	0	**5**
Least Effective	0	3	1	0	0	**4**
Somewhat Effective	4	2	0	0	0	**6**
Effective	1	2	0	0	0	**3**
Very Effective	1	0	0	0	0	**1**
I Don't Use This Strategy	1	0	1	0	0	**2**
Total	**8**	**10**	**3**	**1**	**0**	**21**

Table 3.3.17.

Crosstab Analysis for Statement #12 with Spelling Tests

Effectiveness of Spelling Tests	Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	1	2	2	1	0	**5**
Least Effective	0	2	1	0	1	**4**
Somewhat Effective	1	1	2	2	0	**6**
Effective	0	0	1	2	0	**3**
Very Effective	0	0	0	0	1	**1**
I Don't Use This Strategy	0	2	0	0	0	**2**
Total	**2**	**7**	**6**	**5**	**1**	**21**

Table 3.3.18.

Crosstab Analysis for Statement #14 with Spelling Tests

Effectiveness of Spelling Tests	Statement #14: Formal vocabulary teaching does not help learners become more fluent.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	1	5	0	**5**
Least Effective	0	0	1	1	1	**4**
Somewhat Effective	0	0	0	2	3	**6**
Effective	0	0	0	1	2	**3**
Very Effective	0	0	0	0	1	**1**
I Don't Use This Strategy	0	1	1	1	0	**2**
Total	**0**	**1**	**3**	**10**	**6**	**20**

Table 3.3.19.

Crosstab Analysis for Statement #4 with Word Sorting

Effectiveness of Word Sorting	Statement #4: Teaching English vocabulary directly is more appropriate for older learners.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	1	0	0	0	**1**
Somewhat Effective	0	0	3	1	0	**4**
Effective	0	1	5	4	1	**10**
Very Effective	0	0	1	0	0	**1**
I Don't Use This Strategy	0	0	2	2	1	**5**
Total	**0**	**2**	**11**	**6**	**2**	**21**

Table 3.3.20.

Crosstab Analysis for Statement #5 with Word Sorting

Effectiveness of Word Sorting	Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	1	0	0	**1**
Somewhat Effective	0	0	0	3	1	**4**
Effective	0	0	4	6	0	**10**
Very Effective	0	0	0	1	0	**1**
I Don't Use This Strategy	1	0	1	2	1	**5**
Total	**1**	**0**	**6**	**12**	**2**	**21**

Table 3.3.21.

Crosstab Analysis for Statement #7 with Word Sorting

Effectiveness of Word Sorting	Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	1	0	**1**
Somewhat Effective	0	0	1	2	1	**4**
Effective	1	1	1	4	3	**10**
Very Effective	0	0	0	1	0	**1**
I Don't Use This Strategy	0	0	2	3	0	**5**
Total	**0**	**1**	**4**	**11**	**4**	**21**

Table 3.3.22.

Crosstab Analysis for Statement #8 with Word Sorting

Effectiveness of Word Sorting	Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	1	0	0	0	**1**
Somewhat Effective	0	1	2	1	0	**4**
Effective	6	4	0	0	0	**10**
Very Effective	0	1	0	0	0	**1**
I Don't Use This Strategy	2	2	1	0	0	**5**
Total	**8**	**9**	**3**	**1**	**0**	**21**

Table 3.3.23.

Crosstab Analysis for Statement #12 with Word Sorting

Effectiveness of Word Sorting	Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	1	0	0	0	**1**
Somewhat Effective	0	2	1	0	1	**4**
Effective	2	2	4	2	0	**10**
Very Effective	0	0	1	0	0	**1**
I Don't Use This Strategy	0	2	0	2	1	**5**
Total	**2**	**7**	**6**	**4**	**2**	**21**

Table 3.3.24.

Crosstab Analysis for Statement #14 with Word Sorting

Effectiveness of Word Sorting	Statement #14: Formal vocabulary teaching does not help learners become more fluent.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	1	0	**1**
Somewhat Effective	0	0	0	3	1	**4**
Effective	0	0	2	5	2	**9**
Very Effective	0	0	0	0	1	**1**
I Don't Use This Strategy	0	1	1	1	2	**5**
Total	**0**	**1**	**3**	**10**	**6**	**20**

Table 3.3.25.

Crosstab Analysis for Statement #4 with Word Fixes

Effectiveness of Word Fixes (on purpose errors)	Statement #4: Teaching English vocabulary directly is more appropriate for older learners.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	1	3	0	0	**4**
Effective	0	1	3	3	2	**9**
Very Effective	0	0	1	0	0	**1**
I Don't Use This Strategy	0	0	4	3	0	**7**
Total	**0**	**2**	**7**	**6**	**2**	**21**

Table 3.3.26.

Crosstab Analysis for Statement #5 with Word Fixes

Effectiveness of Word Fixes (on purpose errors)	Statement #5: During lessons, a focus on vocabulary should come after reading tasks, not before.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	2	2	0	**4**
Effective	1	0	4	4	0	**9**
Very Effective	0	0	0	0	1	**1**
I Don't Use This Strategy	0	0	0	6	1	**7**
Total	**1**	**0**	**6**	**12**	**2**	**21**

Table 3.3.27.

Crosstab Analysis for Statement #7 with Word Fixes

Effectiveness of Word Fixes (on purpose errors)	Statement #7: A communicative approach, in which vocabulary is not taught directly, is most effective.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	0	3	1	0	**4**
Effective	0	1	0	6	2	**9**
Very Effective	0	0	0	1	0	**1**
I Don't Use This Strategy	1	0	1	3	2	**7**
Total	**1**	**1**	**4**	**11**	**2**	**21**

Table 3.3.28.

Crosstab Analysis for Statement #8 with Word Fixes

Effectiveness of Word Fixes (on purpose errors)	Statement #8: In learning vocabulary, repeated practice allows learners to use words fluently.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	3	1	0	0	**4**
Effective	5	4	0	0	0	**9**
Very Effective	1	0	0	0	0	**1**
I Don't Use This Strategy	2	2	2	1	0	**7**
Total	**8**	**9**	**3**	**11**	**0**	**21**

Table 3.3.29.

Crosstab Analysis for Statement #12 with Word Fixes

Effectiveness of Word Fixes (on purpose errors)	Statement #12: Vocabulary learning is more effective when learners work out the meaning of words for themselves.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	4	0	0	0	**4**
Effective	0	1	4	3	1	**9**
Very Effective	0	0	0	0	0	**1**
I Don't Use This Strategy	2	2	2	1	1	**7**
Total	**2**	**7**	**6**	**4**	**2**	**21**

Table 3.3.30.

Crosstab Analysis for Statement #14 with Word Fixes

Effectiveness of Word Fixes (on purpose errors)	Statement #14: Formal vocabulary teaching does not help learners become more fluent.					
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	**Total**
Not Effective	0	0	0	0	0	**0**
Least Effective	0	0	0	0	0	**0**
Somewhat Effective	0	1	1	2	0	**4**
Effective	2	0	2	4	0	**8**
Very Effective	1	0	0	0	0	**1**
I Don't Use This Strategy	3	0	0	4	1	**7**
Total	**6**	**1**	**3**	**10**	**0**	**20**

Table 3.4.3.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Word Wall

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **WORD WALL**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	3	0	0	0	**3**
4-7	1	0	3	2	2	1	**9**
10-11	0	0	1	1	0	0	**2**
14-15	0	0	1	1	1	0	**3**
19-20	1	0	0	0	1	0	**2**
28	0	0	1	0	0	0	**1**
30	0	0	0	0	0	1	**1**
Total	**2**	**0**	**9**	**4**	**4**	**2**	**21**

Table 3.4.4.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Read alouds

Years Teaching	**In your own experience, please rank the effectiveness of the following strategy: READ ALOUDS**						
	Not Effective	**Least Effective**	**Somewhat Effective**	**Effective**	**Very Effective**	**I Don't Use This Strategy**	**Total**
1-2	0	0	1	0	2	0	**3**
4-7	0	0	3	2	4	0	**9**
10-11	0	0	1	0	1	0	**2**
14-15	0	0	0	2	1	0	**3**
19-20	0	0	0	0	2	0	**2**
28	0	0	0	0	1	0	**1**
30	0	0	1	0	1	0	**1**
Total	**0**	**0**	**5**	**4**	**10**	**2**	**21**

Table 3.4.5.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Word Box

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **WORD BOX**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	0	0	1	2	**3**
4-7	0	0	1	1	2	7	**11**
10-11	0	0	0	1	0	1	**2**
14-15	0	1	0	1	0	1	**3**
19-20	0	0	0	0	0	2	**2**
28	0	0	1	0	0	0	**1**
30	0	0	0	0	0	1	**1**
Total	**0**	**1**	**2**	**3**	**3**	**14**	**21**

Table 3.4.6.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Vocabulary Notebooks

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **VOCABULARY NOTEBOOKS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	1	2	0	0	0	**3**
4-7	0	0	6	2	0	1	**8**
10-11	0	0	1	1	0	0	**2**
14-15	0	0	2	0	0	1	**3**
19-20	0	0	0	1	0	1	**2**
28	0	1	0	0	0	0	**1**
30	0	0	0	0	1	0	**1**
Total	**0**	**2**	**11**	**4**	**3**	**3**	**21**

Table 3.4.7.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Practicing Phonics

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **PRACTICING PHONICS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	1	1	1	0	**3**
4-7	0	0	0	4	5	0	**9**
10-11	0	0	0	1	1	0	**2**
14-15	0	0	0	2	1	0	**3**
19-20	0	0	0	0	2	0	**2**
28	0	0	0	0	1	0	**1**
30	0	0	0	0	1	0	**1**
Total	**0**	**0**	**1**	**8**	**12**	**0**	**21**

Table 3.4.8.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Vocabulary Cartoons

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **VOCABULARY CARTOONS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	1	0	0	0	0	2	**3**
4-7	0	0	0	2	0	7	**9**
10-11	0	0	0	0	0	2	**2**
14-15	0	0	0	1	0	2	**3**
19-20	0	0	0	0	0	2	**2**
28	0	0	0	0	0	1	**1**
30	0	0	0	0	1	0	**1**
Total	**1**	**0**	**0**	**3**	**1**	**16**	**21**

Table 3.4.9.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Spelling Tests

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **SPELLING TESTS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	2	1	0	0	0	0	**3**
4-7	3	3	1	1	0	1	**9**
10-11	0	0	1	0	0	1	**2**
14-15	0	0	3	0	0	0	**3**
19-20	0	0	0	0	1	0	**1**
28	0	0	0	1	0	0	**1**
30	0	0	1	1	0	0	**2**
Total	**5**	**4**	**6**	**3**	**1**	**2**	**21**

Table 3.4.10.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Word Sorting

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **WORD SORTING**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	1	1	0	1	**3**
4-7	0	1	2	2	1	3	**9**
10-11	0	0	0	2	0	0	**2**
14-15	0	0	1	2	0	0	**3**
19-20	0	0	0	1	0	1	**2**
28	0	0	0	1	0	0	**1**
30	0	0	0	1	0	0	**1**
Total	**0**	**1**	**4**	**10**	**1**	**5**	**21**

Table 3.4.11.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Word Maps

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **WORD MAPS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	1	0	1	0	0	1	**3**
4-7	0	0	1	4	0	4	**9**
10-11	0	0	0	1	1	1	**2**
14-15	0	0	2	1	0	0	**3**
19-20	0	1	0	0	0	1	**2**
28	0	0	1	0	0	0	**1**
30	0	0	0	1	0	0	**1**
Total	**1**	**1**	**5**	**7**	**1**	**6**	**21**

Table 3.4.12.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Word Fixes

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **WORD FIXES (on purpose errors)**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	0	0	0	3	**3**
4-7	0	0	3	2	1	3	**9**
10-11	0	0	0	2	0	0	**2**
14-15	0	0	1	2	0	0	**3**
19-20	0	0	0	2	0	0	**2**
28	0	0	0	1	0	0	**1**
30	0	0	0	0	0	1	**1**
Total	**0**	**0**	**4**	**9**	**1**	**7**	**21**

Table 3.4.13.

Crosstab Analysis for Years Teaching & Effectiveness of Strategy – Word Cards

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **WORD CARDS (cue cards)**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	1	0	0	1	**2**
4-7	1	0	0	1	1	6	**9**
10-11	0	1	1	0	1	1	**4**
14-15	0	0	0	2	0	1	**3**
19-20	0	0	0	0	0	2	**2**
28	0	0	1	1	0	0	**2**
30	0	0	0	0	1	0	**1**
Total	**1**	**1**	**2**	**4**	**2**	**11**	**21**

Table 3.4.14.

Crosstab Analysis on Years Teaching & Effectiveness of Strategy – Computer Based Games on Vocabulary

Years Teaching	In your own experience, please rank the effectiveness of the following strategy: **COMPUTER BASED GAMES ON VOCABULARY**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
1-2	0	0	0	1	1	1	**3**
4-7	0	0	5	1	2	1	**9**
10-11	0	0	1	0	1	0	**2**
14-15	0	0	2	1	0	0	**3**
19-20	0	1	0	0	0	1	**2**
28	0	0	0	1	0	0	**1**
30	0	0	0	0	1	0	**1**
Total	**0**	**1**	**8**	**4**	**5**	**3**	**21**

Table 3.4.15.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy - Word Wall

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **WORD WALL**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	3	0	0	0	**3**
1-7	1	0	5	3	2	1	**12**
10	0	0	0	1	0	0	**1**
15	1	0	0	0	0	0	**1**
20	0	0	0	0	2	0	**2**
30	0	0	1	0	0	1	**2**
Total	**2**	**0**	**9**	**4**	**4**	**2**	**21**

Table 3.4.16.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Read alouds

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **READ ALOUDS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	2	0	1	0	**3**
1-7	0	0	2	3	7	0	**11**
10	0	0	0	0	1	0	**1**
15	0	0	1	0	0	0	**1**
20	0	0	0	1	1	0	**2**
30	0	0	0	0	2	0	**2**
Total	**0**	**0**	**5**	**4**	**12**	**0**	**21**

Table 3.4.17.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy - Word Box

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **WORD BOX**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	0	0	0	3	**3**
1-7	0	1	1	0	3	7	**12**
10	0	0	0	1	0	0	**1**
15	0	0	0	1	0	0	**1**
20	0	0	0	1	0	1	**2**
30	0	0	1	0	0	1	**2**
Total	**0**	**1**	**2**	**3**	**3**	**12**	**21**

Table 3.4.18.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy - Vocabulary Notebooks

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **VOCABULARY NOTEBOOKS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	1	1	1	0	0	**3**
1-7	0	0	8	2	0	2	**12**
10	0	0	1	0	0	0	**1**
15	0	0	1	0	0	0	**1**
20	0	0	0	1	0	1	**2**
30	0	1	0	0	1	0	**2**
Total	**0**	**2**	**11**	**4**	**1**	**3**	**21**

Table 3.4.19.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Practicing Phonics

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **PRACTICING PHONICS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	1	0	2	0	**3**
1-7	0	0	0	6	6	0	**12**
10	0	0	0	1	0	0	**1**
15	0	0	0	1	0	0	**1**
20	0	0	0	0	2	0	**2**
30	0	0	0	0	2	0	**2**
Total	**0**	**0**	**1**	**8**	**12**	**0**	**21**

Table 3.4.20.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Vocabulary Cartoons

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **VOCABULARY CARTOONS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	0	1	0	2	**3**
1-7	0	0	0	3	0	9	**12**
10	0	0	0	0	0	1	**1**
15	0	0	0	0	0	1	**1**
20	0	0	0	0	0	2	**2**
30	0	0	0	0	1	1	**2**
Total	**0**	**0**	**0**	**3**	**1**	**16**	**21**

Table 3.4.21.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Spelling Tests

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **SPELLING TESTS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	1	1	1	0	0	0	**3**
1-7	3	3	3	1	1	1	**12**
10	0	0	0	0	0	1	**1**
15	1	0	0	0	0	0	**1**
20	0	0	1	1	0	0	**2**
30	0	0	1	1	0	0	**2**
Total	**5**	**4**	**6**	**3**	**1**	**2**	**21**

Table 3.4.22.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Word Sorting

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **WORD SORTING**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	0	2	0	1	**3**
1-7	0	1	3	3	1	4	**12**
10	0	0	0	1	0	0	**1**
15	0	0	1	0	0	0	**1**
20	0	0	0	2	0	0	**2**
30	0	0	0	2	0	0	**2**
Total	**0**	**1**	**4**	**10**	**1**	**5**	**21**

Table 3.4.23.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Word Maps

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **WORD MAPS**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	1	0	0	0	1	1	**3**
1-7	0	1	3	5	0	3	**12**
10	0	0	0	1	0	0	**1**
15	0	0	0	0	0	1	**1**
20	0	0	1	0	0	1	**2**
30	0	0	1	1	0	0	**2**
Total	**1**	**1**	**5**	**7**	**1**	**6**	**21**

Table 3.4.24.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Word Fixes

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **WORD FIXES (on purpose errors)**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	0	1	0	2	**3**
1-7	4	0	0	4	1	3	**12**
10	0	0	0	1	0	0	**1**
15	0	0	0	0	0	1	**1**
20	0	0	0	2	0	0	**2**
30	0	0	0	1	0	1	**2**
Total	**4**	**0**	**0**	**9**	**1**	**7**	**21**

Table 3.4.25.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Word Cards

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **WORD CARDS (cue cards)**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	1	0	1	1	**3**
1-7	0	1	1	3	0	6	**12**
10	1	0	0	0	0	1	**1**
15	0	0	0	0	0	1	**1**
20	0	0	0	0	0	2	**2**
30	0	0	0	1	1	0	**2**
Total	**1**	**1**	**2**	**4**	**2**	**11**	**21**

Table 3.4.26.

Crosstab Analysis for Additional Training Sessions Taken and Effectiveness of Strategy – Computer Based Games on Vocabulary

Additional Training Sessions Taken	In your own experience, please rank the effectiveness of the following strategy: **COMPUTER BASED GAMES ON VOCABULARY**						
	Not Effective	Least Effective	Somewhat Effective	Effective	Very Effective	I Don't Use This Strategy	**Total**
0	0	0	1	0	1	1	**3**
1-7	0	0	5	3	2	2	**12**
10	0	0	0	0	1	0	**1**
15	0	0	1	0	0	0	**1**
20	0	1	1	0	0	0	**2**
30	0	0	0	1	1	0	**2**
Total	**0**	**1**	**8**	**4**	**5**	**3**	**21**