Term Project: Case Study

**DESCRIPTION:**

*My Students****:***

My case study examined the comparison of vocabulary instruction for two students with Autism. The first student (i.e., Student A) is a seven year old male who is mainstreamed in a private first grade classroom with the support of an instructional aide. Although he participates in the class; the presentation of his academic tasks, the requirements for his academic tasks, and the expectations for completing his academic tasks are frequently modified by his instructional aide in order to meet his academic needs. The advanced content of the class makes it difficult for Student A to remain engaged in and participate with the class without falling behind. Moreover, the instructional aide provides frequent prompting and redirection throughout the school day in order to ensure that Student A is attending to the teacher, listening to the teacher, understands the directions, is on task, is completing the class work, and is not engaging in maladaptive behaviors. More specifically, Student A displays deficits in his receptive language skills, expressive language skills, social skills, play skills, executive functioning skills, and academic skills and interest. With regards to his literacy skills, he is at the pre-alphabetic and early alphabetic reading stage of development as demonstrated by his rote memorization of a few dozen sight words, his ability to identify the phonic sound that most letters make when in isolation, and his attempt to phonetically read simple three to four letter words (Moats, 1998, p. 1-2). Although these areas of deficit impact his successful engagement in and participation with his class, Student A enjoys coming to school and engaging with his peers (*National Board for Professional Teaching Standards, Standard III & IV)*.

The second student (i.e., Student B) is a five year old male who is attending a private prekindergarten classroom with the support of an instructional aide. Student B frequently attends to, engages in, and completes the class’ academic tasks and activities with minimal facilitation from his instructional aide. The class is highly structured which helps let Student B know what to expect, it is composed of rich academic tasks which helps keep him mentally engaged, and the adults in the class interact with him in a nurturing and supportive manner which allows him to feel safe. Student B displays average to above-average levels of pre-academic skills, interest, and motivation. In the area of literacy skills, he is comparable to his peers who display early alphabetic reading skills as demonstrated by constructing words, sounding out words, and identifying words by sight (Moats, 1998, p. 2). His deficits primarily encompass executive functioning skills and social skills. More specifically, he displays challenges with responding to his peers, utilizing appropriate assertiveness with his peers, correctly identifying the intentions of his peers, regulating his behaviors, and completing tasks in an efficient manner. These areas of deficit predominately impact his successful peer engagement (*National Board for Professional Teaching Standards, Standard III & IV)*.

*The Research:*

In order to better understand the important role that vocabulary knowledge plays in the development of a student’s literacy skills, some of the research about vocabulary knowledge and instruction will be reviewed (*National Board for Professional Teaching Standards, Standard I)*.

Vocabulary knowledge both directly and indirectly impacts a reader’s success due to their level of background knowledge, interpretation of the text, and comprehension of the text (August et al., 2006, p. 357). According to Stahl, vocabulary knowledge is one of the biggest predictors of text difficulty during reading and reading comprehension tasks (2003, p. 241). When reading a text, the reader must understand the meaning of the words they encounter at a relatively deep level in order to comprehend what they are reading (Stahl, 2003, p. 246). This includes understanding the literal meaning and implied meaning of the words (August et al., 2005, p. 51). Moreover, it is the total number of difficult words found in a text that makes reading a text easy or difficult (Stahl, 2003, p. 245). In fact, Stahl asserts that a reader can still comprehend a text that they are reading if between five and ten percent of the text is unknown (2003, p. 245). Once more than ten percent of the text is unknown, however, the content of the text will be jeopardized. According to the Verbal Efficiency Model, for instance, slow reading due to difficulty with word identification and knowledge takes up the readers working memory which results in a lack of comprehension of what is being read (Chard, 2002, p. 386).

*Choosing My Literacy Instruction****:***

Based on this research, the original focus of my assessment was to increase my students’ vocabulary knowledge through instruction in definitional and contextual vocabulary (*National Board for Professional Teaching Standards, Standard I & II)*. Definitional vocabulary knowledge refers to the understanding of categories that vocabulary words belong to and how words change when they are in different categories (Stahl, 2003, p. 244). Contextual vocabulary knowledge, on the other hand, refers to the ability to link prior knowledge to the new vocabulary information while understanding how vocabulary words change in different contexts (Stahl, 2003, p. 245). For ease of assessment purposes with my two students, however, upon initiation of instruction I focused on teaching and assessing definitional vocabulary knowledge.

There are four domains that make up vocabulary acquisition (*National Board for Professional Teaching Standards, Standard I)*. These include the following: learning a new meaning for a known word, learning the meaning for a new word that represents a known concept, learning the meaning for a new word that represents an unknown concept, and expanding the meaning of a known word (TE 846 PowerPoint “Vocabulary Instruction,” Slide 2). When instructing my students, there were opportunities to teach vocabulary from each of these domains. For assessment purposes, however, I predominately focused on increasing their knowledge of the meanings for new words that represent unknown concepts.

I assessed their knowledge of unknown concepts by identifying their vocabulary knowledge including their unknown, recognition/associative, partial, and full knowledge of vocabulary (“Vocabulary Instruction,” Slide 6). These areas are defined as follows: associative knowledge refers to the ability to link a new word with its definition, partial knowledge refers to the ability to use a new word in a few ways, and full knowledge refers to the ability to use a new word in a variety of contexts (“Vocabulary Instruction,” Slide 6). My instructional goal with Student A and Student B was for them to achieve full knowledge of the vocabulary terms that I taught (*National Board for Professional Teaching Standards, Standard II*). During instruction, however, I noted that my students only made associative or partial vocabulary knowledge connections. In retrospect I think that full knowledge was especially challenging for my students due to the inherent difficulty that children with Autism have with generalization and the linkage of new skills across contexts and situations (Jitendra, 2004, p. 312). This will be further discussed in the Analysis sections of this paper.

After identifying that I wanted to increase my students’ full definitional knowledge of unfamiliar vocabulary words that represent unknown concepts, I determined what tool I would use to achieve this (*National Board for Professional Teaching Standards, Standard V & VI*). When making this decision, I referenced research that states that beginning readers need to receive explicit and rich instruction to develop a strong vocabulary (Blachowicz & Fisher, 2004, p. 68). According to August et al., effective vocabulary instruction includes presenting activities that help the readers make semantic links to other words and concepts (2005, p. 53). One such example is Cognitive Strategy Instruction which teaches strategies and frameworks for understanding semantic networks of words (Jitendra, 2004, p. 312). These semantic networks identify categories that a new word belongs to, descriptions of those categories, examples of the new word, and non-examples of that word (Stahl, 1992, p. 228). Additionally, according to Stahl, new words should be taught in meaningful groups (2001). Therefore, upon assessing and obtaining a baseline measure of Student A and Student B’s vocabulary knowledge, I decided to utilize semantic mapping as a tool to teach them vocabulary terms (*National Board for Professional Teaching Standards, Standard II*). See Attachment A for an example of a Semantic Map. A benefit of utilizing semantic mapping with my students is that it promotes a linkage between new word meanings and existing word meanings and knowledge via a visual stimulus (Stahl, 1992, p. 237). Goldenberg suggests pairing pictures with new vocabulary terms for ELL students as a means to help promote acquisition of the new vocabulary term (2008, p. 19). Ehren elaborates by encouraging the use of graphic organizers in order to help make abstract vocabulary concepts more concrete (2005, p. 313). With this information, I was confident in utilizing this instructional tool to teach vocabulary knowledge to my students (*National Board for Professional Teaching Standards, Standard III*).

*Considerations for My Lesson Plan****:***

Before implementing my vocabulary instruction with my students, I developed a lesson plan to guide my instruction (See Attachment B). When I developed my lesson plan, there were a few instructional considerations that I took into account (*National Board for Professional Teaching Standards, Standard III, V, & VI*).

First, when choosing the content of my vocabulary instruction, I was cognizant of increasing my students’ motivation by choosing meaningful and challenging content (Goldenberg, 2008, p. 17). Choosing content that is too challenging, however, may lead to low motivation which will result in a lack of will and effort (Troia, 2002, p. 257). In order to find a necessary balance, McIntyre claims that when working with ELL students, it is important to make curricular connections by focusing instructional content around the students background knowledge, culture, interest, and linguistic strengths (McIntyre, 2010, p. 66). Although Student A and Student B are not ELL students, I feel that the basic tenets of effective instruction for ELL students should be utilized with my students, and with all students for that matter (*National Board for Professional Teaching Standards, Standard III*).

Another variable that I took into consideration when establishing my lesson plan was which vocabulary words I should include in my vocabulary instruction (*National Board for Professional Teaching Standards, Standard I & II*). When choosing which vocabulary words to teach my students, I took into account the frequency of the vocabulary word as well as the level of difficulty of the word (Stahl, 2003, p. 241-242). According to Stahl, word difficulty is driven by the number of syllables the word has, the number and types of prefixes and suffixes the word has, the number of different meanings that the word has, and if the word is used as a literal or implied meaning (2003, p. 241-243). McIntyre references the importance of choosing content that will ensure the student is in the “zone of proximal development” by presenting material that is at a proper level of difficulty so that the student is challenged while not overwhelming them (2010, p. 66). Although I kept this in mind when choosing the content of my vocabulary instruction for each of my students, there were teachable moments that came up during in-vivo opportunities where I taught the meaning of the word via a semantic map (See Work Sample #2 from Instructional Opportunity #6).

Next, I thought about each of my students developmental levels in order to have accommodations ready to implement during my vocabulary instruction if needed (McIntyre, 2010, p. 65). For example, I was prepared to adjust my lesson presentation, or what responses I would accept (Moats, 1999, p. 11). Some of the specific accommodations include the following: allowing pictorial responses instead of written responses, accepting vocal responses instead of written or pictorial responses, allowing receptive responses instead of vocal responses, and targeting fewer definitional components in the semantic map (Verplaetse, 2008, p. 172). Having these accommodations ready to implement if my students needed them helped ensure that my lesson would be implemented successfully (*National Board for Professional Teaching Standards, Standard III & IV*).

Finally, I considered the research that supports frequent exposure to and practice with text as a means to increase literacy skills (Stahl, 1992, p. 224-225). Blachowicz & Fisher explain that exposure to novel material is imperative in order to foster vocabulary development, and that vocabulary development is important because a student’s reading vocabulary is usually about two years behind their oral vocabulary (2004, p. 67). Therefore, readers need to develop their word awareness by frequently engaging with words (Blachowicz & Fisher, 2004, 67). Furthermore, Cunningham & Stanovich reference the dangers posed by the Matthew Effect (1998, 8). They argue that students are at risk for displaying the Matthew Effect because they are exposed to less text, the material they are exposed to is too difficult, they have deficient decoding skills, and they don’t receive reinforcement when they read so they choose not to read (1998, p. 8). The result is that poor readers continue to fall behind their peers. In order to prevent this, readers need to be exposed to high levels of text (*National Board for Professional Teaching Standards, Standard I & II*).

*My Lesson Plan****:***

With these considerations in mind, I began to develop my lesson plan (*National Board for Professional Teaching Standards, Standard V & VI*). The first component of my lesson plan was to determine what my vocabulary instruction objective was. My primary objective was for my students to be able to increase their vocabulary knowledge and to make connections between unfamiliar vocabulary terms and their current vocabulary knowledge through the completion of a semantic map about the unfamiliar vocabulary term (*National Board for Professional Teaching Standards, Standard II*). Through the completion of a semantic map, I wanted to fulfill Moats recommendation that vocabulary instruction should explore the relationship between words, their structure, their origin, and their meaning (1999, p. 8).

The second component of my lesson plan was to get a baseline measure of my students’ ability to complete a semantic map for an unknown vocabulary term by completing a pre-assessment (*National Board for Professional Teaching Standards, Standard II, V, & VI*). In this stage of the lesson plan, I presented a semantic map and an unknown vocabulary term to my students and asked them to complete the semantic map for that term. This baseline measure allowed me to get data on my students understanding of the vocabulary terms prior to instruction. See Attachment C for specifics regarding my students’ pre-assessment scores.

The third component of my lesson plan was to set up my direct instruction through the development of my anticipatory set. To begin my lesson on vocabulary instruction, I determined that I would start by presenting and explaining what a semantic map is, how it is filled out, and why it is a helpful tool to teach vocabulary (*National Board for Professional Teaching Standards, Standard II & VI*). When I introduced the lesson, my goal was to thoroughly explain the lesson, use clear directions, and repeat the directions if necessary (Klinger, 1999, p. 31). I also felt that it was important to explain the purpose and benefit of a semantic map as an effective tool to teach vocabulary so that my students could see the fruits of their labor (Klinger, 1999, p. 31). My final preparatory step was to activate my students background knowledge about the vocabulary terms I was going to teach by discussing the sub-concepts that could be used to define the vocabulary word (Ehren, 2005, p. 311-312). This included discussing and linking any of the following sub-concepts to the main concept: categories, functions, actions, locations, features, attributes, examples, and non-examples.

The next component of my lesson plan was to teach my vocabulary terms through direct instruction (Stahl, 1992, p. 225). This step encompassed modeling how to complete a semantic map about a familiar vocabulary term (*National Board for Professional Teaching Standards, Standard I, V, & VI*). While demonstrating how to complete the semantic map, I modeled how I would use think aloud strategies to complete my semantic map (Cohen, 2007, p. 169). Following modeling how to complete a semantic map about a familiar vocabulary term, I modeled how to complete a semantic map for an unfamiliar vocabulary term.

Goldenberg asserts that good instruction includes opportunities for feedback and practice (2008, p. 17). Therefore, after the direct instruction of my vocabulary terms, I implemented guided practice opportunities where my students completed a semantic map for an unfamiliar vocabulary term along with me (*National Board for Professional Teaching Standards, Standard I, V, & VI*). Following the guided practice opportunity, a controlled practice opportunity was presented where my students completed a semantic map for an unfamiliar vocabulary term while I provided scaffolding to them by evaluating and interpreting their errors and presenting feedback to them (Moats, 1999, p. 11).

August et al. explain the importance of reviewing previously learned concepts while reinforcing the demonstration of these concepts (2005, p. 55). As a result, following the guided practice opportunities, I closed my instruction by summarizing my instructional lesson about semantic mapping while answering any questions that my students had (*National Board for Professional Teaching Standards, Standard I, IV, & V)*.

Effecting instructional strategies should also involve independent performance opportunities (Troia, 2002, p. 259). Therefore, following the closure of my vocabulary lesson, an independent practice opportunity was presented where my students completed a semantic map for an unfamiliar vocabulary term (*National Board for Professional Teaching Standards, Standard I & IV)*.

The final component of my lesson plan was to complete a post-assessment and follow-up on my students’ vocabulary knowledge (*National Board for Professional Teaching Standards, Standard I, IV, & VI)*. To being with, following the independent practice opportunity, a post-assessment opportunity was presented. During the post-assessment my students compared their semantic map with a third person (e.g., teacher, another adult, and / or peer) who also filled out a semantic map for the same vocabulary term. My student and the third person compared and discussed any similarities, differences, and / or adjustments that needed to be made to their semantic map. In order to score my students performance on the semantic map, they received one point for the main concept, and any sub-concepts that were the same as the third persons. A benefit of utilizing peers during my follow-up activities is that research shows that incorporating peers during instructional activities not only increases the students’ academic success but also their motivation (Maheady, 2006, p. 76-79). See Attachment D for specifics regarding my students’ post-instruction scores.

After the post- assessment component of my lesson plan, follow-up opportunities were presented (*National Board for Professional Teaching Standards, Standard I, IV, & VI)*. Jitendra explains the difficulty and subsequent need for students with Learning Disabilities to transfer and generalize reading instruction strategies that they are taught across contexts (2004, p. 312). Moreover, according to Gaskins et al., students need multiple opportunities to review and implement what they have learned (1996-1997, p. 322). Therefore, Archer et al. state that during generalization opportunities, readers need to be explicitly told when, why, and where to use the strategy (2003, p. 95). In light of this research, the final stage of my lesson plan focuses on this goal by utilizing a few instructional tools. First, I set up opportunities for my students to use their new vocabulary term in a sentence. When applicable, I also had my students demonstrate their understanding of the new vocabulary term by “acting out” their new vocabulary term. Finally, I challenged my students to use the vocabulary term in their language with their peers and their parents or caregivers at home.

*My Students Responses to Instruction:*

 During my vocabulary instruction and assessment, I tracked each of my students’ performance with the completion of a semantic map during six different instructional opportunities (See Attachment C and D). Each instructional opportunity was organized and conducted in the general order outlined in my lesson plan (See Attachment B).

The general results of the assessment reflect an increase in independent completion of the semantic map for the target vocabulary word between pre-instruction and post-instruction for both Student A and Student B. (See Attachment C and D for specific performance details). More specifically, Student A was unable to complete any of the semantic map prior to instruction. Post instruction, however, he was able to identify between 1 and 3 components for each vocabulary word presented. Student B, on the other hand, was able to identify between 0 and 2 components of the semantic map prior to instruction. Post instruction, he was able to identify between 2 and 5 components for each vocabulary word presented. These results suggest that the completion of a semantic map increases a student’s vocabulary knowledge and understanding.

**ANALYSIS:**

 My instructional goal for Student A and Student B was for them to be able to increase their full definitional knowledge and understanding of unfamiliar vocabulary words that represent unknown concepts. I will analyze if this goal was met for each student, how each student performed during this assessment, what variables fostered or hindered these results, and what conclusions can be drawn about each student’s performance.

*Analysis of Both Students:*

My instructional goal for both students encompassed three different components. These components included increasing the following: 1. their full 2. definitional knowledge 3. of unknown concepts (*National Board for Professional Teaching Standards, Standard I & II)*. Based on their results between pre and post-instruction, both of my students increased their definitional knowledge of unknown vocabulary words. The completion of the semantic map helped facilitate associative vocabulary knowledge connections for each word across both Student A and Student B as well. During instruction, however, I observed that both students demonstrated difficulty with making full and even partial vocabulary knowledge connections with each word. I think that achieving full vocabulary knowledge through exposure to only one teaching modality (e.g., semantic mapping) was too aggressive of a goal for my students. In order for my students to meet this goal, they would need exposure to each vocabulary word across multiple activities, settings, contexts, people, and time (*National Board for Professional Teaching Standards, Standard I & V)*.

*Analysis of Student A:*

Student A made progress between pre and post-instruction assessment for each instructional opportunity (See Attachment C and D). With the accommodations in place from my lesson plan, he was able to complete the semantic map by either expressively giving his responses or by receptively choosing his responses from an array of options. I also found that pairing pictorial stimuli along with textual stimuli helped facilitate his successful vocabulary understanding (See Work Sample #3 from Instructional Opportunity #2). During the completion of this semantic map about a cupcake, there was an actual cupcake present during instruction. The presentation of the 3-D stimuli along with the textual stimuli led to higher scores during this instructional opportunity than his other instructional opportunities.

There were a few variables that impacted his successful vocabulary development, however, including the following: he engaged in maladaptive behaviors during assessment and instruction, he displayed low attention during instruction, and he displayed difficulty sustaining attention during instruction. In order to address these variables, I kept instructional periods short, I provided frequent breaks, and I utilized reinforcers (*National Board for Professional Teaching Standards, Standard I & III)*. I feel that semantic maps should continue to be utilized as an instructional tool to develop Student A’s vocabulary.

*Analysis of Student B:*

Student B also made progress between pre and post-instruction assessment for each instructional opportunity (See Attachment C and D). Once he was exposed to the concept of what a semantic map was, he was able to complete parts of the map on his own. During instruction, there were a few observations that I made with Student B that differed from Student A. First, during the completion of his semantic maps, he would include concepts and sub-concepts in his responses that were not salient to the original vocabulary word (See Work Sample #1 from Instructional Opportunity #4). When he offered these responses, he was not awarded any points. An additional observation that I made with Student B was that he struggled with the completion of the semantic map when it was for terms that he had less exposure to and subsequent background knowledge for (See Work Sample #2 from Instructional Opportunity #6). Finally, one accommodation that I made with Student B was to allow him to provide vocal responses and/or have a third person assist him with the spelling of words that he wanted to put in his semantic map. Due to his high levels of attention, interest, and motivation; I feel that semantic maps should continue to be used to increase Student B’s vocabulary knowledge.

**REFLECTION:**

*Reflection of Both Students:*

 Due to the generalization difficulties that my students display, I feel that the instructional goal for my students was too aggressive. In the future, there are two alternative goals that I would contemplate for my students. I would either adjust the instructional goal for my students to display associative or partial vocabulary knowledge connections instead of full vocabulary knowledge. Alternatively, I would embed in my instruction and assessment a generalization component where my students would receive exposure to and be assessed on each vocabulary word across multiple activities (reading and non-reading), settings, contexts, people, and time in order to ensure they can achieve full knowledge of that vocabulary term (Gaskins et al., 1996-1997, p. 322).

*Reflection of Student A:*

 I would continue to implement semantic mapping as a tool to teach Student A vocabulary in the future. I would make a few adjustments, however, to the lesson plan and instructional technique in order to decrease the duration of time he has to attend, the number of responses he is expected to provide, and the behavior management techniques that I implement (Klinger, 1999, p. 31). First, I would incorporate more visual stimuli at the onset of instruction (Ehren, 2005, p. 313). Next, due to his difficulty with providing multiple (e.g., more than three) sub-concepts, I would modify the quantity of sub-concepts that he is required to provide. For example, I might start off the lesson by having him identify a synonym for the target vocabulary word instead of multiple sub-concepts. Or I might look at which sub-concept skill set he is the strongest with (e.g., category, function, location, etc.) and I would only require him to identify that one sub-concept for each vocabulary term he is exposed to. Then as he is successful with that one sub-concept, I would start to systematically increase the number of sub-concepts that he provides. Finally, as far as behavior management goes, I would present my instruction along with visual schedules, token systems, behavioral contingencies, and reinforcers in order to help increase his motivation and attention.

*Reflection of Student B:*

 I would continue to implement vocabulary instruction via semantic mapping in the future for Student B as well. His biggest challenge was due to his lack of exposure to and necessary background knowledge about the vocabulary terms he was presented (Stahl, 2003, p. 241-242). As a result, I would expand on the Anticipatory Set component of my lesson plan in order to help frontload him with information that will make him successful with the target vocabulary word (Ehren, 2005, p. 311-312). Along these same lines, I would choose vocabulary words that he has more exposure to, as well as words that are more motivating to him (McIntyre, 2010, p. 66). Other than those few adjustments, Student B was highly engaged, motivated, and interested in participating in the assessment and instructional activities that I presented.