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THE EFFECTIVENESS OF TOTAL PHYSICAL RESPONSE STORYTELLING FOR LANGUAGE LEARNING WITH SPECIAL EDUCATION STUDENTS

by

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A Thesis

Submitted to the

Department of Language, Literacy, and Special Education

College of Education

In partial fulfillment of the requirement

For the degree of

Master of Arts in Learning Disabilities

at

Rowan University

April 20, 2012

Thesis Chair: S. Jay Kuder, Ed.D.

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Abstract

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THE EFFECTIVENESS OF TOTAL PHYSICAL RESPONSE STORYTELLING FOR LANGUAGE LEARNING WITH SPECIAL EDUCATION STUDENTS

2012

Dr. S. Jay Kuder

Master of Arts in Learning Disabilities

The purpose of this exploratory research was to ascertain the validity of the Total Physical Response Storytelling (TPRS) language learning method in comparison with "traditional" language learning methods. The research focused on high school students (n= 44) in grades 9-12 with mild learning disabilities such as specific learning disorder, other health impairment, communication impairment, and multiple disabilities. Students varied greatly with the successes of both language learning methods. There were four

classes that participated in the study and half of the classes performed better on assessments when taught through TPRS techniques. The other classes achieved higher scores when "traditional" language learning methods were utilized. The TPRS technique

is still new and further research on the applications of it need to be examined. Implications for teaching students with mild disabilities a foreign language are discussed.

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Chapter 1

There is a need to find the best way to teach a second language, as foreign language is a part of the school curriculum and it is important for understanding another culture. We live in a global community and it is important that individuals learn about different languages and cultures. The acquisition of languages can help students to better communicate in this global economy. Many students struggle with traditional second language learning methods because these methods are not tapping into all of the different learning styles of students. All students are required to learn a second language and many students with learning disabilities struggle with the traditional language learning methods.

One method for helping students learn a second language is known as "Total Physical Response and Storytelling" (TPRS). This method allows students to pick up the foreign language through listening, reading, visual sources, and actions. Students are able to comprehend the target language through an engaging story that is repetitive and interesting. Since TPRS taps into multiple modes of learning, it may be especially useful for students with learning difficulties.

Various methods such as total language immersion, memorization, and videos have been examined and researched to determine whether they effectively teach a second language. Total language immersion involves completely surrounding the learner by the target language. This is often done through study abroad programs or by only speaking in the target language in the classroom. Language has traditionally been taught through memorization and rote. Students are presented with vocabulary and grammar in the

target language and be expected to memorize the words and grammar rules. This approach focuses on grammar instruction, reading, and writing in the target language. Another method used to teach a foreign language is video modeling. Videos are shown demonstrating proper use of the language in various social settings. The videos allow students to listen to the language and observe the language being used in proper social settings.

This particular study will deal with the TPRS storytelling method for language learning. This method begins by first establishing the meaning of a word in the target language. This is done by giving the word a translation, picture and teaching a gesture with the word. This is followed by the storytelling process. During storytelling a problem is established and questions are asked about the problem in the target language. The questions being are asked are used in a circling technique where the same questions are asked in a variety of ways to get many repetitions. As the story develops more details are added to establish characters, locations, descriptions, a problem and solution. Finally students will read and translate the stories created. The goal of TPRS is to totally immerse students in the language learning process and to differentiate instruction.

This study is designed to compare the use of TPRS versus traditional second language learning methods in a resource room with learning disabled students. The primary goal is to analyze the effectiveness of using TPRS with mild and moderate disabilities. The results of this study may be of interest to foreign language educators, special educators and administrators, as it may help shed light on a more efficient, successful manner in which to teach a language. This study is of particular interest to me as a special education teacher teaching a foreign language. I found many of the

traditional language learning methods to be ineffective with my students and I have been searching for a method to meet their needs. In conducting this study I hope to find which language learning method is most effective with students with learning disabilities and other health impairments.

Research Problem

The overall questions to be answered in this study:

When teaching a foreign language, is the TPRStorytelling technique more effective than traditional language learning techniques for students with learning disabilities and other health impairments?

This study will show which language learning method works best with students with mild to moderate disabilities. My hypothesis is that TPRS is a more effective way to teach foreign language to students with learning disabilities and other health impairments. The information found in this study will aide educators in determining the best technique to implement when teaching a foreign language.

Key Terms

<u>Learning Disabilities</u>: A disability and a category under the Individuals with Disabilities Act (IDEA) which qualifies students for special education based on the following: a discrepancy between intellectual ability and achievement in any of the following areas -

- Listening comprehension
- \circ Oral expression.
- Written expression.
- Basic reading skills.
- Reading fluency skills.
- Reading comprehension.
- Mathematics calculation.
- Mathematics problem solving.

<u>Other Health Impairment</u>: A disability and a category under the Individuals with Disabilities Act (IDEA) which qualifies students for special education based on the following: limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and adversely affects a child's educational performance

<u>Individuals with Disabilities Act (IDEA)</u>: a United States federal law that mandates special education and related services for children with disabilities.

<u>Resource Room Classroom</u>: Typically a smaller size classroom where a special education program can be delivered to a student with a disability. Individual needs are supported in resource rooms as defined by the <u>student's IEP</u>. A teacher's assistant is also provided in this classroom to further assist the students.

<u>*IEP:*</u> An Individualized Education Plan. This is a written statement for each child that provides information on their disability and placement.

<u>*TPR:*</u> Total Physical Response. This method was developed by Dr. James Asher to aide in the learning of second languages. It is a technique for teaching foreign languages where an emphasis is placed on teaching gestures with words. Students respond to commands that require physical movement.

<u>TPRS</u>: Total Physical Response Storytelling. This technique expands upon Dr. James Asher's TPR language strategy. TPRS was developed by Blaine Ray and adds another component to Dr. Asher's TPR, storytelling. This method focuses on learning foreign language with gestures, translations, and pictures. Then creating a repetitive story based on the new vocabulary learned.

<u>Summary</u>

The majority of students with learning disabilities and other health impairments face many challenges with learning due to their disabilities. There are many interventions utilized in the classroom to help these students increase their learning. However, in the foreign language classroom many of these mildly disabled students continue to struggle with the curriculum. It is imperative that new language learning techniques are explored and examined to help this population better comprehend the target language. Techniques utilized must contain various ways to learn the language and address the unique needs of the learning disabled and other health impaired student. High school aged students will be instructed using traditional language learning methods and the TPRS method to identify a more effective way of language learning.

Chapter 2: Literature Review

Children classified with learning disabilities and as attention deficit disorder face many academic challenges. The effects their disability has on their learning are countless and educators strive to find strategies to aid these students with their academics.

Although they have learning disabilities, students with disabilities are still required to meet the state mandated school curriculums and this includes the acquisition of a foreign language. Often times these students lack phonemic awareness and comprehension skills necessary for attaining language skills. This makes foreign language learning more difficult. Krashen (1982) found that what may be comprehensible input for students with strong primary language skills may not be for students who have difficulty with language processing. These students often struggle at the phonological/orthographic level and have difficulty recognizing the rule systems of language.

There are lots of different ways to teach a foreign language with various results. Educators often use more traditional methods that consist of memorization and translation. The more traditional methods also focus on reading and writing the language instead of listening and speaking. There is the immersion technique where the teacher will only speak in the second language and students are required to only speak in the second language. Other methods focus mainly on grammar instruction and translation and some focus primarily on oral communication in the target language. Techniques such as these often do not work with students that have learning difficulties. Methods such as "Total Physical Response" and the "Natural Approach" are often beneficial to

this population. Both of these methods provide little focus on grammar instruction and involve role playing in the target language. The Natural Approach allows for instruction in the students primary language and encourages students to speak in their primary and secondary language. The multisensory, structured, metacognitive language instructional approach could also be beneficial to students with disabilities. This approach is multisensory, structured, explicit, highly repetitive, phonetic, and alphabetic approach to language instruction. Lessons typically focus on phonology/orthography, vocabulary, and morphology.

Leons, Herbert, & Gobbo (2009) examined the ways in which students with language disabilities and Attention Deficit/Hyperactivity Disorder struggled with the study of foreign language. Landmark College, which runs a modified foreign language program for students with learning disabilities and AD/HD was studied. The research took place over a three year period to document the kind of instruction that could enable students with learning disabilities to succeed in the study of foreign language. The results of this study identify visuals and repetitions as the most frequently used strategies that appear to work. These strategies were followed by one-on-one teaching and a multimodal approach. Students in this study increased their foreign language acquisition by one or more levels using these techniques. The techniques identified in this study have been useful for at-risk students when learning a second language.

There are various other techniques that are beneficial to students with disabilities, including: graphic organizers, mnemonic aides, explicit instruction in phonology, syntax, and comprehension, modeling, frequent review, and TPR. It is suggested that TPR will help incorporate activity and movement to language learning, making it more meaningful, interactive, and giving it more purpose for students. It is important that students with disabilities are provided with various ways for language learning and TPR helps to vary instruction to enhance foreign language attainment. Studies by Asher (1970) demonstrate the benefit of teaching gestures with vocabulary words. His research shows an improvement in recollection of vocabulary words when gestures are used while introducing the words. TPR strategies involve listening, speaking, and physically moving. This method taps into all of the modalities of learning and is able to appeal to all learning styles.

Total Physical Response (TPR) was developed by James Asher, professor of psychology at San Jose State University, in the 1960s and 1970s. The underlying belief of TPR is that by combining language instruction with motor activities, students are able to learn quicker, more effectively, and in a stimulating atmosphere. Asher conducted his studies in second language learning for many different languages such as Japanese, Spanish, and Russian. His studies showed that students who use TPR showed a greater retention of the foreign language than the non-TPR students. In addition, his research indicated that the kinesthetic approach of acting out commands is vital to retention when learning a language. Asher discovered that most students are better able to internalize the linguistic code when language is coordinated with movement of one's body. He emphasized the importance of listening comprehension and the significance of acting out commands and vocabulary when learning a foreign language. Many other research studies in language acquisition have supported the use of TPR in language learning. Davidheiser (2002) wrote a journal article discussing his research on TPRS with his students. In this article Davidheiser posited that Stephen Krashen's thesis found that

comprehensible input precedes production and that acquisition is based primarily on what we hear and understand, not what we say. Also, Krashen found that anxiety can inhibit language learning and in TPR this inhibition is lowered because students are often more comfortable in the classroom.

TPR has been found to be a more natural method of language acquisition because it follows the way we learn our first language. When first learning language we learn in context and my responding to commands. During initial language attainment we do not learn formal grammar or rules. TPR often begins with five or six commands taught with gestures by the teacher and students will imitate the teacher's physical actions. Following this, students will be given an assessment where they draw a picture of each command or they may be required to act out the commands. This method allows for all students, even weaker language students, to comprehend what they hear and often students are more willing to speak and participate in class. This technique helps to create the kind of environment that will help students learn.

Some studies have examined the role iconic gestures play in learning foreign language vocabulary and how co-speech hand gestures aide students in retaining the vocabulary. Research done on this topic by Kelly et al. (1999) found that adults understood more detailed information when speakers made gestures while speaking. This information suggests that gestures can help individuals to better comprehend what someone is saying. Cognitive neuroscientists have found that a gesture is closely integrated with the meaning of speech during language learning (Holle & Gunter, 2007). Spencer, McDevitt, & Esch (2009) posted that Willems et al. (2007) used fMRI to reveal that Broca's area processes gestural and spoken information in similar fashion during sentence comprehension, suggesting a common neural mechanism for processing the two modalities. All of these studies have found a benefit to using gestures when attaining language.

The study by Spencer, McDevitt, & Esch (2009) examined the role iconic gestures play in learning Japanese verbs. Their experiment instructed native English adults on Japanese words using various combinations of gesture and speech. The authors investigated vocabulary learning by having the students view, not produce the gesture with speech. The goal was to discover whether gestures enhance learning because of simultaneous semantic overlap of speech and gesture or if the gestures just capture the student's attention. The results demonstrated that gestures play a role in learning and remembering words in a new language. The participants remembered the most words when they were spoken with a congruent gesture. This gesture and speech method created a stronger and more multimodal memory representation.

Another experiment by Spencer, McDevitt, & Esch (2009) was performed using cognitive neuroscience methodology to uncover a possible neural correlation of gesture-speech learning. This study focused on two components involved in semantic memory, the N400 and the Late Positive Complex (LPC). Spencer, McDevitt, & Esch (2009) posted that the N400 was found to be sensitive to the familiarity of the studied items and the LPC was sensitive the actual recollection of the items. The stimuli and procedure were similar to the first experiment but ERP measurements, memory tests, and EEG were additionally utilized. The results found that Japanese words learned with gestures produced a larger LPC in bi-lateral parietal regions but there were no significant N400 differences when gestures were used with speech. This implies that gesture with speech

may create deeper and stronger memory traces during language retrieval. The information found in both of these studies supported Spencer, McDevitt, & Esch's hypothesis that gestures effect the recollection of foreign language vocabulary.

Elliot & Yountchi (2009) examined whether students were able to master the basic meanings of Russian multi and unidirectional VoM (verbs of movement) verbs through a modified TPR activity. The authors sought to discover the effectiveness of TPR versus the traditional grammar-and-translation method to see which was more beneficial to students learning Russian. Elliot & Yountchi chose VoM verbs because these are the most difficult for students of Russian to master. Their study used two sections of first-quarter-second year Russian language classes where one section was the control group and one the experimental. All students were native speakers of English, ages 18 to 21. The control group was taught using the traditional method and the experimental group was taught using a modified TPR technique. This modified TPR technique consisted of TPR review activities, like charades, were students silently acted out sentences with either multidirectional or unidirectional VoM. Images and words were drawn on the board and props were used to help students with the activity. Elliot & Yountchi differed from the original TPR method because the target language and English were used in the activity. However, like Asher this activity created tasks were the students' output was miming of actions and events.

Elliot & Yountchi felt that this TPR activity would aide kinesthetic and visual learners. They found evidence from a similar language study by Lindstromberg & Boers (2005) and from cognitive neurophysiology research by Fadiga et al. (1995) and Gallese et al. (1996) that suggest the experimental methods used in this study are actually

appropriate and effective for all learning types. Lindstromberg & Boers worked with Dutch-speaking young adults ages 19-22 that were advanced college English learners. They conducted three experiments to test the effectiveness of TPR using activities were students acted out the verbs meaning. Lindstromberg & Boers found that the experimental group outperformed the control group in all three studies. Additionally, they found that recall is generally aided by watching someone physically demonstrate the meaning of movement verbs rather than just listening to a translation. It was discovered that demonstrating the meaning of a verb promotes a student's retention.

The results of the study by Elliot & Yountchi contradicted their original hypothesis with 1T because the experimental group using TPR methods was not more successful than the control group. Elliot & Yountchi's hypothesis was supported by the results on 2T, as the experimental group using TPR techniques outperformed the control group. In their experiment the control group for 1T surpassed the experimental 83% of the time while the experimental for 2T exceeded the control 45% of the time. The authors did find evidence that there were certain instances in which individual results of the control group of 1T contrasted greatly with both the student's results on 2T and their overall grade for the course. Also, Elliot & Yountchi used different tests in the 1T and 2T. The 2T tests more closely resembled the tests used in the study conducted by Lindstromberg & Boer. The authors compared their results to the Lindstromberg & Boer study to search for differences and a possible explanation as to why their study did not produce a similar result. They found that Lindstromberg & Boer's participants were at advanced proficiency levels and their participants were at novice-high/intermediate-low levels. This has led the authors to question whether advanced students can navigate

inconsistent forms of input TPR and output grammar-and-translation better than those at lower levels. Elliot & Yountchi claim that on a group level the implementation of TPR activity with Russian VoM may help students' better master these verbs and that using activities of TPR nature are strongly suggested on an individual level. However, this study left further questions for the authors about correlations amongst different tests, different learning input, and the use of TPR activities with other types of Russian vocabulary.

Research has been conducted comparing students' perception of traditional methods versus the Natural Approach and TPR for foreign language learning. A study by Furuhata (1999) examined Japanese students' views if these three methods in regards to learning English. This research also concentrated on the students' own preferred styles of learning. The traditional methods in this study included the following: a heavy emphasis on grammar instruction, exact translations, memorization and reading & writing stressed prior to speaking & listening. It also included rote practice, student errors corrected in class, and students were forced to only speak English in class while the instructor spoke in both languages. The Natural Approach included role playing, games, minimal grammar instruction, listening was emphasized, errors were not corrected in front of the class, students could speak in their native language, and the teacher only spoke in English. The TPR approach included many features of the natural approach along with the learning of words and sentences linked to physical actions. Also, students were not forced to speak before they felt ready to which helped students to become more comfortable in the classroom and feel less pressure to speak the second language.

The study by Furuhata included 237 Japanese students attending an intensive English language school in the United States. The students had to respond to a questionnaire that measured attitudes to the Traditional Japanese, Natural Approach, and TPR teaching techniques. The results of this survey revealed that the majority of Japanese students preferred new methods to the traditional approaches. More specifically, students responded well to having their teacher use innovative activities, such as role-playing and games in the classroom. Furthermore, a favorable disposition was shows towards the main characteristics of the TPR method. This could be attributed to the fact that Japanese students culturally tend to be quiet and reluctant to speak and in a TPR classroom students are not required to speak until they feel ready to. Japanese students found the importance of listening and speaking skills over reading and writing. They preferred the avoidance of grammar instruction and liked the use of commands in English by instructors. Yet, students still showed favor to some traditional approaches such as the value of a teacher's error correction. Overall this study and others demonstrate favorable results towards new foreign language learning methods.

Previous research by Zhao (1990) examined the "Natural Approach" with Chinese students learning English from the perspective of a cross-cultural analysis. The results of this study explained that certain features of the Natural Approach could be adapted to teaching China's non-English majors. Zhao found that a balanced approach between traditional methods and the Natural Approach would work best in EFL Chinese classes. Another study by Sano (1986) investigated the use of TPR activities in the EFL classroom. Sano's research suggested that TPR strategies could be beneficial in

incorporating English into regular classes in Japan. He found the TPR was effective and that student attitudes towards this approach were positive.

Susanne Gardner (2011) examined the successes of a TPR method with adult beginning ESL students at the Maryland Correctional Institution on Jessup. The inmates at this facility who do not have a high school diploma are mandated to attend the MCI-J school for 120 days. If the students are not English proficient they are required to take an English learning class. The instructor of this ESL class taught lessons using TPRS strategies. Lessons focused on football where gestures and actual football actions were used to teach the students the lingo. Also fruits and vegetables vocabulary was taught. During this instruction students had to create their own recipes and had to act out various cooking actions. The students showed great interest and enthusiasm during the TPR lessons. The class initially focused on listening and physically moving one's body to specific vocal commands from the teacher. From there students eventually interacted at different levels and those able to communicate orally in the target language engaged in conversation as they moved around the classroom.

The results of Gardner's study showed the effectiveness of TPR. In one week, literacy-level ESL students learned ten new vocabulary words and phrases, with many learning more. Students were able to use the language correctly when speaking and talking about the game. After two weeks they were able to read and write new vocabulary and three weeks into the study, students could effectively write short sentences. While, an unusual study based on the fact that the participants were inmates, Gardner has shown the usefulness of TPR with the adult population. Thomlinson & Mauhara (2009) focused on the potential benefit of competitive games involving physical movement with the attainment of a second or foreign language. To this point, little research has been discussed on the impact of physical games and language acquisition. Schiling et al. (2006) reported that being active and moving during play boost a child's attention span and facilitates learning. This research found that physical play can also help improve a child's self-esteem. All of these qualities are imperative to learning a foreign or second language.

Carlson- Paige (2008) acknowledged that child development theorists, researchers, and educators have long known that play is one of the most valuable resources of children. Play helps with their emotional and mental readiness to learn. Asher's studies with TPR further validate the use of games in foreign language instruction. His studies involve students mimicking physical actions from teacher's instructions. Asher uses games linked to physical activities, such as Simon Says and games that use actions to dramatize a story, construct a body sculpture, or playing a game with gestures. Thomlinson & Mauhara (2009) posted that Asher claims that TPR allows learners to use the right brain for holistic, rhythmical, and nonlinear learning and the left brain predominantly during analytical learning in the traditional school academic environment. The use of games and gestures can help students access both sides of their brain, increasing the opportunities for learning to occur. Additionally, Branden (2006) and Richards (2001) have assessed the use of task-based language teaching as the center of language learning since the late 1980s and state that this is an important technique to use for instructions. Furthermore, Willis & Willis (2007) include various games such as memory challenges, finding similarities or differences, problem-solving games, and

puzzles. Recently, Cooke (2000) and Bell (2007) have made references to exploring the value of language play that is playful and creative. Research by Kao & O'Neill (1998) studied the positive effects of learners improvising words and actions to dramatize a situation. DeVries (1976) found that instructional games have helped to facilitate the learning process for a variety of cognitive skills.

Despite all of these studies there has been a lack of research-based literature on physical games and second language learning. Thomlinson & Mauhara suggest that language can be contextualized by games and be made comprehensible through actually playing the game. They suggest that what language students experience in the games can be meaningful and the vocabulary can be repeated many times in many different ways. Students will benefit from the features of language in use and be given opportunities to use language. The authors propose that a variety of physical games can help with kinesthetic learning, energize the class, provide meaningful input of language in use, and provide opportunity for personalized use of language. Physical language games can provide chances for learning discoveries about effective ways to process and produce the second language. Thomlinson & Mauhara recommend that games be varied so that they do not always require physical strength and skills. They advise that different roles should be utilized, a quiet phase be used, and rules be implemented. They also suggest that games be included on tests and examinations so that students can understand their value for instruction. Thomlinson & Mauhara state that students will use what they have discovered in the input response activities to help improve what they have produced when using the second language during the game.

Many other studies have been implemented on the acquisition of language. Research focuses on the attainment of vocabulary and the various techniques used in language learning. Barcroft discussed the importance of vocabulary in second language learning in his 2004 study. He discussed the two main ways in which vocabulary is gained; through incidental vocabulary learning which is when the learner acquires new words form context without intending to do so and intentional vocabulary were words are intended to be learned from activities such as words lists and workbook exercises. His research also includes input enhancement, vocabulary learning strategies, word-based process words and lexical phrases to which they are exposed. Barcroft mentions that studies on lexical input processing have focused on how learners allocate limited processing resources to different aspects of the vocabulary learning process, such as word form, word meaning, and form-meaning mapping. Findings in this area have indicated that word form learning can be negatively affected by excessive focus on word meaning or forced output such as requiring students to translate sentences and words.

Barcroft states that there are five principles to effective second language vocabulary instruction. New words need to be presented frequently and repeatedly through pictures or drawings, by pointing to and discussing real world items, or by providing translations of target words. Input of vocabulary needs to convey meaning so learners are able to attach a form to meaning. Some successful techniques to make input more comprehensible include speaking at a slower pace, using visuals, repeating, paraphrasing, and using gestures when introducing vocabulary. Next, Barcroft states that educators should avoid forced output when initially learning new words because students need to focus on encoding new word forms. There should be limited forced semantic

elaboration during the early stages of learning new words. Barcroft feels that language vocabulary instruction should progress from less demanding to more demanding activities. All activities for language instruction need to be made engaging and meaningful. This is collaborated by Lee & VanPatten (1995) who suggested that communicative language instruction include activities that build upon one another to provide students with the tools to complete more difficult and involved tasks over time.

Barcroft (2009) further researched vocabulary learning in a study designed to examine the relationship between learner-selected strategies and intentional vocabulary learning. This study set to explore the different types of activities that learners engage in during intentional second language vocabulary study. The word-picture vocabulary learning paradigm was selected for this study to focus on the strategies and cognitive activity in which learners engage in when given access to the vocabulary words and its reference. Previous research on this topic has found that various mnemonic oriented strategies such as writing, immediate repetition, spaced repetition; contextual associations, linguistic associations, and imagery have been used in the past successfully. Schmitt (1997) developed taxonomy of vocabulary learning strategies that he divided into two main groups: strategies used to infer meaning of new words and strategies used to consolidate words. Schmitt broke down the strategies into those that were determination, social, memory, cognitive, or metacognitive. Of these strategies the ones most available and used by participants in this study were consolidation memory, image of a word's meaning and consolidation-cognitive, involving repetition.

Other researchers have also examined the relationship between strategy use and vocabulary proficiency. Ahmed (1989) found that more successful vocabulary learners

seemed to utilize a larger and more varied repertoire of vocabulary strategies. These strategies included use of monolingual and bilingual dictionaries. Studies by Fan (2003) analyzed the relationship between strategies used by Cantonese students learning English. Based on a questionnaire and vocabulary test, Fan believed that second language learners would benefit more if they were introduced to vocabulary learning strategies used by proficient vocabulary learners. Fan also felt that students should be encouraged to develop effective strategies of their own. Ashmed along with Gu & Johnson (1996) and Fan focused on the mnemonic strategies on intentional vocabulary learning in more immediate learning contexts. Atkinson & Raugh (1975) focuses specifically on the mnemonic strategy called the keyword method. This strategy involved the learner recoding the vocabulary word into a familiar code based upon their primary language orthographic or acoustic properties of the word, then producing an image containing the familiar code and the new word. This technique would help the student to recall the word by using their primary and secondary language.

A study by Lawson & Hogben (1996) employed a think-aloud procedure and vocabulary post test to examine the effectiveness of strategies selected by learners during a second language vocabulary learning task. They found that the top strategies used by students were simple rehearsal and writing of the word and its translation. In addition to this Lawson & Hogben found a positive correlation between the frequency of strategy use and target word recall, showing that certain vocabulary strategies can be more useful in second language learning. The 2009 study by Barcroft sought to expand upon the Lawson & Hogben research by examining the relationship between strategy use and vocabulary learning performance during intentional word-picture vocabulary instruction.

Barcroft's study composed of 93 participants that were first year Spanish students at a private university in the US. The study used twenty-four nouns represented by pictures in a computer presentation. The participants viewed the word-picture pairs for six seconds each twice in the same order. A post test was administered and then students were asked to list and describe the strategies they used to recall the translations. Barcroft found that many of the students reported using a variety of strategies. The ones most frequently used were picture association, language two to language one association, language two to language one translation, and repetition. The strategy that produced the highest target word recall was the use of mnemonic techniques, followed by visualizing the target word and picture, saying words silently, and language two to language one translation and repetition. This research demonstrates to instructors the types of strategies learners self-select during a learning activity and instructors can focus their teaching on some of these strategies.

A study by Wang & Castro (2010) examined the efficiency and effectiveness of classroom instruction on learning English as a foreign language. This study focused on the roles of classroom interactions in promoting language output. Wang & Castro discussed the Input Hypothesis which claims that language input is important in the language program and that fluency will naturally happen once learners have built up sufficient competence through comprehending output. The focus is put on listening comprehension and reading in a foreign language. Research by Tanaka & Yamazaki (1991) on the nature of input showed that input helps with the attainment of words in the target language but doesn't aide in creating some syntactic structures. The Output Hypothesis proposed by Swain (1985) suggested that language output may trigger the

learners to pay attention to the target language so that the students can express their intended meaning. More recent research supports this claim and reinforces that attention does impact language learning. Schmidt (2001) states that there is a connection between learning and attention and that this is an important part of the learning process.

It is argued that classroom interactional tasks such as classroom participation, group work, teacher talk and role plays aide in language retention. Richards & Rodgers (1986) and other studies on communicative language teaching have shown that interaction facilitates the learning of foreign languages. Additionally, Long (1980) and Newton (1991) found that two-way interactional tasks resulted in an increased negation of meaning. Many other researchers have found that having students work in small groups helps to improve language production by positively effecting language input and output.

The study by Wang & Castro focused on Chinese adult learners and their study of English in the passive voice. Forty students ranging from 17 to 25 years old from two classes at a university in Guizhou, China participated in this study. The students were divided into two groups, with one group receiving the treatment and the other receiving no treatment. Written test measures were used as pretests and posttests to establish the participant's knowledge of English in the passive voice. Students were give an article from a newsletter and both groups were required to read the passage and underline the words or phrases they thought were necessary for their written product. Afterwards, both groups worked on the required tasks then the treatment group completed the reconstruction task. The treatment group was encouraged to ask the teacher questions and to discuss with their classmates. They engaged in classroom interaction while the

other group did not before completing the next task. The results show that the group involved in classroom interactions outperformed the non-treatment group: 95% to 74%. This suggests that classroom interactions may aide foreign language learners in noticing the target form and have a positive impact on learning the target language. Additionally, the results confirmed that under certain circumstances, output can promote learning and production of the target language. This promotes a classroom pedagogy that is student-centered and provides more opportunities for foreign language learners to produce the target language in meaningful contexts.

Chamont (2005) also discussed the research on language learning strategies, focusing on much of the research done in the 1980s and 1990s. Learning strategies are important to attaining a foreign language. It has been found that the interpretation of language learning tasks is closely related to the goals advocated within each learner's cultural context. An individual's background and culture have a direct impact on their preferred language vocabulary learning technique. Interview, Questionnaires, diaries, and journals help identify language learners' strategies. Studies have confirmed that good language learners are skilled at matching strategies to the task they are working on. According to Chamot, Barnhardt, El-Dinary, & Robbins (1999) more proficient language learners use sequences of strategies to complete a task effectively. Research has shown that strategy instruction has improved performance on first language tasks such as vocabulary learning, reading comprehension, and writing. Therefore it can be concluded that it would be equally beneficial for language learners in the same tasks and with listening and speaking.

Various strategies for listening comprehension have been shown to be helpful for students learning a second language. Thompson & Rubin (1996) found that students receiving strategy instruction showed significant improvement on a video comprehension test compared to students in the control group. Also, these students demonstrated metacognitive awareness through their ability to select and manage the listening strategies. Additionally, oral communication has been shown to improve by using language learning strategies. Based on test performance, memorization strategies have been shown to be helpful for learning new vocabulary. Language learning strategies can be used to aide students with all aspects of foreign language acquisition. It is important to teach students these strategies in their native language first before utilizing the strategies with a second or foreign language. As the trends continue toward learner-centered instruction and learner empowerment in all areas of education, instruction in learning strategies will assume a greater role in teacher preparation and curriculum design.

There have been many different language acquisition techniques researched by professionals but the TPRS technique still has little empirical research. This is primarily due to the fact that it is a relatively new technique that expands on Asher's TPR. Some of the most recent information for this strategy has been located on the founder of TPRS's website. Blaine Ray, a Spanish teacher, built upon Asher's TPR in the 1990s to create TPR Storytelling. TPRS lessons use a mixture of reading and storytelling to help students acquire a foreign language. The first step of this method is where new vocabulary words are taught using a combination of Asher's gestures, translations, and pictures. Next a personalized set of yes/no and factual questions is used to help create the

story. The main vocabulary word will be left on the board while creating the story. This story will include a problem and the teacher will ask questions to circle around the problem, creating details. The teacher can ask the same questions differently to circle around the vocabulary and use repetition. The story will continue to expand as details are added, which keeps student interest. More characters and locations are added to the story as it continues to attempt to solve the problem, which will finally be solved in the third location. During instruction, various techniques will be implemented to help make the language comprehensible to the students, such as limiting the vocabulary, asking easy comprehension questions, frequent checks, and constant repetition. TPRS continues to have students reading their story and translating it. Furthermore, students will create their own version of the story on their own or in pairs. Blaine Ray has found much success using TPRS and has marketed his language techniques and materials to teachers.

Davidheiser (2002) examined the impact of using gestures with speech by employing Blaine Ray's TPRS model. He conducted his study with his college German year one students. Davidheiser began his classes by modeling the commands twice with speech and gesture. He then had his students imitate the commands. The next day the commands were extensively reviewed and new words and letters of the alphabet were added. Davidheiser found that his students were able to master up to 35 new items daily. He incorporated small amounts of grammar each day based upon the commands being taught. All of the repetition in his class allowed for variety, creativity, and humor. Students were allowed to speak when they felt the need, which is a more natural approach.

Davidheiser closely followed a traditional TPRS lesson in his class by beginning with vocabulary gestures. His students would first mimic the teacher's gestures, and then perform the gestures with their eyes closed when commands were verbalized, and would also work in pairs to practice the gestures. The next day he differentiated from classical TPRS by having his students write out the commands for homework but found that it aided in their transference of oral skills to written work. Following this, Davidheiser began the story process by asking yes/no questions and factual questions to begin creating a plot to their class story using the vocabulary learned. Next, he had the students write the story in their own words, demonstrating that they have not just memorized it, but internalized the language. Lastly, Davidheiser has the students complete a series of drawings, allowing for creativity by applying what they have learned to new stories and filling in the details. This helps to prevent students from using block memorization as their main learning tool. Davidheiser differs from the traditional TPR and TPRS approaches by reviewing content grammar.

Davidheiser has found TPRS to be successful in his classroom, increasing student achievement. This success has also been found by Swaffar & Woodruff who have used TPR in their German program at the University of Texas for more than twenty years. Their results have shown improved student retention, more favorable course and instructor ratings, and higher standardized test results. There are many reasons that Davidheiser contributes to the success of TPRS. This technique is active learning, engaging muscular movement, reaching experimental and creative learners. It also works for conceptual learners because it responds to their need for explicit instruction. Students are able to take ownership of their learning by listening to and physically creating stories.

All of this helps students to feel included and validated which gives them a more positive attitude towards language learning. TPRS is repetitive, physically engaging, and often considered fun by students. However, like all teaching methods some disadvantages have been found. Davidheiser feels that more reading practice is needed and he has not always found TPRS as advantageous in the second year of language learning.

Students with disabilities face many additional obstacles when learning a foreign language. Core academic skill deficits in spelling, reading, weak memory, attention, and phonological processing impact acquisition of a second language. Many children with learning disabilities have difficulties that are language based which presents a challenge for second language learning. A lot of children with learning disabilities struggle with phonology, which impacts their ability to process language sounds and have difficulty with syntax, which affects their understanding of grammar and how word order affects meaning. Morphology is another area of weakness with learning disabled students that can result in poor appreciation of word roots, tenses, and inflections. Weak language processing skills may cause confusion with words beginning with the same sounds, pronunciation, and decoding unknown words. When learning a language students are expected to remember and manipulate additional language throughout the class and due to weaknesses in phonological working memory this becomes more difficult. Often learning disabled students struggle to keep pace with their classmates as language education relies on a strong working memory. Studies by Tannock and Martinussen (2001) show that students with AD/HD and language based learning disabilities have difficulties with verbal working memory. In addition to this, students with AD/HD typically struggle with tasks that require active working memory, resulting in an uneven

focus and problems with independent study. Despite all of these challenges, instruction can be designed to accommodate students with disabilities.

Educators strive to find the best ways to differentiate instruction to meet all learning styles. Instructional or universal design is often used as a way for all students to access the same content, understand the same instruction and/or demonstrate the same knowledge. This method allows for flexibility and redundancy to be built into the curriculum. For example, a teacher may hand out a study guide in advance and will frequently review key concepts with everyone prior to an oral reading or class activity. Teachers are also encouraged to gather information about all of their students, including looking at Individualized Education Plans and Present Levels of Educational Instruction. Intensive instruction on basic skills and learning strategies should be implemented so that students can develop a strong foundation of essential skills needed for learning. Leons, Herbert, & Gobbo (2009) examined the effectiveness of instructional techniques with learning disabled and AD/HD students. Their research found that visuals, repetition, oneon-one teaching, multimodal teaching, and games are among the preferred and effective strategies for students. Kleinert, Harold, et. al. (2007) stress that it is important for educators to vary instructional techniques to include multi sensory approaches, graphic organizers, mnemonic aides, modeling, and explicit instruction in phonology, syntax, and comprehension. In addition to this they also mention the importance of role playing, pictures, and physical activities, such as "Total Physical Response." The authors state that TPR will help incorporate activity and movement to language learning, making it more meaningful, interactive, and giving more purpose.

"Total Physical Response" addresses the many challenges which learning disabled and AD/HD students face in the second language classroom. TPR is a multisensory approach that uses visuals, has students physically moving, listening, and speaking the second language. Barecroft (2004) found that speaking at a slower pace, using visuals, repeating, paraphrasing, and using gestures are techniques that can be implemented to make language learning more comprehensible. TPRS allows for constant repetition through gestures, pictures, and storytelling. Asher's (1970) studies indicate that the kinesthetic approach of using gestures is vital to retention when learning a language. The constant repetition helps students with a poor working memory and the physical activity keeps students attentive and on-task. When teachers give commands and students act them out it helps to increase listening fluency and verbal working memory. Asher's research has found that most students better internalize the linguistic code when language is synchronized with actual movements, such as those used in the TPR language acquisition technique. Students with learning disabilities often have difficulty with phonology, morphology, and syntax. TPR stresses tone, inflection, language sounds, pronunciation, and decoding. The teacher models the appropriate uses and students copy the teacher, verbally and through gestures. This technique does not stress grammar, which is a great difficulty for learning disabled students. Students with disabilities often experience anxiety with second language learning which can inhibit language acquisition. TPR helps to lower this inhibition by creating a positive, stimulating, and structured classroom environment. This technique can be very a very effective way to teach a second language to learning disabled and AD/HD students.

The majority of the research on language learning methods supports using various learning strategies for vocabulary retention. Research promotes the use of pictures, mnemonic devices, TPR methods, the Natural Method, and many aspects of more traditional language acquisition techniques. The research found is varied and supports many different second language attainment approaches. There is also a great deal of research that supports Asher's TPR method. However, the TPRS method is still very new and there is not many published articles that discuss this. Also, most of this research on language acquisition has focused on adults, ages 17-25. There are few investigations on foreign language learning with elementary and high school students which still leaves questions as to which learning technique is most appropriate for their age group. In addition to this most of the studies fail to mention the techniques best used for students with disabilities. It is still to be found which method best works with this population so that educators can make more effective decisions regarding language acquisition for students with disabilities.

Chapter 3: Methodology

This study compared the use of traditional language teaching methods and the Total Physical Response Storytelling (TPRS) technique for language learning. The purpose was to determine which would be the more successful approach when working with students that are classified with a disability.

This study took place at a regional high school in an urban community in South Jersey. The high school is part of a district which contains two other regional high schools. The high school is comprised of students in grades nine to twelve, with students transitioning here from their local township middle school. The district is composed of 3,900 students with 2,200 enrolled at the high school where the research was conducted. Of the school population, 14.6% of students have an IEP. The district holds a level "CD" socioeconomic rating on a scale from "A" to "J" with "J" being the highest. This rating system is based on the percentage of the population with a high school diploma or some college education, occupation, population density, income, unemployment, and poverty.

This research focused on 44 children enrolled in four different learning resource room Spanish classes. Two of the classes contained eleven students, one class had twelve students and one class had ten students. All of the students were classified with a "Specific Learning Disability," "Other Health Impaired," "Multiply Disabled" and "Communication Impaired" (refer to the table below). They were chosen for this study based on teacher accessibility and the students were meeting the educational goal being examined in this study. This classroom is taught by a special education teacher in conjunction with a qualified para-professional. Two of the classes have a student with a

1:1 aide that accompanies them throughout most of the day. All of the students in this study change classes throughout the day and have some special education classes that are made up of all special education students with a special education teacher. Many of the students also have classes that are "inclusion" and made up of special education and regular education students. The "inclusion" classes are taught by a regular and special education teacher. All of the students in this study are below grade level with some performing much lower than others. They are in grades nine through twelve, with majority in ninth and tenth grade and are a diverse group.

Ethnicity						Grade			
Caucasian	African	Hispanic	Asian			9 th	10^{th}	11 th	12 th
	American								
22	15	3	4			14	25	4	1
Dis	<u>ability</u>								
Specifi	c Learning	Oth	er Health		(Communica	tion	Mult	iply
Dis	ability	Im	Impairment		Impaired		1	Disabled	
	32		5		4			3	

Table 1. Student descriptions

Development of Interventions and Materials

The experimental group used the TPRS language learning technique which uses pictures and gestures for teaching the vocabulary that are teacher developed based on the Blaine Ray Total Physical Response Storytelling technique (blaineraytprs.com). This technique has the teacher introduce the vocabulary terms in groups of six to seven words, using gestures and pictures. For example the word, *correr (to run)*, will be introduced with the teacher saying the word and doing a running movement. The teacher repeated the word & gesture then taught the other vocabulary words the same way. After the words were taught with a gesture the teacher showed pictures of each vocabulary word. Simple yes/no questions were asked about the pictures, requiring students to identify the pictures in the target language. The teacher continued to repeat the vocabulary words and asked questions about them (such as what, where, true/false, & who). A picture identification game was played with the new vocabulary words and a teacher directed class story was created with the new vocabulary words in the target language. The teacher already had an outline format of the story and the students contributed elements such as setting, characters, events and details. The new vocabulary words were the focus of the story. Once the class story was created students were required to individually translate the story and then create their own "mini-story" with a partner. There were two experimental groups for each unit consisting of ten to twelve students.

The control groups for each unit contained ten to twelve students. This group used traditional language learning techniques that included rote and memorization, a focus on grammar, and translation worksheets. The same unit of vocabulary was taught for both groups for the same period of time, which lasted for five to eight days. The control group was provided the vocabulary words for the unit and they had to look up all of the translations using an English-Spanish dictionary. Afterwards the translations were reviewed by the teacher verbally and written on the board. The vocabulary was reviewed each day verbally and translation worksheet activities were used as practice. The worksheets included sentences based on the vocabulary unit that were presented in English and/or Spanish for translation.

During the vocabulary unit, the words were continuously reviewed through verbal and written techniques. The control group only used the written word while the experimental group was provided with pictures and gestures. Both groups were give two to three "mini-quizzes" prior to the test to assess comprehension of the vocabulary. The "mini-quizzes" for the experimental group were listening with picture identification and the "mini-quizzes" for the control group were listening with word identification. Both groups were given the same end of unit assessment. This assessment was a test that included a listening section, picture identification in Spanish, word translations into English, and sentence translations.

To complete this study thoroughly, the researcher used the following materials throughout the duration of the research:

Table 2. Materials and Purposes.

Material	Purpose
Vocabulary List	One for each student
Vocabulary Notebook	To record vocabulary translations
Vocabulary Pictures	One for each student in the experimental group
English-Spanish Dictionary	One for each student in the control group
ENO Board	To create pictures, play games, create stories, and review vocabulary

Procedure

This study followed an experimental design with a control group. The four classes were divided into two groups: a control and treatment group. Each group consisted of ten to twelve students. The control group received language instruction using traditional

language learning techniques that included: teaching through rote & memorization, an emphasis on grammar rules, a focus on reading & writing the language, and an emphasis on translations. A student notebook was kept, study guides were used (prior to tests), and Spanish-English dictionaries will be available. The experimental groups received language instruction using TPRS techniques that incorporated the following: gestures and/or pictures and translations when learning new vocabulary, little emphasis on grammar rules, a focus on listening & speaking, and storytelling in the target language. A student notebook was kept & study guides were used prior to tests.

The control and experimental groups studied the same unit of vocabulary using different types of instructions. Both groups received the same test for each unit that included both TPRS and traditional components. For example, the tests included pictures for both groups, traditional fill in the blank, listening section, picture identification and sentence translations. The results from the vocabulary units were compared amongst the control & experimental groups. When the next vocabulary unit was given, the control and experimental groups were switched. For example, classes A and C started as the experimental group for the first vocabulary unit while classes B and D were the control group. For the second vocabulary unit classes B and D were the experimental group and classes A and C were the control group. This process was repeated for all four vocabulary units. Each vocabulary unit included twenty to twenty-four words on a particular topic. The first unit was on "AR Action Verbs," which are verbs ending in AR that mean an action (i.e. *bailar means to dance & hablar means to speak*). The second unit contained food vocabulary such as, *albóndigas which means meatballs*. The third unit introduced activities such as, *caminar con perro which means to walk the dog*. The

fourth unit consisted of rooms in a home and room items such as, *espejo which means mirror & cocina which means kitchen*. Table 3 represents which vocabulary unit each class was the control group and experimental group for. Each class was the experimental group twice and the control group twice.

All data will be presented in narrative form, as well as graph form. Recommendations and analyses will be provided, and variability and possible changes to research will be suggested. The data will compare the effectiveness of TPRS and Traditional teaching methods by looking at the class test averages for each vocabulary unit. In addition to this, the data will be analyzed by each class period to determine which was a more effective teaching method based on test scores for each unit. Additional questions to be answered are: Does TPRS provide a more effective way for language learning? Which method are students more receptive to? Do students participate more with TPRS then traditional methods and which method do students prefer?

	Control	Control	Experimental	Experimental
Class A	Activities	Food	AR Action	Room
	Vocabulary	Vocabulary	Verbs	Vocabulary
			Vocabulary	
Class B	AR Action	Room	Food	Activities
	Verbs	Vocabulary	Vocabulary	Vocabulary
	Vocabulary			
Class C	Activities	Food	AR Action	Room
	Vocabulary	Vocabulary	Verbs	Vocabulary
			Vocabulary	

Table 3. Research phases.

	Control	Control	Control	Control
Class D	AR Action	Room	Food	Activities
	Verbs	Vocabulary	Vocabulary	Vocabulary
	Vocabulary			

Chapter 4: Results

Summary

In this experimental/control group research design, vocabulary instruction of four Spanish I resource center classes consisting of 44 students with mild disabilities were compared. The research question to be answered was:

When teaching a foreign language, is the TPRStorytelling technique more effective than traditional language learning techniques for students with learning disabilities and other health impairments?

In this study all students had little to no background in the Spanish language and all were classified with a Specific Learning Disability, Other Health Impairment, Multiply Disabled, or Communication Impaired. The study consisted of two experimental classes for each where the vocabulary was taught using TPRS techniques and two control classes for each where traditional teaching methods were used. For example, when class A was taught room vocabulary using TPRS, class B was taught using traditional methods. At the end of each vocabulary unit the same test was given to all classes. The average test results for each class were tallied for each vocabulary unit and presented in graph form.

Results

All results are displayed in a line graph format showing the class averages for each vocabulary unit test based on the teaching method. The numbers on the Y axis represent the average test grade for each class. The lines display the average test scores for those taught with TPRS techniques versus those taught with traditional techniques for each vocabulary unit.



Figure 1. TPRS test averages versus Traditional test averages.

Figure 1 shows the class test averages for each of the four vocabulary units based on the teaching techniques used. Each unit is listed two times because four classes were used, two were taught through traditional techniques and two taught through TPRS techniques. The results demonstrate a slightly higher average test score for the classes taught with TPRS techniques. However, a significant increase is not shown amongst the units taught with traditional and TPRS techniques.

The next four charts display the results for each vocabulary unit comparing TPRS and traditional techniques.



Figure 2. Test Average results for the AR Action Verb Vocabulary Unit.

All four class periods of students were taught the same vocabulary list of AR Action verbs but using different techniques. AR Action verbs are words that end in an *AR* and represent an action (*i.e. nadar means to swim*). For this unit the control group consisted of classes B and D taught with traditional techniques and the experimental group contained classes A and C taught with TPRS techniques. Figure 2 shows TPRS test average scores of 73.6% and 78.5% and traditional test average scores of 86.7% and 76.4%. For this particular vocabulary unit the results are better with the classes taught using traditional techniques.



Figure 3. Test Average results for the Room vocabulary unit.

This graph displays the test score results for the unit of room vocabulary. In this unit students were taught the names for rooms in the home and room items in Spanish using traditional or TPRS techniques. The control group for this unit was classes B and D and the experimental group was classes A and C. The graph shows average test scores of 84.3% and 78.3% for the TPRS taught classes and 71.3% and 70.4% for the classes taught with traditional units. This unit demonstrates higher grades for students who were taught using TPRS techniques.



Figure 4. Test Average results for the Activities vocabulary unit.

For the activities unit, classes A and C were the control group and classes B and D were the experimental group. This graph shows little difference with the groups taught using TPRS techniques and those taught with traditional techniques. The control groups scored test averages of 80.6% and 82% and the experimental groups had test averages of 83.7% and 82.3%.



Figure 5. Test Average results for the Food vocabulary unit.

Figure 5 represents the average test scores for classes taught with TPRS and traditional techniques. For this unit the experimental group was classes B and D and the control group was classes A and C. The average test scores for the control group were 82% and 85.2% and the averages for the experimental group were 91.3% and 84.8%.





Figure 6. TPRS v Traditional results for each class.

Figure 6 compares the average test results for units taught with TPRS techniques and units taught with traditional techniques for each class. The results show an average of 79% for class A when taught via TPRS techniques and an average of 81.3% with traditional techniques. Class C produced similar results with a 78.4% average for TPRS taught units and 83.6% for traditional taught units. The results for class A and C show a slight difference between the two techniques with higher scores resulting from units taught with traditional methods. However, the results for class B and D favor the use of TPRS techniques over traditional methods. Class B had a 87.5% test average when taught with TPRS and a 79% when instructed through traditional techniques. When taught with TPRS techniques class D also scored a higher percentage at 83.6 versus 73.4% with traditional methods.

The results from this study vary from class to class, as to the advantage of having material taught using TPRS techniques. Individually the results show that twenty-four out of forty-four students performed better when instructed via TPRS techniques.

Overall, the results slightly favor the TPRS techniques when no tester error is taken into account.

Chapter 5: Discussion

Review

In this study, the effectiveness of the "Total Physical Response Storytelling" (TPRS) technique for teaching foreign language was examined in students with mild to moderate disabilities. Four resource room Spanish I classes of students with "specific learning disabilities," "other health impairments," "communication impairments" and "multiple disabilities" were examined. There were four data collection periods that were presented in alternating fashion- that is two classes were exposed to the experimental technique of TPRS, while two classes experienced the traditional language learning techniques, and vice versa. The TPRS techniques included introducing vocabulary in small segments of six to seven words at a time, using gestures and pictures, listening, frequent review, storytelling, study guides and using games for review. The traditional methods included rote and repetition, a heavier emphasis on grammar, more time spent reading the language, study guides, frequent review and translation worksheet activities. The data was taken from student's test results on each of the four vocabulary units.

Previous research by Dr. Asher, Davidheiser, and Barecroft has suggested that teaching a language with gestures, games, repetition, and word-picture association would be beneficial for students. The results of the present study demonstrate that these are effective teaching methods for students learning a foreign language. Results from the four vocabulary units showed that traditional and TPRS methods can be effective when teaching students that have disabilities. Of the four vocabulary units the results of two displayed higher test scores for students taught with TPRS techniques. However, one unit showed higher scores for students taught with traditional methods and one unit revealed equal scores for students taught with the two different techniques. Overall, the results of this study show slightly higher test average scores for students taught with TPRS methods compared to students educated with traditional methods (81.1% to 78.9%).

It was hypothesized in Chapter 1 that TPRS would be a more effective method for teaching a foreign language to students with disabilities as it engages a more multi-model approach then traditional language learning methods. This study showed that showed that both methods could be effective and found that it depended upon the individual student. Out of all the classes examined, half made more progress with the TPRS technique, posting a higher class average on the tests. The data showed that class A scores were higher with a more traditional approach at 80% to 79%, as did class C with average scores at 83.5% to 78.4%. The other two classes demonstrated higher scores with the TPRS technique with class B scoring 87.5% to 79% and class D scoring 83.5% to 73.4%. When scores were compared on an individual level it was shown that 54.5% of student's grades increased when they were given a test after being taught with TPRS techniques. This data suggests that TPRS is an efficient method for teaching a foreign language to some students with disabilities and may have a positive impact on student's grades than traditional methods.

Previous research (e.g. Davidheiser, 2002) revealed the benefits of teaching year one German students with speech and gestures and using constant repetition. Also, research by Barecroft (2009) found that using visuals, repeating, and gestures are techniques that can make language learning more comprehensible. Spencer, McDevitt, & Esch (2009) found that using gestures plays a role in learning and remembering words.

However, very few of these articles mentioned TPRS techniques used for students with disabilities. One article by Leons, Herbert, & Gobbs (2009) found that visuals, repetition and multi-modal games are effective strategies for AD/HD students. This study concurs with the results of previous studies but it specifically uses the TPRS teaching technique for students with disabilities. This technique is still very new and there is not a lot of empirical research that has been done on it. The research done on the TPRS technique and similar strategies does not conclusively prove that this technique works better for students with disabilities. There may be other strategies and/or techniques that will be beneficial for students with disabilities.

Discussion of the study

The results of this study slightly favor the recommended TPRS teaching technique and loosely support the original hypothesis. There are a number of limitations that must be noted in regards to this study. First, the research focused on a small number of classes due to the qualifications required for each student. To effectively compare the two teaching techniques, it was important to compare the same mild disabilities in all participants. The classes that were chosen consisted of only ten to twelve students with mild disabilities. These were the only classes available that met the qualification required for the study. Furthermore, the classes chosen were all Spanish I classes, as the study was not opened up to Spanish II classes containing students with mild disabilities. This study failed to take into account the effects of the TPRS technique on regular education students.

Second, the classes were compared as a whole and student's individual scores were not as closely looked at. This study focused on the class average not an individual's progress with each method. Third, it was not taken into account how much instruction time that a student missed, their participation level, focus, or behavior. For example, a student in class A may have been absent for the majority of the lessons taught with the TPRS technique and this would have greatly affected their test score, thus impacting the class average test score. Class participation, focus, and attendance are vital to the TPRS method, as students are required to be actively involved in each lesson. If a student is absent or doesn't participate then they miss learning the material through TPRS techniques, such as picture identification, gestures, questioning, and repetition. Also, a student's behavior and mood may have impacted their test grades with each method. Many students have difficulty separating their personal lives from their academics and "outside" issues will greatly impact their grade.

The results of this study were mostly positive but inconclusive. There are a few changes that could be made to enhance the conclusions. This study could have been conducted with a larger sample size and with a broader spectrum of students. For example, more students with mild disabilities could have been researched in inclusion and mainstream classes. Also, Spanish 2 students with disabilities could have been included in this study. Including more students may have provided more definitive results in regards to the question of which technique is better for students with mild disabilities. In addition to this more units could have been added to compare the results of the two techniques. Also, the same test was given to the control and experimental group when the teaching techniques were different. The typical TPRS assessment

contains more listening, pictures identification, and more stories then the assessments given. The tests administered contained elements of both traditional and TPRS tests. This study could have focused on the individual progress versus the whole group process. For example, the study could have compared student Y's results on their TPRS against the traditionally taught units. In addition to this the factors within the students who were successful with the TPRS technique could have been examined. Further investigation could have been done on which disabilities had more success and what the classroom conditions were like for each student. Lastly, taking a longer time to conduct the research may have given more data with which to work, making any conclusions more substantial.

Conclusion

The purpose of this study was to answer the question of whether the TPRStorytelling technique is more effective than traditional language learning techniques for students with learning disabilities and other health impairments. The data from the control and experimental groups supports the use of the TPRStorytelling technique as an effective technique for language learning. However, it does not demonstrate that this technique is more effective than traditional language learning techniques for students with mild disabilities. According to the test averages for each of the four units, when the vocabulary was taught using the TPRS technique students earned slightly higher test averages for three out of the four units. When looking at the class averages for units taught with TPRS and traditional techniques the test results did not greatly favor either technique. The results of this research support the use of both techniques, with neither yielding higher test scores than the other.

As with most teaching techniques, there are pros and cons to the TPRS and traditional teaching methods. TPRS seems to engage the students more quickly and for a longer period of time. This method takes into account all modalities of learning by using visual and auditory stimuli to draw the student in and using kinesthetic activities, such as gestures to keep the students involved. The TPRS technique relies heavily on student participation and attention, which assists in the comprehension of the vocabulary unit. Unfortunately, if a student is absent, inattentive, or doesn't participate they will miss critical instruction and often fall behind because this technique is very student centered. Traditional techniques such as rote, memorization, a heavy focus on grammar, direct teacher instruction, and translation worksheets initially capture the students attention but aren't as engaging as the TPRS techniques. For example, when I switched techniques with the classes from TPRS to traditional, many students asked why I stopped showing pictures, teaching with gestures, and playing review games. The students stated that they enjoyed these activities and felt that they learned the vocabulary better this way. I also noticed an increase in attention and participation when I used TPRS techniques. However, it was difficult to teach certain grammar skills such as verb conjugations with TPRS. Traditional methods provided more structure with grammar rules. In addition to this, absent students were better able to catch up on the vocabulary and work that they missed when the traditional teaching methods were being implemented. As far as instructor demands are concerned, TPRS was time consuming to gather pictures for all the vocabulary words, come up with the gestures, and develop story outlines. While the traditional techniques allowed for more use of the textbook and did not require as much instructor preparation time.

This research examined two different strategies for teaching a foreign language to students with mild disabilities. The results suggest that students with disabilities are more engaged when participating in "hands on" activities and excel when a variety of modalities are used for teaching. The techniques used in this study were both proven to be effective teaching methods for students with disabilities. As previously stated, each technique has pros and cons to consider, as well as peer reviewed research to verify their effectiveness. This study found the TPRS storytelling technique to be slightly more effective, engaging, and efficient than the traditional methods for foreign language learning in students with mild disabilities.

References

- A'libpour, Javad. (2010). Teaching Vocabulary in EFL Classrooms: A Tried-Out Technique. *English Language Teaching*, 3 (3). 158-159.
- Barcroft, Joe. (2004). Second Language Vocabulary Acquisition: A Lexical Input Processing Approach. *Foreign Language Annals*, 37 (2). 200-208.
- Barcroft, Joe. (2009). Strategies and performances in intentional L2 vocabulary learning. *Language Awareness, 18* (1), 74-89.
- Celestino, W.J. (1993). Total Physical Response: commands, not Control. *Hispania*, 76, 902-903.
- Chamont, Anna. (2005). Language Learning Strategy Instruction: Current Issues and Research. *Annual Review of Applied Linguistics*, 25, 112-130.
- Davidheiser, J. (2002). Teaching German with TPRS (Total Physical Response Storytelling). *Die Unterrichtspraxis/Teaching German, 35*, 25-35.
- Duvall, Emily. (2006). Including Students with Disabilities in a Foreign Language Class. *Teaching Exceptional Children*, 38 (6), 42-48.
- Elliot, Elisabeth & Yountchi, Lisa. (2009). Total Physical Response andRussian Multi-and Unidirectional Verbs of Motion: A Case Study inAcquisition. *Slavic and East European Journal, 53*, 428-450.

- Furuhata, Hamako. (1999). Traditional, Natural and TPR Approaches to ESL:
 A Study of Japanese Students. *Language, Culture, and Curriculum, 12*, 128-143.
- Gardner, Susanne. (2011). Correctional Education: The Success of Total
 Physical Response In the Adult ESL Classroom. *Corrections Today*, 73.
 50-55.
- Kleinert, Harold, Cloyd, Elizabeth, Rego, Molly, & Gibson, Jina. (2007).Students with Disabilities: Yes, Foreign Language Instruction isImportant. *Teaching Exceptional Children. 39* (3). 24-29.
- Leons, Eve, Herbert, Christie, and Gobbo, Ken. (2009). Students with Learning Disabilities and AD/HD in the Foreign Language Classroom: Supporting Students and Instructors. *Foreign Language Annuals*, 42 (1), 42-52.
- Ray, Blaine. (2006-2011). Blaine Ray TPRS. Retrieved from http://www.blaineraytprs.com
- Spencer, K.D., McDevitt, T., & Esch, M. (2009). Brief training with co-speech gesture lends a hand to word learning in foreign language. *Language and Cognitive Processes*, 24(2), 313-334.
- Tomlinson, Brian & Masuhara, Hitomi. (2009). Playing to Learn: A Review of Physical Games in Second Language Acquisition. Simulation & Gaming, 40 (5), 645-668.

Wang, Qiaoying & Castro, Carolyn. (2010). Classroom Interaction and Language Output. English Language Teaching, 3 (2), 175-187.

Appendix A: Test Administered

Nombre: _____ Pd. ____ Pd. ____ *Examen: Vocabulario del cuarto*

Escuchando.

1)	4)				
2)	5)				
3)					
Identify the following in English.					
6) sala -	7) basurero -	8) puerta -			
9) espejo -	10) ventana -	11) cómoda -			

Identify the following in Spanish.









Translate the following into Spanish.		* <u>MAKE SURE YOU CONJUGATE THE VERB!</u> ©		
* For your assistance Comprar	Tener	Necesitar		

- 16) He has a lamp, alarm clock, and dresser in his (su) bedroom.
- 17) I need a kitchen in my apartment.
- 18) We buy a poster and mirror for the house.

Translate the following into English.

- 19) Rachel y AJ compran un cartel, un estante, y un basurero para sus dormitorios.
- 20) Yo tengo siete ventanas, una sala, una cocina, y dos baños en mi casa.