
HIM 1990-2015

2014

What is the Efficacy of Peer Presentation for English Language Learners?

Courtney Roy
University of Central Florida

 Part of the [Special Education and Teaching Commons](#)

Find similar works at: <https://stars.library.ucf.edu/honorstheses1990-2015>

University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by STARS. It has been accepted for inclusion in HIM 1990-2015 by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Roy, Courtney, "What is the Efficacy of Peer Presentation for English Language Learners?" (2014). *HIM 1990-2015*. 1648.

<https://stars.library.ucf.edu/honorstheses1990-2015/1648>

WHAT IS THE EFFICACY OF PEER PRESENTATION
FOR ENGLISH LANGUAGE LEARNERS?

by

COURTNEY A. ROY

A thesis submitted in partial fulfilment of the requirements
for the Honors in the Major Program in Exceptional Education
in the College of Education and Human Performance
and in The Burnett's Honors College
at the University of Central Florida
Orlando, Florida

Summer Term, 2014

Thesis Chair: Dan Ezell, Ed. D.

ABSTRACT

This study investigates whether the learning strategy of Peer Presentations may positively influence an English Language Learner's (ELL's) relationship with peers, and personal perspectives with pertinence to the sciences, public discourse, and their institution. Data collection instruments included a developed pre- and post-sociometric survey to quantitate each classroom's social status, and a pre- and post-qualitative oral interview to acquire individual perceptions concerning enjoyment and contentment of academic topics. Three ELLs from two learning environments participated with the eight day intervention, comprising of 45 minute instructive sessions to become proficient with demonstrating an arrangement of invigorating yet harmless scientific experiments. After the Peer Presentation, analysis of pre- and post-sociometric results demonstrated an overall increase of more intimate friendships. Examination of the ELLs' oral interview responses indicated growth of enjoyment regarding their institution and public discourse. Overall recommendations and suggestions of utilizing Peer Presentations are discussed for those involved with educating students.

DEDICATION

In loving memory of my grandfather, William R. Semper (1936-2005),
a man who showed determination and courage when others were silent.

His name will always be my inspiration to make a difference,
and he will never be forgotten.

ACKNOWLEDGEMENTS

It is a pleasure to thank those who have made this thesis possible.

Dr. Dan Ezell, for serving as Thesis Chair and his continuous support, motivation, and patience throughout the writing of this thesis. Also to Dr. Cynthia Pearl and Dr. Sherron Roberts, as committee members, for providing the additional guidance and encouragement.

My Mother, for being my greatest advocate in life. She provided me with an exceptional academic and moral background, and encouraged a constant desire to learn.

Words cannot describe my gratefulness of her constant encouragement and guidance.

To my Father for his additional support to complete my university studies, and brother Mitchell, who is understanding and reminds me to laugh.

A wholehearted thanks to the administrators, teachers, and students who were involved with the study. Their assistance with this research will hopefully promote a successful teaching strategy which benefits future learners.

To all my instructors, mentors, and friends, who provided additional knowledge and motivation; their instruction, help, and words of encouragement were greatly appreciated.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION.....	1
Rationale	1
Significance of Research.....	3
Forthcoming Chapters.....	4
CHAPTER TWO: REVIEW OF THE LITERATURE	5
Introduction.....	5
Social Psychology Background	5
English Language Learners.....	8
Peer Presentations	10
Summary	12
CHAPTER THREE: METHODOLOGY	13
Introduction.....	13
Proposed Setting	13
School Environment.....	13
Students.....	14
Case study of ELL #1	15
Case study of ELL #2	15
Case study of ELL #3	15
Research Approval.....	15
Study Design.....	16
Instruments and Resources	17

Pre- and post-sociometric survey.....	17
Pre- and post-interview survey	19
Experiments	20
Final Presentation.....	23
Compensation	23
Summary	24
CHAPTER FOUR: RESULTS	25
Introduction.....	25
Analysis of Pre- and Post-Sociometric Surveys	25
English language learners’ status results	26
English language learners’ interaction opportunities.....	27
Classrooms’ social status	28
Analysis of Pre- and Post-Interview Surveys	30
Summary	32
CHAPTER FIVE: CONCLUSIONS	33
Introduction.....	33
Discussion of Results.....	33
Educational Implications	35
Future Research	37
APPENDIX A: IRB APPROVAL LETTER	39
APPENDIX B: SCHOOL DISTRICT APPROVAL	41
APPENDIX C: PARENT/GUARDIAN CONSENT FORM	43

APPENDIX D: PARENT/GUARDIAN CONSENT FORM (SPANISH).....	49
APPENDIX E: ELLS’ PARENT/GUARDIAN CONSENT FORM.....	55
APPENDIX F: ELLS’ PARENT/GUARDIAN CONSENT FORM (SPANISH)	61
APPENDIX G: SOCIOMETRIC SURVEY.....	67
APPENDIX H: SOCIOMETRIC SURVEY (SPANISH)	69
APPENDIX I: INTERVIEW QUESTIONS.....	71
APPENDIX J: INTERVIEW QUESTIONS (SPANISH)	73
APPENDIX K: INTERVENTION INSTRUCTION TECHNIQUES	75
REFERENCES	77

LIST OF FIGURES

Figure 1: Maslow's Hierarchy of Needs	8
Figure 2: Science Experiments	22
Figure 3: ELLs' Pre- and Post-Intervention Status	26
Figure 4: Pre- and Post-Intervention Interaction Opportunities	27
Figure 5: Classroom A Pre-Intervention Social Status	28
Figure 6: Classroom A Post-Intervention Social Status	29
Figure 7: Classroom B Pre-Intervention Social Status	29
Figure 8: Classroom B Post-Intervention Social Status.....	30
Figure 9: Pre-Intervention Perceptions	31
Figure 10: Post-Intervention Perceptions.....	31

LIST OF ABBREVIATIONS

ELL - English Language Learner

ESL - English as a Second Language

FLDOE - Florida Department of Education

IRB - Institutional Review Board

NGSSS - New Generation Sunshine State Standards

PI - Peer Instruction

UCF - University of Central Florida

CHAPTER ONE: INTRODUCTION

Rationale

With each passing year, the population of English Language Learners (ELLs) living within the United States increases. According to the *Migration Policy Institute: National Center on Immigrant Integration Policy*, between 1998 and 2008, the number of ELLs enrolled in Pre-Kindergarten to 12th grade escalated by 1.9 million children. The six states in which these demographics are growing the most rapid are California, Texas, Florida, New York, Illinois, and Arizona. Students are coming from non-native backgrounds, presenting limited English proficiency when entering the public school system, and instead are bringing cultural mannerisms, beliefs, and customs into the classroom, which are most likely to be diverse from their peers. With a language barrier and few lifestyle similarities, these ELLs may become “neglected” and/or “rejected” among their peers and unmotivated to learn (Santrock, 2008; Wood, Wood, & Boyd, 2011).

The purpose of this research is to investigate a teaching method aimed towards improving the social and academic achievements within the pre-adolescent population who are ELLs. From the composite of research and personal observations, Peer Presentations -- a cooperative pedagogical method in which students teach the subject content -- is considered an effective learning strategy. As corresponding literature to this study will suggest, receiving peer acceptance motivates students to reach their full potential and excel academically, especially those who are learning the language spoken within the classroom environment (Santrock, 2008; Sentese, Lindenberg, Omvlee, Ormel & Veenstra, 2009; Wood, Wood, & Boyd, 2011).

Therefore, the following primary question was considered:

- *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) relationship with their English-speaking peers?*

To determine the answer, a small group of chosen ELLs were given the task to complete a Peer Presentation involving one of the most commonly underused subjects utilized in school: Science. Despite the lack of attention the discipline receives, it offers a great opportunity for “hands-on, science instruction . . . learning opportunities for ELL students to develop scientific understanding” (Lee, Buxton, Lewis, & LeRoy, 2006, p. 610). Such academic activities would provide supportive language acquisition in the context of authentic communication concerning scientific knowledge. Furthermore, the experiments are also fun and exciting to both the participant and the general viewers alike.

Previous research has demonstrated the instructional method of Peer Presentations additionally increases student motivation in regards to learning, as it motivates students and increases student subject proficiency (Chase, 2012; Ogawa & Wilkinson, 1997). Therefore, the following question was also posed:

- *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) perceptions of science, public speaking, and school?*

For the research study, data was collected using a pre- and post-intervention sociometric survey, completed by all 27 participating students. Additionally, pre- and post-interview were given to the ELLs who were involved with the intervention, measuring their perceptions.

Considering the primary research questions, the following inquiries were posed:

- *Is there an increase in the frequency of the ELL's names on sociometric surveys completed by peers following Peer Presentation of science experiments?*
- *Following the presentation of experiments to their peers, will there be a change in the ELLs' enjoyment and/or comfort with science, public speaking, and school?*

The following was hypothesised in correspondence:

- *After presenting scientific experiments to their peers, English Language Learners (ELLs) names will appear more frequently on the post-sociometric survey.*
- *Using pre- and post-intervention questionnaire responses as evidence, the ELLs perceptions will increase in regards to their enjoyment and/or comfort with science, public speaking, and school.*

Significance of Research

For those educators who are teaching within classrooms which contain a diverse population of cultures, languages, and backgrounds, using instructional methods which encourage a student-centered, constructivist environment will promote interaction between students. In the book, *Theoretical Foundations of Learning Environments*, Jonassen & Land (2012) declared the following: "A social constructivist perspective emphasizes the interdependence of the individual learner and the context in which s/he is learning (p. 273). Therefore, classmates may perceive their peers with coequality rather than as an opposite or possible inferior. This research explored whether Peer Presentations demonstrate potentiality to encourage and improve these values, by having two classrooms observe three of their ELL classmates present an array of science experiments after two weeks of exclusive small-group instruction.

Forthcoming Chapters

In the contents of the next chapter, a review of related literature and research is shared to provide prior knowledge concerning the discussed topics. The methodology of the study is expressed in Chapter Three, including the setting, population, instruments, and procedures. Within the last two chapters, four and five, the analyzed results of the research are discussed accordingly in regards to any transformations, educational implications and future research.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

This research is focused upon examining whether the learning strategy of Peer Presentations may influence English Language Learners (ELLs) relationships with their peers. In addition, it studies how a student's perceptions change upon completing the program in regards to science education, public speaking and school. Data was collected from students using a pre- and post-sociometric and interview survey, followed by the researcher reporting descriptive statistics with qualitative analyzation.

In this chapter, pertinent literature and research studies are examined and discussed which influenced the methodology of this study. It begins with sharing the developmental process of pre-adolescent individuals and how peer rejection affects their overall well-being. This is followed by background information with reference to ELLs and identifying the psychological aspect to their linguistic and cultural differences. Finally, the learning strategy of Peer Presentations is investigated in regards to its purpose and any previous attempts of utilization in classroom settings.

Social Psychology Background

Throughout life, it is natural for humans to desire acceptance from those surrounding them daily, due to the social necessity of creating relationships with others (Poston, 2009). However, these cannot be formed nor forced by individuals who are within a similar setting, namely a classroom. In the book, *The Cultural Animal: Human Nature, Meaning, and Social Life*, by Baumeister (2005), he states, "Cultural beings do not relate to each other only as individuals . . . the backdrop of culture organizes behaviors and interactions in ways that

transform them” (p. 342). Therefore, people attempt to create connections by finding similarities in each others’ experiences, including upbringing, education, and language. It is by finding such equivalences in lifestyles, relationships may be created. Yet, social scientists have determined this only becomes prioritized at certain life stages.

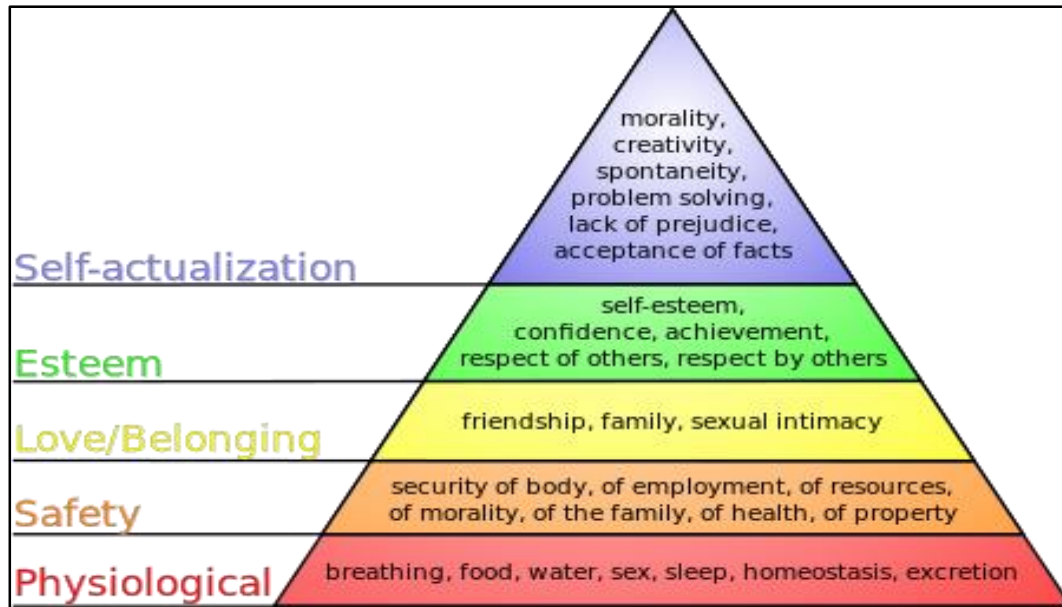
Erikson’s fourth psychosocial stage, industry versus inferiority, is one that is directed towards youth ranging in the late childhood to pre-adolescent years. During this time, the child must grow functionally to become productive, while additionally avoiding the sensation of being inferior to others (Boeree, 2006). Although gaining an education is now important, children become more preoccupied with establishing a strong social status amongst peers (Erikson, 1980; Miller, 2003). Therefore, youth will take the common route humans have taken throughout the ages, by finding acquaintances from those who share similar views. Such relationships can be formed at various agencies of socialization, such as “the family, information ‘peer groups’, churches, and sundry voluntary organizations” (Ballantine & Spade, 2008, p. 81). However, as a large portion of the United States’ younger generation are being educated, the classroom is the ultimate central socializing agency.

Being warmly accepted by a group of peers is essential for a healthy lifestyle; by having a positively influenced communal standing, it can improve a student’s social and mental development displayed as self-respect and academic achievement. In contrast, being rejected by peers may generate serious opposing effects (Sentese, Lindenberg, Omvlee, Ormel, & Veenstra, 2009). The overall results of rebuffing are described into more detail by Leung and Silberling (2006) of Loyola Marymount University:

“Rejection seems to play an important role in achievement and motivation for students because students who are rejected by their peers are often found to have more problematic academic and socioemotional adjustment. Further, peer rejection has been linked with violations of classroom rules and has been considered to be a predictor of academic dysfunction. Consistent with the above findings . . . students who were viewed negatively by peers were also rated by their teachers as having academic and social difficulties” (p. 58).

Yet individuals who are viewed positively by peers, and therefore appreciated and respected, will theoretically accept themselves. According to Maslow’s five-leveled Hierarchy of Needs, this is known as ‘self-actualization’. Prior to satisfying this fulfillment, four other psychological extrinsic values are required, as depicted in a pyramidal order of ascension in a linear pattern of growth: Physiological, Safety/Security, Belongingness, and Self-esteem or Respect (Olson, 2013). Self-actualization may be demonstrated once each standard has been met. Individuals would then demonstrate a combination of ‘reality-centered’ attributes, including interconnectedness, spontaneity, autonomy, acceptance, and lawfulness (Gawel, 1997).

Figure 1: Maslow's Hierarchy of Needs



Reasoning for student rejection may differentiate amongst ages and cultures. Such factors may include a 'socially withdrawn' attitude, which has been created from their at-home environment or previous experiences (Asher & Coie, 1990), or differences in physicality, mentality or even linguistically. Nevertheless, either could prevent the student from communicating.

English Language Learners

According to the book by Ravitch (2007), *EdSpeak: A Glossary of Education Terms, Phrases, Buzzwords, and Jargon*, an English Language Learner (ELL) is defined as a student whose first language is not English, and has yet to gain proficiency in English. Within the public schools of the United States, they are the largest growing population. According to the National Policy Institute, of the 49.9 million students enrolled during the 2007-2008 school year, 5.3

million (10.7%) were ELLs. As explained by the *Center for Public Education*, these numbers will continue to increase as diverse racial and ethnic origins populations grow. Based upon the *2012 Census*, statistics demonstrate that 20% of the children within the U.S. who are five years or younger are non-English speakers. With an increase of minorities rising, it is estimated that by the year 2030, over 40% of the student population in schools will be ELLs (Navarrete & Watson, 2013). Due to the linguistic diversity, in addition to cultural and socioeconomic diversity, the need for English as a Second Language (ESL) and/or bilingual instruction is a priority. Suggestions of methods to develop a supportive environment may include implementing verbal scaffolding, employing student's prior knowledge and experiences, and/or deliberately planning oral functions. Unfortunately, the number of educators who are qualified as ESL/bilingual instruction is sparse. According to the National Center for Education Statistics, in the 2011-2012 school year, only 2.1% of the educators in public elementary and secondary schools were certified to teach ELLs.

Unlike their classmates, students who do not naturally speak English additionally carry anxieties about speaking. This may be due to the fear of incorrectly pronouncing expressions, peer/teacher laughter, and the overall learning environment (Zgutowicz, 2009). When students are dissuaded by such factors to speak and interact in the classroom, this cannot only hinder their language learning and overall academics, but additionally any possible acceptance from peers within the central socializing agency of one's youth. Considering these circumstances, it may be possible the method of Peer Presentations could promote both student relationships and academic achievement.

Peer Presentations

In 1903, playwright George Bernard Shaw communicated the following in his drama ‘*Man and Superman*’ (1903): “[S]he who can, does. [S]he who cannot, teaches”. This infamous quote has been repeated by many as rationale why practical vocations are superior, while disparaging all educators stating they are incompetent of any notable skill. Discernibly, this speculation is nonsensical, as anyone who lacks the ability to physically do something would additionally have insufficient knowledge to educate others.

A variant of the mentioned quotation has been attributed to ancient Grecian philosopher Aristotle, which states, “Those who know, do. Those that understand, teach”. Although none of his documented written works state this, in Aristotle’s book, *Metaphysics*, Wheelwright (1951), it translates as, “what distinguishes the man who knows from the ignorant man is the ability to teach, and this is why we hold that art and not experience as the character of genuine knowledge” (as cited in Moon & Mayes, 1993, p.126). A principle which embraces educating of content to demonstrate proficiency and appreciation of the content, surpassing involvement, would be concordant at any age.

Within learning environments, students will typically attempt to complete assigned undertakings of which they have prior knowledge (“do”). However, such comportment does not assure nor verify whether instructed subject matter was comprehended (“understand”), inducing imprecise responses during assessments. Considering the philosophy in which educating others demonstrates comprehension, it may be implied instructing students to become teachers will guarantee a high probability of retention, a learning strategy commonly referred to as ‘Peer Presentations’.

Peer Presentation should not be confused with the evidence-based methodology known as ‘peer instruction’ (PI), which was developed in the 1990s by Harvard professor, Eric Mazur. This strategy involves a short single-focused presentation, followed by a conceptual question which every student is probed to formulate individual answers to then discuss with classmates (Crouch & Mazur, 2001). Research findings found PI to be extremely effective, significantly increasing the percentage of accuracy in regards to simple recall questions, while additionally promoting advancement with higher-level thinking (Rao & DiCarlo, 2000). In contrast, there is scarce research regarding the pedagogical method of Peer Presentations. However, a study was conducted circa 1997 at a junior-college in Nagasaki, Japan, in which the first- and second-year students were challenged to become the teachers as a means to advocate higher communication skill levels. After an evaluation of both student reports and teacher observations, it was demonstrated that participants gained an intensified awareness of proper methods of communicating with others in regards to pronunciation, annunciation, and body language. Additionally, some students expressed an increase of motivation to learn, while others showed appreciation for their teachers (Ogawa & Wilkinson, 1997).

In 2012, *Envision Education* in California, partook in a pilot project to develop a curriculum which encompassed a project-based environment and implemented the web-based education resources from the non-profit organization, *Khan Academy*. In hopes to “increase student engagement and foster an authentic sense of urgency around their education”, a new web platform, known as ‘Upside Down Academy’ was designed and applied to which students had opportunities to virtually teach as a method of learning (Chase, 2012). Similar to the 1997 study in Japan, a post-project reflection from the students demonstrated a higher respect for their

teachers. However, by understanding how teachers educate, it provided them the understanding about how to break down a difficult concept and teach themselves.

Summary

Based upon the psychological and statistical findings concerning pre-adolescent students and ELLs in the United States, this research was conducted around a fusion of these populations. It was additionally determined to go forth and employ the originally proposed teaching strategy of Peer Presentations for this study, as evidence showed they can increase student motivation of the subject-content. The basis of this study will determine whether they may furthermore adjust the perceptions of observing pre-adolescent peers, and therefore, relationships between students.

In Chapter Three, information regarding the study's methodology is discussed in detail. After receiving approval to conduct the research in two fourth grade classrooms, all of the participating students were required to complete a pre- and post-intervention sociometric survey to indicate both environments' social status. Three ELLs, who presented science experiments to their classmates, additionally completed a pre- and post-interview survey to measure their self-perceptions in regards to science education, public speaking and school.

CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this study was to answer the research questions: *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) relationship with their English-speaking peers?* and *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) perceptions of science, public speaking, and school?* Review of literature demonstrated the target developmental population in which this would be most effective amongst are between the late childhood and pre-adolescent stages. Therefore, the aim was to conduct the study in an elementary school, and have three to five ELLs demonstrate the motivational strategy of Peer Presentation to their fourth grade classmates. Within this chapter, the methodology of completing these tasks is recounted descriptively by outlining the objectives and operations.

Proposed Setting

It is during the pre-adolescent years, the importance of popularity reaches its peak (Erikson, 1980; Miller, 2003). Therefore, to conduct this research, the proposed population was to work with students between the fourth and sixth grades. Additionally, as all in-field research was conducted by one individual, the objective was for at least two classrooms to participate with three to five of their ELLs partaking in the intervention. Based upon these conditions, the setting and participants were chosen.

School Environment

Research was conducted at an urban magnet school, Endeavour Elementary, within Eastern Central Florida. According to the Florida Department of Education's (FLDOE) 2013

School Grades, although the school on average rates with a ‘D’ level performance, it was rated as an ‘F’ during the 2012-2013 fiscal year. The location is within a low income neighborhood, and is a Title I school with 100% of the students eligible to receive free and reduced lunches.

Within the school’s population during the 2012-2013 school year, 20% of the students were English Language Learners. Although, information has not yet been distributed by the FLDOE regarding the 2013-2014 fiscal year, accounts from the educators within the school has confirmed this percentage has increased. A majority of the students have immigrated or have roots originally from South and Central America, and/or East Asia.

Students

A total of two fourth grade classrooms participated in the study, with each having a total of nineteen students. Within the first classroom (Classroom A), fourteen of the students completed participation by filling out both a pre- and post-sociometric survey. The overall demographics of the classroom included twelve females and seven males. Racially, there were two Caucasians, six of African-decent, and eleven Latino/Hispanics. Approximately 42% of the students are considered ELLs, and are provided with the corresponding services. Three of the students are recent immigrants to the United States, having arrived only two months prior to the study. For the intervention, a male and female student from this classroom were chosen to participate.

Within the second classroom (Classroom B), thirteen of the students participated by completing both the pre-and post-sociometric survey. With a total of ten females and nine males within the environment, racial demographics of this group included six Caucasians, ten of

African-decent, and three Latino/Hispanics. Approximately 23% of the students are considered ELLs, only one male being chosen to be involved with the intervention.

Case study of ELL #1

Coming from Classroom A is a 10-year old male student. Originally from the Western United States, he was raised within a Spanish-speaking community. Regarding conduct, the student's teacher considers him quiet during academic studies. In contrast, throughout physical education and other similar recreation, he is humorous and outgoing.

Case study of ELL #2

A 10-year old female from Classroom A, the student was born and raised in Eastern Central Florida. However, being surrounded by Spanish-speaking family and neighbours, her English-language acquisition is between the early production and emergent stage. The student is considered to be a caring and sweet individual by her teacher, yet is very reserved in demeanor.

Case study of ELL #3

From Classroom B is a 10-year old male student. He is an immigrant from Central America, and has lived in the United States for a few years. Although occasionally finding companionship with two classmates, academic studies are given predominance. Though he has difficulty with writing and the pronunciation of English, he excels in mathematics and science.

Research Approval

Prior to conducting this research, an application was submitted to the Department of Research at the University of Central Florida (UCF) to be reviewed by the Institutional Review Board (IRB). A receipt of approval was received on December 13th, 2013 (Appendix A). A

research application was then sent to the school district, and received written approval on February 6, 2014 (Appendix B). Afterwards, the administrator for the participating elementary school was contacted to conduct the study, and provided consent.

Two teachers from the school were contacted, and agreed to have their class involved with the study. Copies of consent letters were printed and distributed to all the students, and asked to be completed within two weeks. One was for those students who would only be completing the pre- and post-sociometric surveys (Appendix C). The other was for the ELLs who were also completing the sociogram, in addition to a pre- and post-interview and participating in the intervention (Appendix E). Both documents were originally written in English. However, translation services were required, and the forms were transcribed into Spanish by reliable personnel (Appendix D & F)

Study Design

To determine whether ELL's relationship with peer changed following Peer Presentations, a survey study was completed. All of the student who were given consent to participate in the study from the two fourth grade classrooms were provided with an initial six-question sociometric survey, in addition to a random code name to keep confidentiality, to determine each environment's social status. Following receiving the results, three ELLs, two from Classroom A and one from Classroom B, each completed an individual five-question interview sharing and rating their perceptions of science education, public speaking, and school.

Upon completing this, all three of the ELLs were brought together to begin the science intervention. Applying a pre-determined list of experiments, the students learned how to conduct and present each demonstration effectively. This continued every day for two weeks, excluding

Mondays (equaling eight days), with each session being 30-45 minutes in length. On the last day of the intervention, a Friday, the students performed all the experiments in a classroom for their fellow classmates and teachers. Following the students' demonstration, both classrooms had a pizza party and watched a local magician perform. Students involved with the study additionally received a certificate of participation during the celebration, with the three ELLs each receiving a small packet of materials to conduct science experiments at home.

The Tuesday of the following school week, all of the participating students were given another random code and an identical sociometric survey. Additionally, each of the three ELLs who participated in the intervention completed an identical five-question interview. Again, it asked the students to share and rate their perceptions of science education, public speaking, and school.

Instruments and Resources

To evaluate the differences between social relationships and the three participating ELLs' change in motivational attitudes, two instruments were used prior and subsequent to the intervention. In addition, a total of six experiments were selected for the three students to learn.

Pre- and post-sociometric survey

A sociometric survey is a tool which helps portray the structure of the classroom and the position of each student within it (Moreno & Fox, 1984). In this survey, six questions were asked, in which the students needed to identify their preferences in classmate companionship. For reasons concerning confidentiality, the students were asked to "try to answer the questions by themselves" and to "not share their answers with another pupil" (Cornish & Ross, 2004). To ensure complete disclosure, students were randomly given code names (e.g. Alpha, Indigo,

Tonka, Zulu, etc.). The survey questions were taken and adapted from a previous study by Bowen (2008), who measured friendship patterns between deaf and/or hard of hearing students and their classmates in general first/second and third/fourth grade classrooms. The original questionnaire contained sixteen scenario-based questions, eight of both positively and negatively posed situations, including: “Which of the students in the class would you most/least like to have as a friend?”, and, “Which of the students in the class would you most/least like to sit with at lunch?”. To ensure focus was placed upon favourable components, this study only required responses to positive situations (Appendix G):

- *Which classmate do you consider your best friend?*
- *Which classmate would you most like to have as a friend?*
- *Which classmate would you most like to work with on a school project?*
- *Which two classmates would you most like to sit with at lunch?*
- *You have been given permission to have a sleepover. Which three classmates would you most like to invite?*

Each question was slowly read orally by the researcher, to ensure student comprehension. For those students who were unable to read or aurally understand the English version, a Spanish document was made readily available and slowly read aloud (Appendix H).

Once gaining the initial results, and using each classroom’s roll book as a reference, a sociometric matrix was created. This quantitative structure summarised the choices and dismissals declared by each student. Using this data sheet, a sociogram was created which diagrammatically indicated the patterns of the social status within both classrooms (i.e. whose names were chosen the most and least often).

Exactly three days after the intervention, each of the participating students within the two classrooms were given a second sociometric survey. To collate the results precisely, identical questions were asked. Additionally, each student was given a random code name to ensure confidentiality. The findings from the new classroom peers status were then compared and contrasted to the original sociogram results to determine the answer of the research question:

- *Is there an increase in the frequency of the ELL's names on sociometric surveys completed by peers following Peer Presentation of science experiments?*

Pre- and post-interview survey

To gain knowledge of the ELLs concepts of their self-perceptions regarding academic, each of the ELLs were orally interviewed separately in a designated location on the school grounds. The discussion consisted of five questions; two concerning science education, two about public speaking, and one concerning their enjoyment of school (Appendix I):

- *Do you enjoy science?*
- *Do you like doing experiments?*
- *Do you enjoy speaking in front of others?*
- *Are you comfortable speaking in front of others?*
- *Do you like school?*

Students were asked to respond with, “Never”, “Sometimes”, “Often” or “Always”.

Although the questions and possible answer selections were in English, a Spanish translation was available to read from (Appendix J). However the latter rendition was utilized merely once with a particular student. Following the interview, was a two week intervention and a final demonstration. Three days afterwards, the chosen ELLs were given an identical oral interview

which could be responded with the same four answers. The findings from their new self-perceptions were then compared and contrasted to their original responses to determine the answer to the secondary question:

- *Following the presentation of experiments to their peers, will there be a change in the ELLs' enjoyment and/or comfort with science, public speaking, and school?*

Experiments

For the intervention, the three ELLs were brought to the school's science lab where they learned how to conduct and present exciting, yet highly educational, scientific experiments. Being temporarily removed from their typical learning environment, each of the demonstrations needed to follow benchmarks under the Big Ideas for fourth grade science in accordance with Florida's Next Generation Sunshine State Standards (NGSSS). Each experiment chosen was taken and adapted from educational literature written for individual children to conduct experiments privately (Burtitta, 2005; Robinson, 2007). Therefore, they were considered safe and required no hazardous tools or substances. On Figure 2, it shows the experiments taught and the corresponding NGSSS.

The students learned how to conduct and explain each experiment during the first four days of intervention. Upon doing so, they were given the opportunity to decide which they would each like to present. Throughout the last three days, they worked cooperatively and were prompted to incorporate personal components such as humour offered by ELL #1, the easygoingness of ELL #2, and a serious disposition from ELL #3. As a final touch to the demonstration, the three students also determined to incorporate volunteers and additional props (Appendix K). Upon determining their individual roles and movements, a script was orally

dictated from the students to the researcher to type. Students were given individual printed copies to practice with at home to ensure familiarity.

Figure 2: Science Experiments

Experiment	Activity	How it Works	NGSSS
1. Liquid to a Solid**	Put a 1/4 teaspoon of sodium polyacrylate, into a styrofoam cup. Then pour approximately 1/2 cup of water into the cup. Wait about 3 seconds, and turn the cup over. The mixture solidified!	Sodium polyacrylate is a super-absorbent polymer, which is a chain of repeating molecules. These polymers expand when in contact with water, as the liquid is drawn in.	SC.5.P.8.IN.1 - Identify basic properties of solids, liquids, and gases, such as colour, texture, and temperature.
2. Miracle Fish	Place a Chinese 'Fortune Tell Fish' onto one's hand, and hover the other hand above it. The fish moves!	The fish is made from sodium polyacrylate, a polymer which grabs onto water molecules nearby. This changes the objects shape, hence why the fish moves.	SC.5.P.8.IN.1 - Identify basic properties of solids, liquids, and gases, such as colour, texture, and temperature.
3. Instant Snow*	Put a 1/2 teaspoon of the Insta-Snow into a cup/dish. Then pour approximately 3/4 cup of water into the container. It immediately turns into fluffy 'snow'.	The powder contains sodium polyacrylate, a polymer which absorbs water molecules. When the substance does this, it turns into a fluffy substance.	SC.5.P.8.IN.1 - Identify basic properties of solids, liquids, and gases, such as colour, texture, and temperature.
4. Straw & A Potato	Placing a thumb tightly onto the hole of one end of the straw, quickly force it into a potato! It will go straight through!	Placing a thumb over one end of a straw traps air inside. The air molecules compress, building strength, making it strong enough to use as a sturdy projectile.	SC.4.P.10.2 - Investigate and explain that energy has the ability to cause motion or create change.
5. Pepper & Water*	Pour water into a bowl, and shake some pepper into the container until it covers the entire surface. Dip finger into dishwashing liquid, then into the water mixture. All the pepper rushes to the edges!	Adding detergent to water lowers surface tension. Water normally bulges, yet when tension is lowered, it spread outs.	SC.5.P.8.2 - Identify properties and common uses of water in each of its states.
6. Piercing a Balloon*	Inflate a latex balloon until it is about full size. Dip a bamboo skewer into oil or Vaseline, then pierce where the balloon was tied. Push it until it penetrates the opposite side. It doesn't pop!	The portion where the latex molecules are under the least strain are on both ends (where the skin is thicker). By using the oil/Vaseline as a lubricant, it helps keep these areas together when the skewer penetrates the area.	SC.5.P.8.4 - Recognize that materials are made of tiny parts that cannot be seen without a magnifying glass or a microscope.

* - Experiment Used

** - Experiment Used Twice (Adjusted)

Final Presentation

After seven days of learning and practicing scientific experiments, the three ELLs gave their demonstration clad in lab coats and goggles to promote lab safety. The presentation was completed within one of the participating classrooms, with all of their classmates and teachers in attendance. Additionally, students from the exceptional education program, other teachers, and school administration were present.

Using a script the students created, a total of five scientific techniques were demonstrated. In Figure 2, experiments marked with a single asterisk (*) are ones the students determined to present. Additionally, an experiment was presented twice, yet with different procedures (this is marked with a double asterisk **); while one student presented this independently incorporating a card trick, the other two students used a comedic style to make water disappear.

Informal observations of viewers' behavior and reactions were made during the presentation. All of the students seemed genuinely intrigued and amazed with their fellow classmate's abilities. Every time a new experiment was presented, the other children would inquire aloud how it happened.

Compensation

After the students finished their presentation, festivities continued with entertainment, food, and an award ceremony. The leading investigator for this study is also a professional magician. Therefore, he demonstrated a variety of magic tricks to the students inside the classroom, and additionally outside on the basketball court as the students enjoyed slices of pizza. Before being dismissed, all the students who were given consent and were involved in the

study were given a certificate of participation, and the three ELLs given a small packet filled with materials to conduct science experiments at home.

Summary

To conduct the study, a total of 27 out of 38 (71%) students from two fourth grade classrooms completed an identical six-question pre- and post-sociometric survey. These instruments were created to provide evidence as to how both environments' social statuses changed after the intervention - three fellow ELL classmates demonstrating a science presentation after two weeks of practice. Informal observations displayed a positive attitude and greater admiration towards those three students. Additionally, to determine whether motivation increased, the ELLs involved with the intervention completed an identical five-question pre- and post-interview survey regarding their perceptions of science education, public speaking, and school.

In Chapter Four, the results from all these surveys will be described statistically and qualitatively. With the sociometric surveys, concern will be upon the increase and/or decrease of occasions the three ELLs' names appeared on the post-survey compared to the one initially given. This will demonstrate as to whether the intervention of Peer Presentations affects a learning environment's overall social status. Furthermore, each of the three ELL's pre- and post-interview surveys will be evaluated to measure the differences in perception in the specified academic areas.

CHAPTER FOUR: RESULTS

Introduction

The primary research questions were: *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) relationship with their English-speaking peers?* and *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) perceptions of science, public speaking, and school?* To answer this, two additional inquiries were made as guides for the study's overall design:

- *Is there an increase in the frequency of the ELL's names on sociometric surveys completed by peers following Peer Presentation of science experiments?*
- *Following the presentation of experiments to their peers, will there be a change in the ELLs' enjoyment and/or comfort with science, public speaking, and school?*

In this chapter, the results from the pre- and post-intervention sociometric surveys will be reported as descriptive statistics. They will also be analyzed qualitatively, based upon the data and informal observations. Outcomes of the pre- and post-interview survey will also be evaluated as to the differentiating of the ELLs' self-perceptions in regards to science education, public speaking, and school.

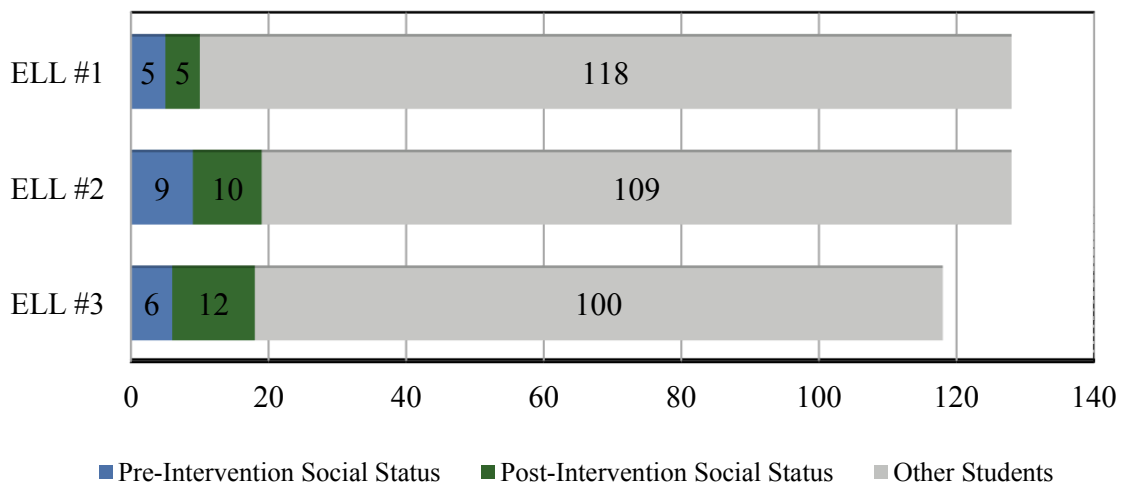
Analysis of Pre- and Post-Sociometric Surveys

To evaluate the differences between the ELL's pre- and post-intervention results, both sociometric surveys were analyzed quantitatively. Based upon their results, the placements their names appeared are evaluated. Additionally, each of the classroom's social statuses are assessed statistically and discussed in concern to individual phenomena (Lawrence, 2000).

English language learners' status results

In Figure 3, the horizontal bar-graph indicates the increase or lack thereof in regards to the social status of the three students via the pre- and post-intervention surveys. While ELL #1 (male) and #2 (female) were from Classroom A, ELL #3 (male) was from Classroom B. The students from the first environment each had 64 opportunities for their names to appear on each survey, while the other had 59 possibilities.

Figure 3: ELLs' Pre- and Post-Intervention Status



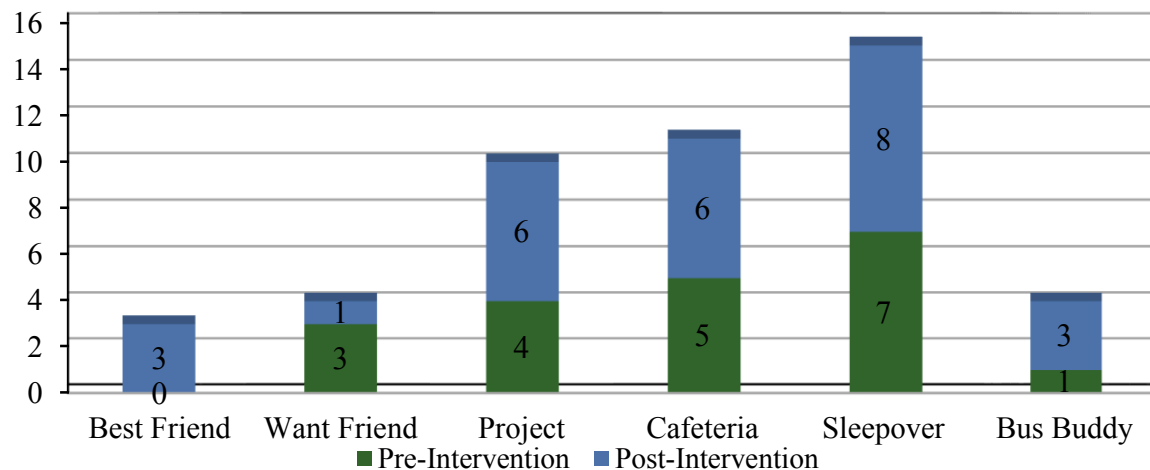
With ELL #1, on the first survey, the student's name appeared 5 out of 64 times (7.8%). This number neither increased nor decreased for the second survey. Therefore, the number of occasions his name appeared combined was 10 out of 128 (7.8%) times. With ELL #2, the student's name was written 9 out of 64 (14.2%) on the first survey. This number increased by 1.5% (10 out of 64) for the second survey, making her total social status equivalent to 14.8% (19 out of 128). For ELL #3, the student's name appeared 6 out of 59 times (10.2%) on the first

sociometric survey. However, this number doubled for the post-survey, when his name appeared on 12 out of 59 (20.3%) occasions, equaling to a total of 18 out of 118 (15.3%).

English language learners' interaction opportunities

In Figure 4, the vertical bar-graph reveals the combined frequency of the ELLs' names across specified social interaction opportunities. Prior to intervention, none of them were considered best friends by their peers, yet were considered to begin a relationship. The post-survey indicates these numbers interchanged; although the ELLs names decreased for "want as a friend", they increased for being considered a classmate's "best friend". All of the other four opportunities of interaction additionally escalated.

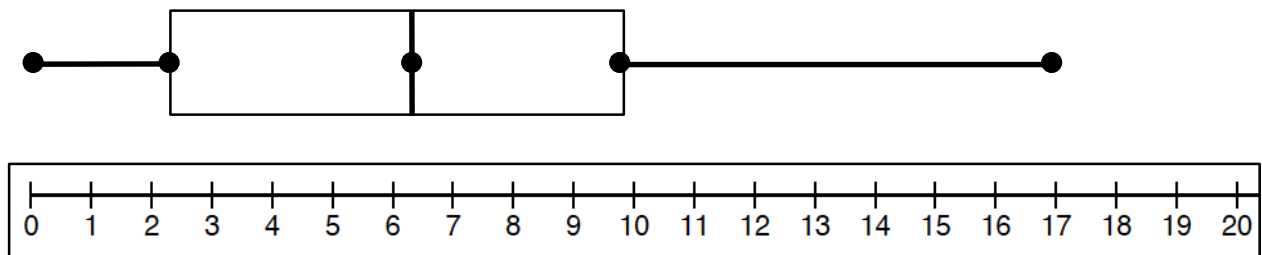
Figure 4: Pre- and Post-Intervention Interaction Opportunities



Classrooms' social status

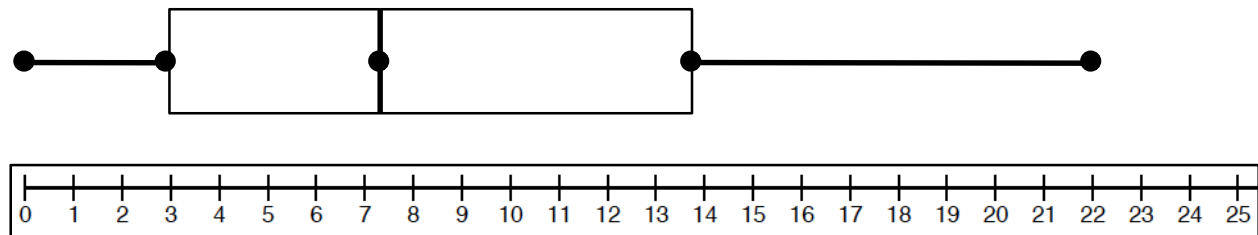
In order for there to be an approximately equal social status amongst the students in Classroom A, each student's name would need to appear at least four times or a percentage of 4.6% (4 out of 64) on both the pre- and post-survey. The overall range of the results in Classroom A for the pre-survey was 17, with a mean of 6.37 occasions a student's name appeared. Two of the students were 'ghosts', never being acknowledged in any of the surveys, whereas two other students gained 'starness' by being mentioned more than 100% of the classroom mean (Lawrence, 2002). Of the other 15 students within the room, approximately 53.3% were above the average while 46.7% were under (Figure 5). In regards to ELLs #1 and #2, the former of the two was within the lower quadrant and the latter in the upper.

Figure 5: Classroom A Pre-Intervention Social Status



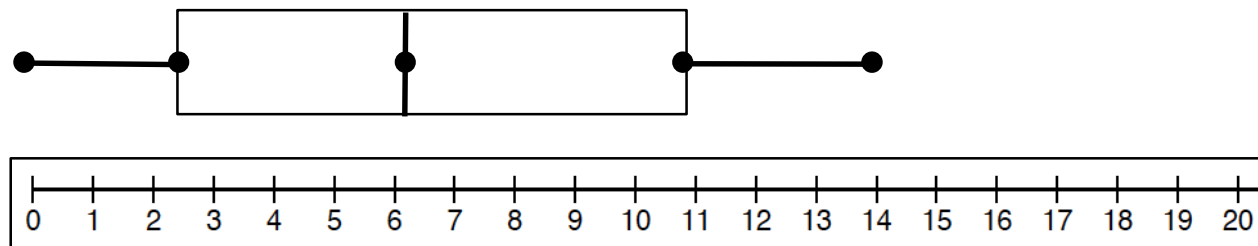
With the post-survey, Classroom A's overall range was 22, with a mean of 7.31 occasions a student's name appeared. Again, two of the students were 'ghosts', and two achieved 'starness'. Of the 15 other students within the room, approximately 46.7% were above the average while 53.3% were under (Figure 6). ELL #1 once more was within the lower quadrant, and ELL #2 in the upper.

Figure 6: Classroom A Post-Intervention Social Status



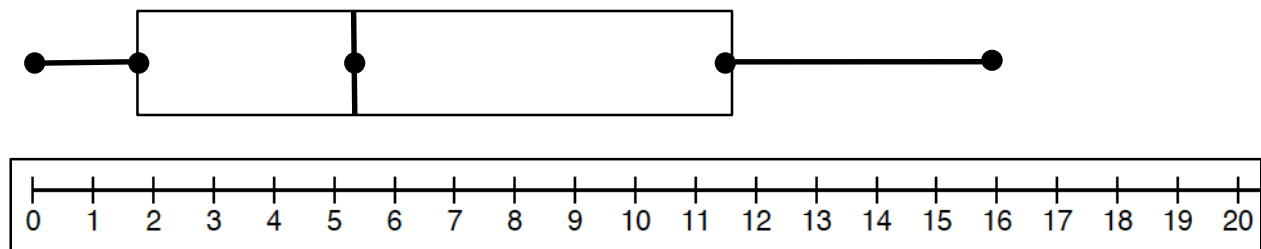
To reach an approximately equal social status in Classroom B, each students' name would need to appear four times or 4.5% (4 out of 59) on both the pre- and post-survey. The overall range of the results for the pre-survey was 14, with a mean of 6.16 occasions a student's name appeared. One of the students was a 'ghost', never being acknowledged in any of the surveys, whereas two other students achieved 'starness' by being mentioned 100% or more of the classroom mean (Lawrence, 2002). Of the other 16 students within the room, approximately 37.5% were above the average while 62.5% were under (Figure 7), including ELL #3 whose name appeared on 6 occasions.

Figure 7: Classroom B Pre-Intervention Social Status



With the post-survey, Classroom B's overall range was 16, with a mean of 5.37 occasions a student's name appeared. This time, five of the students were 'ghosts' while four achieved 'starness', including ELL #3. Of the other 10 students within the room, approximately 47% were above the average while 52% were under (Figure 8).

Figure 8: Classroom B Post-Intervention Social Status



Analysis of Pre- and Post-Interview Surveys

Demonstrated by the two line-graphs, Figures 5 & 6, an increase for all three ELLs with the enjoyment of speaking was shown. For ELL #2, there was growth in regards to being comfortable with speaking, and there was an increase for ELLs #1 and #2 with the enjoyment of school. There was no change for all the ELLs in regards to the enjoyment of science and experiments.

Figure 9: Pre-Intervention Perceptions

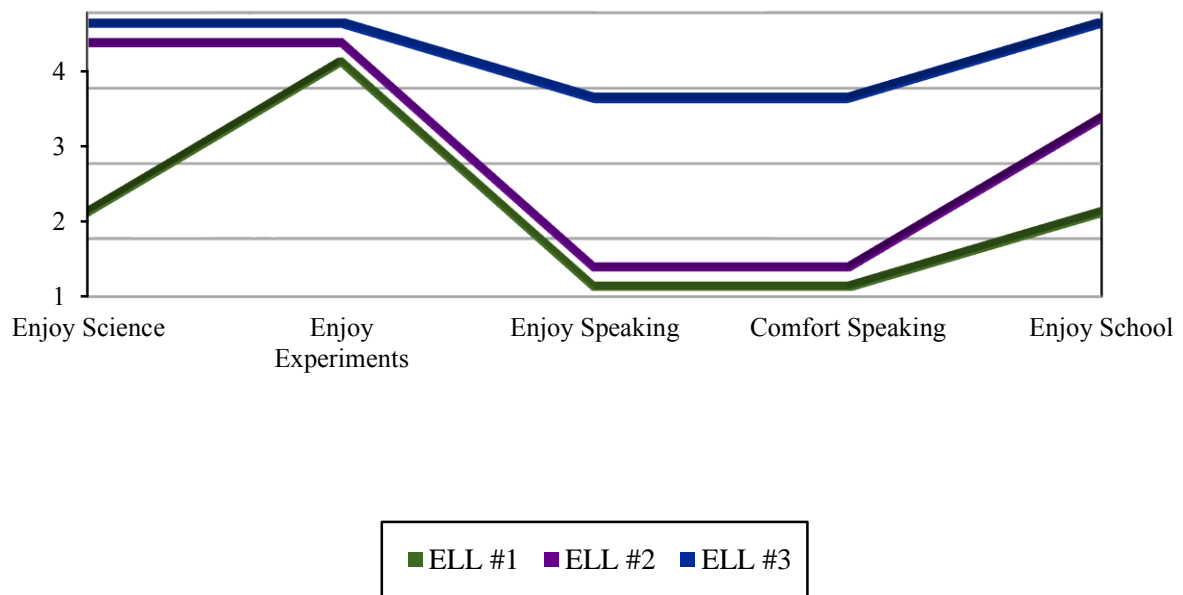
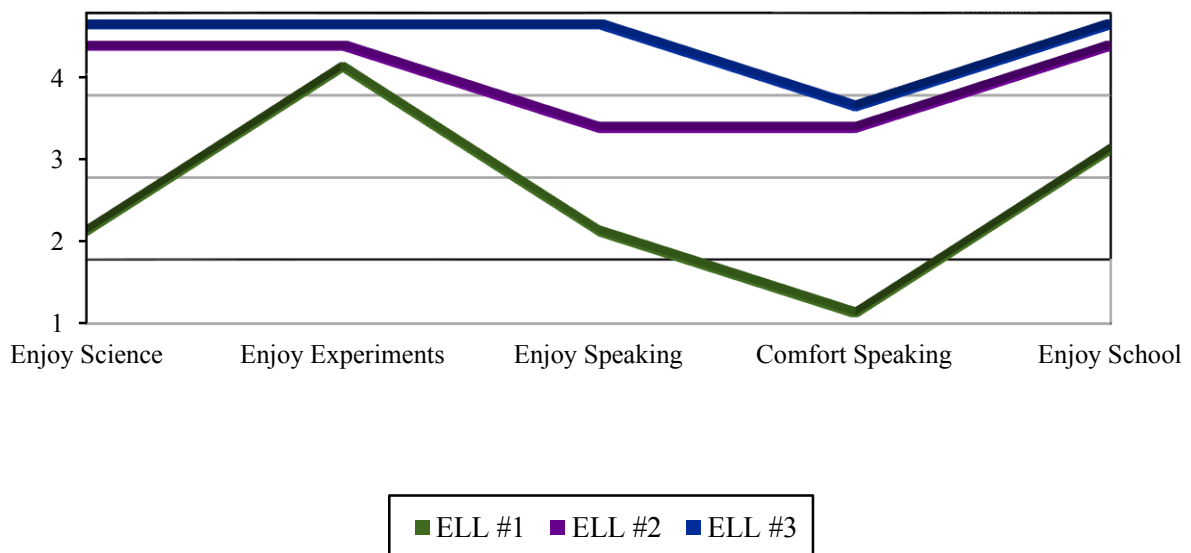


Figure 10: Post-Intervention Perceptions



Summary

The results from the six question pre- and post-sociometric surveys demonstrated either a neutral and/or positive affect on the actual presenter in terms to possible relationships; while in Classroom A, one student's status remained unchanging while the other's was minimal, the one student from Classroom B achieved favoritism among peers. Therefore, the answer is affirmative when answering the inquiry: *Is there an increase in the frequency of the ELL's names on sociometric surveys completed by peers following Peer Presentations of science experiments?*

By additionally analyzing each classroom's social status prior and following the intervention, knowledge was gained about the individual phenomena that occurred. It was noticed in Classroom A, minor differences occurred between the two occasions. However, within Classroom B, the number of those who were either unacknowledged or preferred both increased.

Evaluation of the pre- and post-interview surveys determined an increase with enjoying public speaking with all three of the students. For ELL #2, the student's comfort level of public speaking also increased, while both ELLs #1 and #2 acquired a greater interest in school. These responses, ergo, provide an assenting response to the question posed: *Following the presentation of experiments to their peers, will there be a change in the ELLs' perceived enjoyment of science, public speaking, and school?*

CHAPTER FIVE: CONCLUSIONS

Introduction

Within previous sections, related research was discussed concerning the benefits of peer acceptance and how it may positively affect academic and emotional growth of the increasing English Language Learner (ELL) within the United States (Center for Public Education, 2012; Sentese, Lindenberg, Omvlee, Ormel & Veenstra, 2009). Furthermore, the teaching strategy of Peer Presentation was introduced as a method which promotes content comprehension and retention, communication skills, and motivation to learn (Chase, 2012; Ogawa and Wilkinson, 1997). Based upon these principles, research was conducted within two fourth grade classrooms to determine if Peer Presentations could additionally influence relationships between peers.

In this chapter, the results will be discussed with discernment as to the reasoning for the outcomes, answering questions such as: *What would cause relationship preferences to alter after a Peer Presentation?* and *Why would the two classrooms' results differentiate?* Based upon these responses, methods of application will be suggested in concern to the teaching strategy of Peer Presentations while taking account of the overall benefits. In conclusion, possible future research plans are considered, and how they may provide additional insight to the socio-psychological and emotional consequences when Peer Presentations are implemented into a learning environment.

Discussion of Results

For this research study, one of the primary questions asked was: *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) relationship with their English-speaking peers?* After having three ELLs practice and present a series of

science experiments, this was determined using a six-question pre- and post-intervention sociometric survey. The social status was quantitatively measured in both environments to determine whether preference towards these three students increased after the presentation. Results showed a neutral to a favorable extensive difference in popularity with the chosen students. Given these outcomes it has been determined that in certain cases, after demonstrating a science-related Peer Presentation, a student's social status within a classroom may increase. The perceptual reasoning that fellow classmates may adjust their relationship preferences could possibly be induced from wanting to learn how to conduct the experiments themselves, or witnessing the capabilities of their classroom counterparts. Each of these would be considered advantageous to the ELLs who participated in the intervention of this research study, as it is directed towards their overall performance.

Another motive for these responses may be due to the students changing their behavior in response to being observed by a guest, and/or having interest in receiving approval from the co-investigator rather than noticing their peers. This behavioral studies phenomena is regarded as the 'Hawthorne Effect', named after a study completed at an electric plant by Elton Mayo and Fritz J. Roethlisberger in 1933 (Anteby & Khurana, 2012). However, as Coombs & Smith (2003) suggest in the article, *The Hawthorne Effect: Is It a Help or a Hindrance in Social Science Research*, "Social interactions are complex and difficult to study. They represent uncertain acts and actions in the context of a particular situation" (p. 102). The work therefore suggests for an in-field social researcher to obtain substantial intimate contact with the study participants to ensure equality.

Prior to the official commencement of this study, the researcher visited each classroom and became briefly acquainted with all of the students. Eventually, each time she would enter either environment, the students became excited at her arrival. Nonetheless, excitement rather than casual comfort with the arrival of a guest may demonstrate an influence. Studying the insignificant differences in the social statuses of ELL #1 and #2, there is high probability the Hawthorne Effect did not occur. Yet in Classroom B, where the social status of ELL #3 increased by 100%, there is a possibility.

The second question inquired during this study was: *Can the learning strategy of Peer Presentations influence an English Language Learner's (ELLs) perceptions of science, public speaking, and school?* This was measured prior to and following the intervention using a five-question interview survey, in which the students could respond with “Never”, “Sometimes”, “Often”, or “Always”. The outcome showed that student perceptions may increase in regards to public speaking and school. With concern to the ELLs’ perceptions, considering they received additional attention in comparison to their peers, Coombs and Smith’s (2003) article suggests the Hawthorne Effect would be non-existent. Therefore, although belongingness may not yet be completely satisfied, the students’ self-esteem and positive attitude towards classroom activities still advances each of them towards self-actualization (Maslow & Herzberg, 1954).

Educational Implications

Research has been limited regarding the teaching strategy of Peer Presentations. However, many pedagogic philosophies do foster “that environments which foster academic achievement through hands-on, authentic learning can motivate students by engaging them in their own learning” (Bradford, 2005). Regardless of such an impression, such a thought process seems quite

idyllic; even an exciting lesson which incorporates practical participation or games may become menial. Therefore, focus should be upon increasing students' 'motivation to learn', which is the conscious decision to acquire knowledge or a skill set designed learning activities are intended to develop (Brophy, 2010). By having students actively involved with their learning through the means of becoming familiar with a topic and instructing others about the content, previous studies have proven it to increase a motivation to learn (Chase, 2012; Ogawa & Wilkinson, 1997).

For this study, three ELLs were chosen to participate in the intervention; after being privately taught how to conduct a series of exciting science experiments, they were given the responsibility to decide which experiment they would like to present to their classmates. Additionally, they needed to determine their dialogue, and methods of enhancing the demonstration by incorporating other features, such as props and audience volunteers (Appendix K). As an educator must consider all students in the classroom, a similar design may be implemented within a learning environment. During the school year, the teacher could incorporate a variety of science experiments into the curriculum until the students are able to complete them independently. Then, twice during the academic year (i.e. December and May), they could have the opportunity to choose one of the experiments to present with a fellow classmate at a year-end event for the entire school. All of the students would be required to additionally share the scientific knowledge behind their chosen demonstration.

Peer Presentations may be incorporated within any other subject-content, including mathematics, language arts, history/civics, and physical education. They could also be completed within individual classrooms or larger settings, such as an entire school or grade-level. For instance, a teacher may assign each student a specific topic to research (e.g. Native American

Tribes: Apache, Seminole, Cherokee, Dakota, Mohawk, etc.) with an outline of set guidelines. Using resources, such as computers, textbooks, library literature, or other books, the students may learn and take notes about their topic. To incorporate multimedia, students may create a PowerPoint or a poster to use as a visual aid while presenting.

Mindful of these suggestions and the positive consequences which may be produced, it would therefore be of the student's best interest for teachers to practice this teaching strategy within their classrooms. Legitimately, it would presumably be pragmatic if school administrators developed an authentic and project-based curriculum. It would be designed to allow the students become the teachers, ultimately promoting learner engagement and motivation. Educator, author and speaker, Stephen Covey once wrote in his book, *The Seven Habits of Highly Effective People* (1989), "Remember, to learn and not to do is really not to learn. To know and not to do is really not know" (p. 12). Henceforth, an individual must acquire the mind *and* practice of acting accordingly to ultimately become successful. Students should be encouraged and instructed how to fulfill such a principle by educators, parents, and others who both practice and model an identical standard.

Future Research

The research study was informative and provided insight to the positive effects of Peer Presentations in regards to relationships and motivation, yet refrains from being theoretically significant due to the number of student participants. Therefore, to establish this research as an evidence-based practice (EBP), it would need to be a controlled study. This may be completed by having all of the English Language Learners within multiple classrooms between the fourth and sixth grades participate in a similar intervention. A pre- and post-intervention sociometric

survey would be provided to measure the social status results, and an adapted and/or translated version of Rosenberg's Self-Esteem Scale (1965) to measure both positive and negative self-perceptions of each participating ELL. By having a larger population to study, it may confirm the benefits of the learning technique and promote educators to utilize it within their classrooms. Additionally, to prevent any occurrences of the Hawthorne Effect, substantial amount of time with the students prior to conducting research as suggested by Coombs & Smith (2003).

APPENDIX A: IRB APPROVAL LETTER



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Dan L. Ezell and Co-PI: Courtney A. Roy**

Date: **December 12, 2013**

Dear Researcher:

On 12/12/2013, the IRB approved the following human participant research until 12/11/2014 inclusive:

Type of Review:	UCF Initial Review Submission Form
Project Title:	Peer Presentation: Can It Influence An English Language Learner's Relationship With Peers?
Investigator:	Dan L. Ezell
IRB Number:	SBE-13-09682
Funding Agency:	
Grant Title:	
Research ID:	N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30 days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at <https://iris.research.ucf.edu>.

If continuing review approval is not granted before the expiration date of 12/11/2014, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 12/12/2013 10:35:12 AM EST

IRB Coordinator

APPENDIX B: SCHOOL DISTRICT APPROVAL



Office of Accountability, Testing, and Evaluations
Research Application

Assurances Form

I understand that I am requesting permission to engage in a research Project, and I am not requesting information pursuant to Open Records Legislation. If my research project requires participation with students, I understand that I may be subject to the appropriate School Board policy regarding background investigations, as well as any applicable costs associated. Additionally, if my request is granted, I agree to abide by all policies, rules and regulations of the District, INCLUDING THE SECURING OF WRITTEN PARENT PERMISSION PRIOR TO IMPLEMENTATION OF MY PROJECT.

x 
Researcher

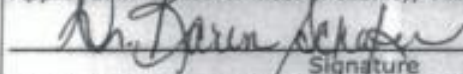
2-5-14
Date

I have read the procedures for Research Projects in the Brevard County Public School System and understand that supervision of this project and responsibility for an outcome report rests with me. I also understand that the privileges of conducting future studies in the Brevard County Public School System is conditioned upon the fulfillment of such obligations.

x 
Sponsor/Advisor of Research Project
(signature required for student research)

2-5-14
Date

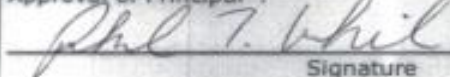
Approval of Office of Accountability, Testing and Evaluation*:


Signature

1-6-14
Date

*Approval of the study at the district level does not obligate principals to participate in the proposed research.

Approval of Principal*:


Signature

2/10/14
Date

*The principal's signature suggests that the research project has been reviewed and that the school will participate, subject to the researcher's compliance with District policies.

APPENDIX C: PARENT/GUARDIAN CONSENT FORM



***Peer Presentation: Can It Influence
An English Language Learner's Relationship With Peers?***

Parent or Guardian Informed Consent

Principal Investigator: *Dan. L. Ezell, Ed.D.*

Co-Investigator: *Courtney Roy*

Faculty Supervisor: *Sherron E. Roberts, Ed.D*

Research Associate: *Cynthia E. Pearl, Ph.D.*

Investigational Site: *Endeavour Elementary School*

How to Return this Consent Form:

After signing this consent form, please have your child give it to his/her teacher. This form is due by the start of the intervention date, Friday, February 14th.

Introduction:

Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being asked to allow your child to take part in a research study, which will include about 45 other students at Endeavour Elementary School. Your child is being invited to take part in this research study because he/she is a student at the school.

The person conducting this research is Dr. Dan Ezell from the Department of Child, Family & Community Sciences at UCF. He will be collaborating with Dr. Cynthia Pearl, as well as Dr. Sherron Roberts from the School of Teaching, Learning, and Leadership, to complete this study. A UCF student, Courtney Roy, is learning about research will also part of the team.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should allow your child to take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide, it will not be held against you or your child.

- Feel free to ask all the questions you want before you decide.

Purpose of the research study:

Due to social anxieties caused by language barriers and cultural differences, English Language Learners (ELLs) may struggle constructing a connection with English-speaking peers. Research has shown such unsuccessful efforts can negatively affect the students' academic achievements as well. In hopes to reverse this impact, we are studying to see how peer presentations, a commonly used instruction method, can establish an appealing connection between ELLs and their fellow classmates.

What your child will be asked to do in the study:**1. Friday, February 14th**

a. Your child will be asked to complete a 6-question survey. The questions will have your child identify his/her preferences in companionship from classmates in certain situations (i.e. sitting on a bus) by naming specific classmates. For more information about this, please view "Confidentiality" on Page 3. Please note, your child does not have to answer every question if they are not comfortable doing so. This survey will be monitored by Courtney Roy.

2. Friday, February 28th

a. Two weeks later, on a Friday morning, your child will have the opportunity to watch three of his/her English Language Learner peers give an educational demonstration.

3. Tuesday, March 4th

a. Your child will be asked to complete a 6-question survey. The questions will have your child identify his/her preferences in companionship from classmates in certain situations (i.e. sitting on a bus) by naming specific classmates. For more information about this, please view "Confidentiality" on Page 3. Please note, your child does not have to answer every question if they are not comfortable doing so. This survey will be monitored by Courtney Roy.

Location:

Endeavour Elementary School
905 Pineda Street
Cocoa, Florida 32922

Time required:

We expect that your child will participate in this research study by coming to completing both the pre- and post-surveys, in addition to watching his/her peers present their educational demonstrations. Each of the surveys will each take approximately 10 minutes to complete. The presentations should be completed between 30-45 minutes. Again, the dates your child will be required to participate are February 14th, 28th, and March 4th.

Risks:

There are no reasonably foreseeable risks or discomforts involved in taking part in this study.

Benefits:

Your child will not benefit directly for taking part in this research, besides learning more about how research is conducted.

Compensation:

Upon completion of this study, all of the participating classes will be eligible to part-take in a pizza party. Those students who completed all the required tasks of the research will be given special recognition during this celebration. The party will take place at your child's classroom.

Confidentiality:

Your child's personal information will be limited to those who need to review the information. To ensure the names of your child will be not be publicized, each child will be designated a random code. Please note, the IRB may inspect and copy your information for research purposes.

Study contact for questions about the study or to report a problem:

If you have questions, concerns, or complaints, or think the research has hurt your child talk to Dr. Sherron Roberts, Faculty Supervisor, School of Teaching, Learning, and Leadership at (407) 823-2016 or by email at sherron.roberts@ucf.edu.

IRB contact about you and your child's rights in the study or to report a complaint:

Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerning, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Withdrawing from the study:

You may decide not to have your child continue in the research study at any time without it being held against you or your child. If you decide to have your child leave the research, he/she will be allowed to participate in the Pizza Party with his/her classmates. Should you decide to have your child leave the study, please contact the investigator so he can make arrangements to remove your child's information from the study's content.

The person in charge of the research study can remove your child from the research study without your approval. Possible reasons for removal include failing to follow specific instructions from the research staff. We will tell you and your child about any new information that may affect your child's health, welfare or your choice to have your child stay in the research.

Your signature below indicates your permission for the child named below to take part in this research.		
DO NOT SIGN THIS FORM AFTER THE IRB EXPIRATION DATE BELOW		
Name of participant		
Signature of parent or guardian		Date
		<input type="checkbox"/> Parent <input type="checkbox"/> Guardian (See note below)
Printed name of parent or guardian		
Assent		
	<input type="checkbox"/> Obtained	
Note on permission by guardians: An individual may provide permission for a child only if that individual can provide a written document indicating that he or she is legally authorized to consent to the child's general medical care. Attach the documentation to the signed document.		

APPENDIX D: PARENT/GUARDIAN CONSENT FORM (SPANISH)



***Peer Presentation: Can It Influence
An English Language Learner's Relationship With Peers?***

Padre o Tutor Consentimiento Informado

Investigador Principal: *Dan. L. Ezell, Ed.D.*
Co-Investigador: *Courtney Roy*
Facultad Supervisor: *Sherron E. Roberts, Ed.D*
Investigador Asociado: *Cynthia E. Pearl, Ph.D.*
Centro de investigación: Endeavour Elementary

Como devolver este formulario de consentimiento:

Después de firmar este formulario de consentimiento, por favor haga que su hijo le dan a su maestro / a. Este formulario debe de ser entregue en el inicio de la fecha de la intervención, el viernes, 14 de febrero.

Introducción:

Los Investigadores de la University of Central Florida (UCF) estudian muchos temas. Para tal necesitamos la ayuda de las personas que estén de acuerdo en participar en un estudio de investigación. Pedimos su permiso para que su hijo participe en un estudio de investigación, que incluirá 45 otros estudiantes de la Endeavour Elementary. Invitamos a su hijo a participar en este estudio de investigación porque él / ella es un estudiante de la escuela.

La persona que realiza esta investigación es el Dr. Dan Ezell del Department of Child, Family & Community Sciences en la UCF. Él estará colaborando con la Dra. Cynthia Pearl, así como el Dr. Sherron Roberts de la School of Training, Learning, and Leadership, para completar este estudio. Una estudiante de Educación de UCF, Courtney Roy, está aprendiendo acerca de la investigación también y será parte del equipo .

Lo que usted debe saber acerca de un estudio de investigación:

- Alguien le explicará este estudio de investigación a usted.
- Un estudio de investigación es algo que se ofrece voluntariamente.
- Si usted quiere tomar parte depende de usted.

- Usted debe permitir que su hijo participe en este estudio apenas si usted lo quiera.
- Usted puede optar por no participar en el estudio de investigación.
- Usted puede estar de acuerdo en participar ahora y puede más tarde cambiar de opinión.
- Cualquiera que sea su decisión, no se llevará a cabo en contra de usted o su hijo.
- No dude en hacer todas las preguntas que quiera antes de decidir.

Propósito del estudio de investigación:

Debido a las ansiedades sociales causados por las barreras del idioma y las diferencias culturales, Aprendices del Idioma Inglés pueden tener dificultades en construir una conexión con sus compañeros de habla Inglesa. Las investigaciones han demostrado que los esfuerzos no exitosos pueden afectar negativamente a los logros académicos de los estudiantes también. Con la esperanza de revertir este impacto, estamos estudiando para ver cómo las presentaciones de pares, un método de instrucciones de uso común, pueden establecer una conexión atractivo entre los estudiantes ELL y sus compañeros de clase.

¿Que le pedirá a su hijo que haga en el estudio

1. Viernes, 14 de febrero:

- a. Le pedirán a su niño a completar una encuesta de 6 preguntas. Las preguntas tendrán su niño a identificar sus / sus preferencias en compañía de sus compañeros de clase en determinadas situaciones (por ejemplo, sentado en un autobús) al nombrar a los compañeros de clase específicos. Para obtener más información sobre esto, por favor vea "confidencialidad" en la página 3. Tenga en cuenta que su hijo no tiene que contestar todas las preguntas si no se siente cómodo haciéndolo. Esta encuesta será supervisada por Courtney Roy.

2. Viernes, 28 de febrero:

- a. Dos semanas más adelante, viernes por la mañana, su hijo mirará tres de su/sus conocimientos presentara la realización de experimentos científicos.

3. Martes, 4 de marzo:

- a. Le pedirán a su niño para completar una encuesta de 6 preguntas. Las preguntas tendrán su niño a identificar sus / sus preferencias en compañía de sus compañeros de clase en determinadas situaciones (por ejemplo, sentado en un autobús) al nombrar a los compañeros de clase específicos. Para obtener más información sobre esto, por favor vea "confidencialidad" en la página 3. Tenga en cuenta que su hijo no tiene que contestar todas las preguntas si no se siente cómodo haciéndolo. Esta encuesta será supervisada por Courtney Roy.

Ubicación:

Endeavour Elementary School
905 Pineda Street
Cocoa, Florida 32922

Tiempo requerido:

Esperamos que su hijo participe en este estudio de investigación terminando dos encuestas, y mirará tres de su/sus conocimientos presentara la realización de experimentos científicos. Ambas encuestas serán 10 minutos. Las intervenciones serán 30-45 minutos. Su hijo participará durante desde el Febrero, 14, 28 y Marzo 4.

Riesgos:

Ara no riesgo.

Beneficios:

No podemos prometer ningún beneficio para usted o su niño por su participacion en esta investigación.

Compensación:

Una vez finalizado este estudio, todas las clases participantes serán elegibles para tomar parte parcial en una fiesta de pizza. Aquellos estudiantes que cumplieron con todas las tareasnecesarias de la investigación receberan un reconocimiento especial durante esta celebración. La fiesta tendrá lugar en el salón de clases de su hijo.

Confidencialidad:

Información personal de su hijo se limitará a aquellos que necesitan revisar la información. Para asegurar que el nombre de su hijo no se dara a conocer, a cada niño se designará un código aleatorio. Tenga en cuenta, el IRB podrá inspeccionar y copiar su información para fines de investigación.

Contacto para preguntas sobre el estudio o para reportar un problema:

Si tiene preguntas, inquietudes o quejas, o cre que la investigación ha hecho daño a su hijo, favor hablar con la Dra. Sherron Roberts, Supervisora de la Facultad de la School of Training, Learning, and Leadersnip en el (407) 823-2016 o por correo electrónico a sherron.roberts@ucf.edu.

Contacto IRB acerca de usted y de los derechos de su hijo en el estudio o para reportar una queja:

Investigación de la University of Central Florida con seres humanos se lleva a cabo bajo la supervisión de la Junta de Revisión Institucional (IRB UCF). Esta investigación ha sido revisada y aprobada por el IRB. Para obtener información sobre los derechos de las personas que participan en la investigación, por favor póngase en contacto con: Institutional Review Board, University of Central Florida, Office of Research and Commercialization, 12201 Research

Parkway, Suite 501, Orlando, FL 32826-3246 o por teléfono al (407) 823-2901. También puede hablar con ellos para cualquier de los siguientes:

- Sus preguntas, en relación con, o quejas no están siendo respondidas por el equipo de investigación.
- No se puede llegar al equipo de investigación.
- ¿Quieres hablar con alguien además del equipo de investigación.
- Quiere recibir información o proporcionar información acerca de esta investigación.

Retirarse del estudio:

Usted puede decidir no hacer que su hijo continúe en el estudio de investigación en cualquier momento sin que se lleve a cabo en contra de usted o su hijo. Si usted decide tener a su hijo salir de la investigación, él / ella se le permitirá participar en la fiesta de la pizza con su / sus compañeros de clase. Si usted decide que su hijo deje el estudio, por favor póngase en contacto con el investigador para que pueda hacer los arreglos necesarios para eliminar la información de su hijo del contenido del estudio.

La persona a cargo del estudio de investigación puede sacar a su hijo del estudio de investigación sin su aprobación. Las posibles razones para la remoción incluyen no seguir las instrucciones específicas del personal de investigación. Le diremos a usted y a su hijo sobre cualquier nueva información que pueda afectar a la salud de su hijo, el bienestar o su elección para que su hijo se quede en la investigación.

Su firma indica su permiso para que el niño inscrito abajo participe en esta investigación.		
NO FIRME ESTE FORMULARIO DESPUES DE LA FECHA DE VENCIMIENTO DE IRB ABAJO		
Nombre del participante		
Firma del padre o tutor		fecha
	<input type="checkbox"/> Padre	
	<input type="checkbox"/> Tutor (Ver nota abajo)	
Nombre del padre o tutor		
Asentimiento		
<input type="checkbox"/>	Obtenido	
Nota sobre el permiso de los tutores: Un individuo puede dar permiso para un niño sólo si esa persona puede proporcionar un documento escrito que indica que él o ella está legalmente facultada para autorizar el cuidado médico general del niño. Adjunte la documentación con el documento firmado.		

APPENDIX E: ELLS' PARENT/GUARDIAN CONSENT FORM



***Peer Presentation: Can It Influence
An English Language Learner's Relationship With Peers?***

Parent or Guardian Informed Consent

Principal Investigator: *Dan. L. Ezell, Ed.D.*

Co-Investigator: *Courtney Roy*

Faculty Supervisor: *Sherron E. Roberts, Ed.D*

Research Associate: *Cynthia E. Pearl, Ph.D.*

Investigational Site: *Endeavour Elementary School*

How to Return this Consent Form:

After signing this consent form, please have your child give it to his/her teacher. This form is due by the start of the intervention date, Friday, January 31st.

Introduction:

Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being asked to allow your child to take part in a research study, which will include about 45 other students at Endeavour Elementary School. Your child is being invited to take part in this research study because he/she is a student at the school.

The person conducting this research is Dr. Dan Ezell from the Department of Child, Family & Community Sciences at UCF. He will be collaborating with Dr. Cynthia Pearl, as well as Dr. Sherron Roberts from the School of Teaching, Learning, and Leadership, to complete this study. A UCF Education student, Courtney Roy, is learning about research will also part of the team.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should allow your child to take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide, it will not be held against you or your child.

- Feel free to ask all the questions you want before you decide.

Purpose of the research study:

Due to social anxieties caused by language barriers and cultural differences, English Language Learners (ELLs) may struggle constructing a connection with English-speaking peers. Research has shown such unsuccessful efforts can negatively affect the students' academic achievements as well. In hopes to reverse this impact, we are studying to see how peer presentations, a commonly used instruction method, can establish an appealing connection between ELLs and their fellow classmates.

What your child will be asked to do in the study:

1. Friday, February 14th:

a. Your child will be asked to complete a 6-question survey. The questions will have your child identify his/her preferences in companionship from classmates in certain situations (i.e. sitting on a bus) by naming specific classmates. For more information about this, please view "Confidentiality" on Page 3. Please note, your child does not have to answer every question if they are not comfortable doing so. This survey will be monitored by Courtney Roy.

2. Tuesday, February 18th:

a. Your child will be brought to a designated location on school grounds. Here, Courtney Roy will give your child an oral interview containing 5 questions. The questions will ask your child's preferences on science instruction, public speaking, and school.

b. After the oral interview, your child will start the intervention process. Courtney Roy will be teaching your child, along with two other students, different science experiments. During this time, your child will also be instructed how to conduct the experiments themselves, and how to present them to others. Each science lesson given by Courtney will take about 25-30 minutes, and will be done every school-day over the course of two weeks.

3. Friday, February 28th:

a. After completing the intervention, your child will present their skills about conducting science experiments to his/her classmates.

4. Tuesday, March 4th:

a. Your child will be asked to complete a 6-question survey. The questions will have your child identify his/her preferences in companionship from classmates in certain situations (i.e. sitting on a bus) by naming specific classmates. For more information about this, please view "Confidentiality" on Page 3. Please note, your child does not have to answer every question if they are not comfortable doing so. This survey will be monitored by Courtney Roy.

b. After completing the survey, your child will be taken to a designated location on school grounds. Here, Courtney Roy will be giving your child another oral interview containing 5 questions. Again, the questions will be focused on your child's personal viewpoint on science instruction, public speaking, and school.

Location:

Endeavour Elementary School
905 Pineda Street
Cocoa, Florida 32922

Time required:

We expect that your child will be in this research study for at least 10 school-mornings, from Friday, January 31st to Tuesday, February 18th. Please note, on the three Mondays (February 3rd, 10th & 17th) there will be *nothing* scheduled. The interventions will begin at 8:30 AM and end no later than 9:15 AM. In order for your child to successfully complete this study, he/she must attend all the school-mornings.

Risks:

During the oral interview, your child will be asked specific questions regarding their relationship with classmates. Yet, if your child is uncomfortable answering the inquiries, he/she may choose to not answer the questions.

Benefits:

We cannot promise any benefits to you, your child, or others from your child taking part in this research. However, a possible benefits may include a) your child gaining a new friendship and/or b) your child learning how research is conducted.

Compensation:

Upon completion of this study, all of the participating classes will be eligible to part-take in a pizza party. Those students who completed all the required tasks of the research will be given special recognition during this celebration. The party will take place at your child's classroom.

Confidentiality:

Your child's personal information will be limited to those who need to review the information. To ensure the names of your child will be not be publicized, each child will be designated a random code. Please note, the IRB may inspect and copy your information for research purposes.

Study contact for questions about the study or to report a problem:

If you have questions, concerns, or complaints, or think the research has hurt your child talk to Dr. Sherron Roberts, Faculty Supervisor, School of Teaching, Learning, and Leadership at (407) 823-2016 or by email at sherron.roberts@ucf.edu.

IRB contact about you and your child's rights in the study or to report a complaint:

Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of

Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerning, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Withdrawing from the study:

You may decide not to have your child continue in the research study at any time without it being held against you or your child. If you decide to have your child leave the research, he/she will be allowed to participate in the Pizza Party with his/her classmates. Should you decide to have your child leave the study, please contact the investigator so he can make arrangements to remove your child's information from the study's content.

The person in charge of the research study can remove your child from the research study without your approval. Possible reasons for removal include failing to follow specific instructions from the research staff. We will tell you and your child about any new information that may affect your child's health, welfare or your choice to have your child stay in the research.

Your signature below indicates your permission for the child named below to take part in this research.		
DO NOT SIGN THIS FORM AFTER THE IRB EXPIRATION DATE BELOW		
Name of participant		
Signature of parent or guardian		Date
		<input type="checkbox"/> Parent <input type="checkbox"/> Guardian (See note below)
Printed name of parent or guardian		
Assent		
	<input type="checkbox"/> Obtained	
Note on permission by guardians: An individual may provide permission for a child only if that individual can provide a written document indicating that he or she is legally authorized to consent to the child's general medical care. Attach the documentation to the signed document.		

APPENDIX F: ELLS' PARENT/GUARDIAN CONSENT FORM (SPANISH)



***Peer Presentation: Can It Influence
An English Language Learner's Relationship With Peers?***

Padre o Tutor Consentimiento Informado

Investigador Principal: *Dan. L. Ezell, Ed.D.*
Co-Investigador: *Courtney Roy*
Facultad Supervisor: *Sherron E. Roberts, Ed.D*
Investigador Asociado: *Cynthia E. Pearl, Ph.D.*
Centro de investigación: Endeavour Elementary

Cómo devolver este formulario de consentimiento:

Después de firmar este formulario de consentimiento, por favor haga que su hijo le dan a su maestro / a. Este formulario debe de ser entregue en el inicio de la fecha de la intervención, el viernes, 14 de febrero.

Introducción:

Los Investigadores de la University of Central Florida (UCF) estudian muchos temas. Para tal necesitamos la ayuda de las personas que estén de acuerdo en participar en un estudio de investigación. Pedimos su permiso para que su hijo participe en un estudio de investigación, que incluirá 45 otros estudiantes de la Endeavour Elementary. Invitamos a su hijo a participar en este estudio de investigación porque él / ella es un estudiante de la escuela.

La persona que realiza esta investigación es el Dr. Dan Ezell del Department of Child, Family & Community Sciences en la UCF. Él estará colaborando con la Dra. Cynthia Pearl, así como el Dr. Sherron Roberts de la School of Training, Learning, and Leadership, para completar este estudio. Una estudiante de Educación de UCF, Courtney Roy, está aprendiendo acerca de la investigación también y será parte del equipo .

Lo que usted debe saber acerca de un estudio de investigación:

- Alguien le explicará este estudio de investigación a usted.
- Un estudio de investigación es algo que se ofrece voluntariamente.
- Si usted quiere tomar parte depende de usted.

- Usted debe permitir que su hijo participe en este estudio apenas si usted lo quiera.
- Usted puede optar por no participar en el estudio de investigación.
- Usted puede estar de acuerdo en participar ahora y puede más tarde cambiar de opinión.
- Cualquiera que sea su decisión, no se llevará a cabo en contra de usted o su hijo.
- No dude en hacer todas las preguntas que quiera antes de decidir.

Propósito del estudio de investigación:

Debido a las ansiedades sociales causados por las barreras del idioma y las diferencias culturales, Aprendices del Idioma Inglés pueden tener dificultades en construir una conexión con sus compañeros de habla Inglesa. Las investigaciones han demostrado que los esfuerzos no exitosos pueden afectar negativamente a los logros académicos de los estudiantes también. Con la esperanza de revertir este impacto, estamos estudiando para ver cómo las presentaciones de pares, un método de instrucciones de uso común, pueden establecer una conexión atractivo entre los estudiantes ELL y sus compañeros de clase.

¿Qué le pedirá a su hijo que haga en el estudio:

1. Viernes, 14 de febrero:

- a. Le pedirán a su niño a completar una encuesta de 6 preguntas. Las preguntas tendrán su niño a identificar sus / sus preferencias en compañía de sus compañeros de clase en determinadas situaciones (por ejemplo, sentado en un autobús) al nombrar a los compañeros de clase específicos. Para obtener más información sobre esto, por favor vea "confidencialidad" en la página 3. Tenga en cuenta que su hijo no tiene que contestar todas las preguntas si no se siente cómodo haciéndolo. Esta encuesta será supervisada por Courtney Roy.

2. Martes, 18 de febrero:

- a. Su hijo será llevado a un lugar designado en la escuela. Aquí, Courtney Roy le dará a su hijo una entrevista oral que contiene 5 preguntas. Las preguntas le pedirán las preferencias de su niño en la enseñanza de ciencias, de hablar en público y la escuela.
- b. Después de la entrevista oral, su hijo comenzará el proceso de intervención. Courtney Roy va a enseñar a su hijo, junto con otros dos estudiantes, diferentes experimentos científicos. Durante este tiempo, su niño también se le indicará cómo llevar a cabo los experimentos ellos mismos, y la forma de presentarlos a los demás. Cada lección de ciencia dada por Courtney tomará alrededor de 25 a 30 minutos, y se hace todos los días de la escuela a lo largo de dos semanas.

3. Viernes, 28 de febrero:

- a. Después de completar la intervención, su hijo presentara sus conocimientos acerca de la realización de experimentos científicos a su / sus compañeros de clase.

4. Martes, 4 de marzo:

- a. Le pedirán a su niño para completar una encuesta de 6 preguntas. Las preguntas tendrán su niño a identificar sus / sus preferencias en compañía de sus compañeros de clase en determinadas situaciones (por ejemplo, sentado en un autobús) al nombrar a los compañeros de clase específicos. Para obtener más información sobre esto, por favor vea "confidencialidad" en la página 3. Tenga en cuenta que su hijo no tiene que contestar todas las preguntas si no se siente cómodo haciéndolo. Esta encuesta será supervisada por Courtney Roy.
- b. Después de completar la encuesta, su hijo será llevado a un lugar designado en escuelas jardines. Aquí, Courtney Roy va a dar a su hijo otra entrevista oral que contiene 5 preguntas. Una vez más, las preguntas se centrarán en el punto de vista personal de su hijo en la enseñanza de las ciencias, de hablar en público y la escuela.

Ubicación:

Endeavour Elementary School
905 Pineda Street
Cocoa, Florida 32922

Tiempo requerido:

Esperamos que su hijo participe en este estudio de investigación durante al menos 10 mañanas de la escuela, desde el Viernes, 14 el febrero hasta el martes, 4 de marzo. Por favor tenga en cuenta, en los tres lunes (17 y 24 de febrero, y 3 de marzo) no habrá nada programado. Las intervenciones se iniciarán a las 8:30 de la mañana y terminarán el más tardar a las 09:15 AM. A fin de que los niños puedan completar con éxito este estudio, él / ella debe asistir a todas las mañanas-escolares.

Riesgos:

Durante la entrevista oral, a su hijo se le harán preguntas específicas con respecto a su relación con los compañeros de clase. Sin embargo, si su hijo no se siente cómodo respondiendo a las preguntas, el / ella puede optar por no responder a las preguntas.

Beneficios:

No podemos prometer ningún beneficio para usted o su niño por su participación en esta investigación. Sin embargo, posibles beneficios pueden incluir: a) su hijo ganar una nueva amistad y / o b) su hijo aprender cómo se realiza la investigación.

Compensación:

Una vez finalizado este estudio, todas las clases participantes serán elegibles para tomar parte parcial en una fiesta de pizza. Aquellos estudiantes que cumplieron con todas las tareas necesarias de la investigación recibirán un reconocimiento especial durante esta celebración. La fiesta tendrá lugar en el salón de clases de su hijo.

Confidencialidad:

Información personal de su hijo se limitará a aquellos que necesitan revisar la información. Para asegurar que el nombre de su hijo no se dará a conocer, a cada niño se designará un código aleatorio. Tenga en cuenta, el IRB podrá inspeccionar y copiar su información para fines de investigación.

Contacto para preguntas sobre el estudio o para reportar un problema:

Si tiene preguntas, inquietudes o quejas, o cre que la investigación ha hecho daño a su hijo, favor hablar con la Dra. Sherron Roberts, Supervisora de la Facultad de la School of Training, Learning, and Leadership en el (407) 823-2016 o por correo electrónico a sherron.roberts@ucf.edu.

Contacto IRB acerca de usted y de los derechos de su hijo en el estudio o para reportar una queja:

Investigación de la University of Central Florida con seres humanos se lleva a cabo bajo la supervisión de la Junta de Revisión Institucional (IRB UCF). Esta investigación ha sido revisada y aprobada por el IRB. Para obtener información sobre los derechos de las personas que participan en la investigación, por favor póngase en contacto con: Institutional Review Board, University of Central Florida, Office of Research and Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 o por teléfono al (407) 823-2901. También puede hablar con ellos para cualquier de los siguientes:

- Sus preguntas, en relación con, o quejas no están siendo respondidas por el equipo de investigación.
- No se puede llegar al equipo de investigación.
- ¿Quieres hablar con alguien además del equipo de investigación.
- Quiere recibir información o proporcionar información acerca de esta investigación.

Retirarse del estudio:

Usted puede decidir no hacer que su hijo continúe en el estudio de investigación en cualquier momento sin que se lleve a cabo en contra de usted o su hijo. Si usted decide tener a su hijo salir de la investigación, él / ella se le permitirá participar en la fiesta de la pizza con su / sus compañeros de clase. Si usted decide que su hijo deje el estudio, por favor póngase en contacto con el investigador para que pueda hacer los arreglos necesarios para eliminar la información de su hijo del contenido del estudio.

La persona a cargo del estudio de investigación puede sacar a su hijo del estudio de investigación sin su aprobación. Las posibles razones para la remoción incluyen no seguir las instrucciones específicas del personal de investigación. Le diremos a usted y a su hijo sobre cualquier nueva información que pueda afectar a la salud de su hijo, el bienestar o su elección para que su hijo se quede en la investigación.

Su firma indica su permiso para que el niño inscrito abajo participe en esta investigación.		
NO FIRME ESTE FORMULARIO DESPUES DE LA FECHA DE VENCIMIENTO DE IRB ABAJO		
Nombre del participante		
Firma del padre o tutor		fecha
	<input type="checkbox"/>	Padre
	<input type="checkbox"/>	Tutor (Ver nota abajo)
Nombre del padre o tutor		
Asentimiento		
<input type="checkbox"/>	Obtenido	
Nota sobre el permiso de los tutores: Un individuo puede dar permiso para un niño sólo si esa persona puede proporcionar un documento escrito que indica que él o ella está legalmente facultada para autorizar el cuidado médico general del niño. Adjunte la documentación con el documento firmado.		

APPENDIX G: SOCIOMETRIC SURVEY

Sociometric Survey

Your Secret Code:

Teacher's Name:

1. Which classmate do you consider your best friend?

Write name here: _____

2. Which classmate would you most like to have as a friend?

Write names here: _____

3. Which classmate would you most like to work with on a school project?

Write names here: _____

4. Which two classmates would you most like to sit with at lunch?

Write names here: _____

5. You have been given permission to have a sleepover. Which three classmates would most like to invite?

Write names here: _____

6. Your class is going on a field trip to Kennedy Space Center. Which classmate do you want to sit by on the bus?

Write names here: _____

APPENDIX H: SOCIOMETRIC SURVEY (SPANISH)

Sociometric Survey

Nombre Secreto:

Teacher's Name:

1. ¿Qué compañero de clase es su mejor amigo?

Escribe el nombre aquí: _____

2. ¿Qué compañero de clase te gustaría como amigo?

Escribe el nombre aquí: _____

3. ¿Qué compañero de clase le gustaría completar un proyecto escolar con el?

Escribe el nombre aquí: _____

4. ¿Qué dos compañeros de clase le gustaría sentarse con el almuerzo?

Escriba los nombres aquí: _____

5. Usted tiene permiso para tener una fiesta de pijamas. ¿Qué tres compañeros invitas?

Escriba los nombres aquí: _____

6. Usted va en un viaje de campo. ¿Qué compañero te quieres sentarte en el autobús?

Escribe el nombre aquí: _____

APPENDIX I: INTERVIEW QUESTIONS

Interview Questions

Student's Name: _____

Teacher's Name: _____

	Never	Sometimes	Often	Always
1. Do you enjoy science?				
2. Do you like doing experiments?				
3. Do you enjoy speaking in front of others?				
4. Are you comfortable speaking in front of others?				
5. Do you like school?				

APPENDIX J: INTERVIEW QUESTIONS (SPANISH)

Interview Questions

Student's Name: _____

Teacher's Name: _____

Put a ✓ under the most appropriate answer.

	Nunca	A veces	Muchas Veces	Siempre
1. ¿Te gustan las ciencias?				
2. ¿Le gustaría realizar experimentos?				
3. ¿Le gusta hablar delante de los demás?				
4. ¿Está usted cómodo hablando delante de los demás?				
5. ¿Te gusta la escuela?				

APPENDIX K: INTERVENTION INSTRUCTION TECHNIQUES

Techniques for Implementing Peer Presentations

Remember to . . .

- Allow the students to feel in control, as this is ultimately their project.
- Always have a positive and caring attitude to help students feel comfortable.
- Be excited and motivated, to encourage students to feel identically.
- Provide additional guidance when needed.

Procedures for Presentation Structure

- To ensure student stays focused, provide them with a topic to choose and/or focus upon.
- Provide student with presentation expectations as principle guidance.
- Emphasize on student strengths, and have them utilize those capabilities.
- Ask student what they want to incorporate in the presentation, and prompt when needed.

This may include multimedia, props, volunteers, and/or or puns for example.

Procedures for Script Writing

- After student determines a synopsis of their presentation, have them create a script or notes to practice speaking. For ELLs and ESE students, allow them to dictate orally and type it for them.

Procedures during Presentation

- Be patient, and prompt or assist should student require it.
- Again, emphasize the students strengths and provide constructive feedback.

REFERENCES

- Anteby, M., & Khurana, R. (2012). *A new vision: The "Hawthorne Effect"*. Retrieved June 10, 2014 from Harvard Business School's Baker Library Historical Collections website:
<http://www.library.hbs.edu/hc/hawthorne/09.html>
- Asher, S. R. & Coie, J. D. (1990). *Peer rejection in childhood*. New York: NY: Press Syndicate of the University of Cambridge.
- Ballantine, J., & Spade, J. (2008). *Schools and society: A sociological approach to education*. (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Batalova, J., & McHugh, M. (2010). *Number and growth of students in US schools in need of English instruction*. Washington, D.C.: Migration Policy Institute.
- Baumeister, R. F. (2005). *The cultural animal: Human nature, meaning, and social life*. New York, NY: Oxford University Press.
- Bradford, M. (2005). Motivating students through project-based service learning. *T.H.E. Journal*, 32(6), 29-30. ERIC Document EJ710331
- Brophy, J. (2010). *Motivating students to learn*. (3rd ed). New York, NY: Routledge.
- Boeree, C. G. (2006). *Personalities theories: Erik Erikson*. Retrieved from http://www.social-psychology.de/do/pt_erikson.pdf
- Bowen, S. K. (2008). Coenrollment for students who are deaf or hard of hearing: Friendship patterns and social interactions. *American Annals of the Deaf*, 153(3), 285-293.
Retrieved from the US National Library of Medicine National Institutes of Health. PMID Document: 18807402

- Burtitta, H. (2005). *It's not magic, it's science!: 50 science tricks that mystify, dazzle & astound!*. New York, NY: Larks Books.
- Coombs, S. J. & Smith, I. D. (2003). The Hawthorne effect: Is it a help or a hindrance in social science research? *Change: Transformations in Education*. 6(1). Retrieved July 15th from The University of Sydney Library: <http://priyapati.library.usyd.edu.au/bitstream/2123/4494/1/Vol6No1Article7.pdf>
- Crouch, R., & Zakariya, S. B. (2012). *The United States of education: The changing demographics of the United States and their schools*. Retrieved June 8, 2014 from the Center for Public Education: <http://www.centerforpubliceducation.org/You-May-Also-Be-Interested-In-landing-page-level/Organizing-a-School-YMABI/The-United-States-of-education-The-changing-demographics-of-the-United-States-and-their-schools.html>
- Chase, K. (2012, October 16). Project-based learning: When students do the teaching. [Web log message]. Retrieved from: <http://www.edutopia.org/blog/blended-learning-students-teach-students-envision-schools>
- Cornish, U., & Ross, F. (2004). *Social skills training for adolescents with general moderate learning difficulties*. London, UK: Jessica Kingsley Publishers.
- Crouch, C. H., & Mazur, E. (2001). Peer instruction: Ten years of experience and results. *American Association of Physics Teachers*, 69(9), 970-977. doi: 10.1119/1.1374249
- Erikson, E. (1980). *Identity and the life cycle, Volume 1*. New York, NY: W. W. Norton.
- Florida Department of Education (FLDOE). (2013). *School grades, basic information on schools*. Tallahassee, FL: FLDOE.

- Flynn K., & Hill, J. (2005). *English language learners: A growing population* (Policy brief).
Aurora, CO: Mid-Continent Research for Education and Learning.
- Gawel, J. E. (1997). *Herzeberg's theory of motivation and Maslow's hierarchy of needs*.
Washington D.C.: ERIC Clearinghouse and Assessment and Evaluation. ERIC
Document ED421486
- Jonassen, D., & Land, S. (2012). *Theoretical foundations of learning environments*. (2nd ed.).
New York, NY: Taylor & Francis.
- Lawrence, W. S. (2002). *Sociometry in the classroom: How to do it*. Retrieved from: [http://
www.users.iamioh.edu/shermalw/sociometryfiles/socio-interpret.htmlx](http://www.users.iamioh.edu/shermalw/sociometryfiles/socio-interpret.htmlx)
- Lee, O., Buxton, C., Lewis, S., & LeRoy, K. (2006). Inquiry and student diversity: Enhanced
abilities and continuing difficulties after an instructional intervention. *Journal of
Research in Science Teaching*, 43(7), 607-636. doi: 10.1002/tea.20141
- Leung, B. P., & Silberling, J. (2006). Using sociograms to identify social status in the
classroom. *California school psychologist*, 11, 27-61. ERIC Document EJ902518
- Miller, S. R. (2003). *Shyness, social acceptance, and self-esteem in early adolescence:
Interrelationships and the role of parents' problem solving*. (Doctoral dissertation).
University of Georgia, Athens, GA.
- Moon, B., & Mayes, A. S. (1993). *Teaching and learning in the secondary school*. Open
university postgraduate certificate of education. London, UK: Routledge.
- Moreno, J. L., & Fox, J. (1987). *The essential Moreno: Writings on psychodrama, group
method, and spontaneity*. Springer Publishing Company.

- National Center for Education Statistics. (2013). *Number and percentage distribution of teachers in public and private elementary and secondary schools, by selected teacher characteristics: Selected years, 1987-88 through 2011-12* (Table 209.10). Digest of Education Statistics.
- Navarrete, L., & Watson, S. M. R. (2013). *English language learners: The impact of language and socio-cultural factors on learning*. Retrieved May 28, 2014 from the Council for Learning Disabilities: <http://www.council-for-learning-disabilities.org/publications/infosheets/cld-infosheet-diversity-2014>
- Ogawa, N., & Wilkinson, D. E. (1997). Let your students teach their class. *The Internet TESL Journal*, 3(12). Retrieved June 10, 2014 from <http://iteslj.org/Techniques/Ogawa-StudentsTeach.html>
- Olson, A. (2013). Theory and psychopathology: The theory of self-actualization - lines of thought. Retrieved May 28, 2014 from Psychology Today: <http://www.psychologytoday.com/blog/theory-and-psychopathology/201308/the-theory-self-actualization>.
- Poston, B. (2009). An exercise in personal exploration: Maslow's hierarchy of needs. *Association for Surgical Technologists*, 41(8), 347-353.
- Rao, S. P., & DiCarlo, S. E. (2000). Peer instruction improves performance on quizzes. *Advances in Physiology Education*, 24(1), 51-55. Retrieved from the US National Library of Medicine National Institutes of Health. PMID Document: 11209565
- Ravitch, D. (2007). *Edspeak: A glossary of education terms, phases, buzzwords, jargon*. Alexandria, VA: Association for Supervision & Curriculum Development.

- Robinson, T., (2007). *Everything kids' magical science experiments book: Dazzle your friends and family by making magical things happen!* Boston, MA: Adams Media.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press. Retrieved June 10, 2014 from Fetzer Institute: http://www.fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measures_for_Self-Esteem_ROSENBERG_SELF-ESTEEM.pdf
- Santrock, J. W. (2008). *Life-span development*. 12 ed. New York, NY: McGraw-Hill Companies.
- Sentse, M., Lindenberg, S., Omvlee, A., Ormel, J., & Veenstra, R. (2010). Rejection and acceptance across contexts: Parents and peers as risks and buffers for early adolescent psychopathology. *Journal of Abnormal Child Psychology*, 38(1), 119-130.
doi: 10.1007/s10802-009-9351-z
- Wood, S. E., Wood, E. G., & Boyd, D. (2011). *The world of psychology*. 7th ed. Boston, MA: Pearson.
- Zgutowicz, R. (2009). *What effects does language anxiety have on ESL students' decisions to speak English in a middle school classroom?*. (Master's thesis). Saint Paul, MN: Hamline University.