#### **Rowan University**

# **Rowan Digital Works**

Theses and Dissertations

7-24-2011

# The importance of cultural competence when evaluating bilingual students

Maria-Ines Castro

Follow this and additional works at: https://rdw.rowan.edu/etd



Part of the Child Psychology Commons, and the Student Counseling and Personnel Services

Commons

#### **Recommended Citation**

Castro, Maria-Ines, "The importance of cultural competence when evaluating bilingual students" (2011). Theses and Dissertations. 26.

https://rdw.rowan.edu/etd/26

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact graduateresearch@rowan.edu.

# THE IMPORTANCE OF CULTURAL COMPETENCE WHEN EVALUATING BILINGUAL STUDENTS

by María-Inés Castro

#### A Thesis

Submitted to the
Department of Psychology
College of Liberal Arts and Sciences
In partial fulfillment of the requirements
For the degree of
Master of Arts
at
Rowan University
May 4th, 2011

Thesis Chair: Dr. Roberta Dihoff



## **Dedication**

I would like to dedicate this manuscript to my mother, Ines Bueno, and to my father,

Manuel Castro

#### Acknowledgments

It is a pleasure to thank those that made this thesis possible. First, gratitude goes to Dr. Dihoff and Klanderman for their support during this process. A special thanks to Writing Arts professor and Rowan-Camden tutor, Tara Timberman, for her academic guidance and encouragment. I would like to express my appreciation to Professor Jackie McCafferty, Rowan University-Camden's Director of English Language Programs, for her creative support and professional advice. I would like to also mention Dr. Barbara Williams of Rowan's Psychology department for being so inspiring as a professional in her field.

Although the Master's thesis is an independent learning experience, there are a number of people that I would like to thank for their help and support along the way:

Most importantly, I want to thank my family, and special thanks goes to my sisters María Augusta and María Eugenia that always encourage me with great love and support to keep working toward achieving every goal that I dream about.

My sincerest gratitude goes to my dad and mom for their constant love and support, even by distance. I always keep in mind three words that they taught me along the way that I put into practice every day during my academic experience: constancy, discipline, and love for what I pursue in life. I am truly thankful to them.

#### **Abstract**

# María-Ines Castro THE IMPORTANCE OF CULTURAL COMPETENCE WHEN EVALUATING BILINGUAL STUDENTS 2010/2011

Dr. Roberta Dihoff and Dr. John Klanderman Master of Arts in School Psychology

The purpose of this study was to examine the impact of language and culture on Hispanic student test taking performance. Specifically, the researcher hypothesized that Hispanic students' test taking performance would be impacted by the language used on the assessment given, and the test administrator's awareness, knowledge, and skills related to cultural competence.

Twelve bilingual-Hispanic students from Rowan University- Camden completed a

Nelson-Denny Reading Test for the purpose of this research project. The same test was

presented to all students in an English version and a Spanish version. A Mixed Design

with repeated measures indicated that there was no significant difference in test

performance based on which test was administered first. There was also no interaction.

However, there was a modest difference in test scores when students took the test in their

primary versus secondary language. Overall, students' scores were higher on the Spanish

version. In addition to the data collected through the test results, interesting trends were

found related to the test administrator's awareness of language, culture, and cultural

competence when administering the Nelson-Denny Reading Test to bilingual students.

### **Table of Contents**

Abstract	iv
List of figures	V
Chapter I: Introduction	1
1.1 Need	1
1.2 Purpose	2
1.3 Hypotheses	2
1.4 History	3
1.5 Definitions	4
1.6 Assumptions	5
1.7 Limitations	5
1.8 Summary	5
Chapter II. Literature Review	7
2.1 Introduction	7
2.2 Culture Competence	8
2.3 Culture and Test Taking	9
2.4 Hispanic/Latino Americans Culture	14
2.5 Socio-Cultural Factors	16

2.6 Reading Process for Bilingual Students	21
2.7 Language and Culture	22
2.8 Summary of findings	23
III. Research Design	25
3.1 Introduction	25
3.2 Participants	25
3.3 Methods	25
3.4 Procedures	29
3.5 Analysis Design	30
3.6 Summary	30
IV. Results	31
4.1 Introduction and Restated Hypotheses	31
4.2 Results	31
4.8 Summary	39
V. Discussion and Implications	40
5.1 Summary of Findings	40
5.2Limitations	41
5.3 Future Directions	42
List of References	44

# **List of Figures**

Graph 4.3	33
Graph 4.4	34
Graph 4.5	35
Graph 4.6	37
Graph 4.7	38

#### **CHAPTER I**

#### Introduction

#### **1.1 Need**

Testing is a cultural activity (Westby C., Word of Mouth, 2005). Culture and language may be factors that influence bilingual student test performance. Student test results may vary according to whether the test is administered in the students' primary or secondary language. Bilingual students are sometimes required to take reading comprehension assessments like the Nelson-Denny Test for different purposes in educational settings. The Nelson-Denny Test measures a student's reading ability.

According to the author "the test is of particular value in identifying students who may need special help developing reading skills in order to take full advantage of their course offerings. It should provide help in determining which students would profit most from placement in a reading clinic, a developmental program, or an accelerated reading class" (Brown J., Fischco V, Hanna G, 2008). The results of this test may vary when it is given to a bilingual student in his or her secondary language and also given in his or her primary language.

This study was compared bilingual college students' Nelson-Denny Test results when the test was administered in their primary and secondary languages, Spanish and English. A comparison of the test results produced data that may evidence whether it is important for examiners to have cultural competence when assessing bilingual students' academic performance. More specifically, results indicating a difference in testing outcomes would suggest that examiners achieve some level of cultural competency when working with bilingual students by seeking to understand their perception of time, means

of learning, language styles, group orientation versus individualism orientation and students' socio-cultural backgrounds and influences, especially when assessing students (Westby C., Word of Mouth, 2005). By acknowledging the impact students' Hispanic backgrounds and language have on test performance, examiners can adopt instructional practices that will best facilitate their bilingual students' testing and learning processes and maximize their academic potential.

#### 1.2 Purpose

The purpose of this comparative study was to evaluate bilingual students' reading ability in English and Spanish using the Nelson-Denny Reading Test presented in both languages. The results were analyzed to determine whether language and culture for bilingual students affects test performance.

#### 1.3 Hypothesis

Based on previous research, language and culture have an impact on bilingual student test performance. Students may improve their scores on reading assessment tests (Nelson- Denny) if they take them in their primary language versus secondary language. Educational professionals' culture competence is important when evaluating bilingual students from different cultural backgrounds and when choosing appropriate methods of instruction and test preparation.

#### 1.4 History

The racial and cultural diversity in the U.S. population calls for educators to understand the factors that can impact student test performance. In this study, the comparison of bilingual student test results may potentially give educators reason to take students' cultural backgrounds into account when administering tests, designing lessons, and providing students' with accommodations. For example, an instructor may give a bilingual student a test in his or her primary language to determine his or her grasp of material taught and then compare the results with those achieved when the test is administered in the student's secondary language.

The professionals who evaluate student test results are sometimes responsible for deciding that student's academic progress in his/her respective field. Therefore, it is important for the evaluator to have sensitivity and empathy for the student based on his/her cultural identity (Derald Wing Sue, 2007). A professional thinking about using diverse teaching methodologies and the possibility of giving accommodations during testing processes to bilingual students is one who actively attempts to understand the worldview of his/her culturally different client (student), demonstrating a desire for the client (student) to succeed.

Culturally competent helping professional is one who is actively in the process of becoming aware of his or her own assumptions about human behavior, values, biases, and preconceived notions personal limitations (Sue, 2007). This study and it results were analyzed to determine whether language or cultural component for bilingual students affects test performance. Certainly, it is crucial note the importance of the language and cultural competence when the professional examine those students.

#### 1.5 Definitions

Cultural competence, culturally competent helping professional is one who is actively in the process of becoming aware of his or her own assumptions about human behavior, values, biases, and preconceived notions personal limitations (Derald Wing Sue, 2007). Nieto and Booth (2010) define culture competence in the educational sector as the "ability to successfully teach students who come from different cultures other than your own" (p. 408).

Components of Cultural Competence: awareness, knowledge, and skills (Derald Wing Sue, 2007). Culture, is defined as the way of life of a people (Hall 1976). Culture consists of the ways of perceiving and organizing the world that are held in common by a group of people (1976).

The Concept of High and Low context cultures is defined to understand the ways in which culture affects the testing process (1976). High context cultures, people give considerable attention to situational cues and shared knowledge in behaving and in interpreting behavior (1976). Low context cultures, people give more attention to the specific words that are spoken. (1976).

**Reading Comprehension**, the ability to understand what one has read (Hallahan, Kauffman, Pullen, 2009).

**Language**, is an arbitrary code or system of symbols to communicate meaning (Hallahan, Kauffman, Pullen, 2009).

**Nelson-Denny**, is a reading test with a particular value in identifying students who may need special help developing reading skills in order to take full advantage of their course offerings. It should provide help in determining which students would profit

most from placement in a reading clinic, a developmental program, or an accelerated reading class" (Brown J., Fischco V, Hanna G, 2008).

#### 1.6 Assumptions

The participants were responding with integrity and involvement to the entire process. The participants were not a group of actors. The study is with a real context of ESL (English as a Second Language) of students in advanced level of ESL program from Rowan University-Camden.

#### 1.7 Limitations

The test was only in English and in Spanish (not in other language). The students were going to be just from ESL (English as a Second Language) program. The test had time frame that not allowed giving accommodations to the students in the English version of the test, such as an extra time, in this case specifically for the purposes of the study. The Test was administered to a diverse type of socio-cultural-economic background without specification if their families are well educated or not.

#### 1.8 Summary

Culture and language may be factors that influence bilingual student test performance. Student test results may vary according to whether the test was administered in the students' primary or secondary language. Bilingual students are occasionally required to take reading comprehension assessments like the Nelson-Denny Test for different purposes in educational settings. The results of this test may vary when

it was given to a bilingual student in his or her secondary language and also given in his or her primary language. This chapter intended to bring interesting theory about whether language or cultural component for bilingual students affects test performance. Certainly, it is crucial to note the importance of language and cultural competence when the professional examine a student.

In chapter two the research pertaining to cultural competence and evaluating bilingual students in reading test will be reviewed. In chapter three will discuss methodology followed by the results of the research and discussion in chapters four and five.

#### **CHAPTER II**

#### **Literature Review**

#### 2.1 Introduction

This chapter intends to illustrate from diverse previous studies the importance and transcendence that culture has in the test-taking process. The process of evaluating a reading- comprehension test involves the participation of the bilingual student and the examiner. The professionals that work in the educational field may have cultural competence in order to understand student's needs. The author cites "The importance of cultural competence is the attitude of shifting to being culturally unaware to being aware and sensitive to one's own cultural heritage and to valuing and respecting differences" (Sue 2007). Nieto and Booth (2010) define culture competence in the educational sector as the "ability to successfully teach students who come from different cultures other than your own" (p. 408). The authors mention that to be culturally competent is central to increasing understanding and improving relationships across cultures. Chen and Starosta link the concept of intercultural sensitivity to cultural competence as the affective aspect of intercultural communication where the individuals have "active desire to motivate themselves to understand, appreciate, and accept differences among cultures" (Peng, 2006, p.39). Culture competence, language and testing were crucial terms for this study and those certainly were connected with the final purpose to observe how the student may succeed in his or her performance.

#### **2.2 Culture Competence**

Why culture competence is involved when evaluating a student? Cultural competence has three interesting words to consider: Awareness, Knowledge and Skills. In the book *Counseling the Culturally Diverse* Sue Derald Wing claims that cultural competence awareness is to be aware of one's own values and biases and how they may affect diverse clients in a session therapy. The author discusses cultural competence awareness in the context of the therapy setting and the relationship between therapist and client. *Awareness* in a test taking environment, test administrators need to be aware of the cultural diversity they find in the test setting, so they can consider accommodations that might help bilingual students succeed, especially when it comes to following instructions. For example, in Hispanic cultures visually demonstrating test answer expectations, like filling in a circle or writing the letter that corresponds to one's answer, is often preferred by students over hearing verbal instructions alone.

Testing administrators also need *knowledge* of their student's ethnicities and the regions they come from because they may not all be from the same Hispanic background. Therefore, the students may not share the exact same vocabulary and may need additional information to understand words they encounter on their tests that they cannot easily translate into their own language. This may prove to be especially important when they take tests in which using a process of elimination answer strategy will benefit them.

Without being able to translate all the words in an answer appropriately, they will have difficulty eliminating answers and arriving at the most logical response.

Communication is important as is competence *skills* to communicate, when sending and receiving both verbal and nonverbal messages, accurately and appropriately

is important and that professional must also exercise institutional intervention skills on behalf of their clients when appropriate (Sue. 2007). Comparing with the case of an examiner- student it is crucial to use the skill to communicate and the message is sent accurately in order to gain from the student what the examiner expects in terms of test-taking. In the classroom, when testing administrators give instructions to bilingual students they need to recognize that students have diverse ways of learning and receiving the messages. For example, reading aloud may help some students understand instructions better than if they are expected to read them on their own. The intonation the administrator uses may be helpful to students because it will allow them to recognize when certain instructions are very important, like how long a student has to complete a test section.

#### 2.3 Culture and Test Taking

Culture consists of ways groups of people commonly perceive and organize the world. A person who is "[c]ulturally competent is one who is actively in the process of becoming aware of his or her assumptions about human behavior, values, biases, and preconceived notions and personal limitations" (Derald Wing Sue, 2007). Culture is involved in the act of testing. Sue explains that the act of testing itself is culturally biased. Most students have ways of understanding and engaging in the process of test taking that are dependent on how they have been taught within the context of their culture. Hall identifies two types of context cultures that can influence a person's engagement in testing, high and low. The following behavioral characteristics define them: a) perception

of time, **b**) orientation to the group or the individual **c**) means of learning, **d**) language styles and function.

#### **a.** Perception and use of time:

- Low context: Time is linear and "[a]ctivities are allotted time frames with clearly demarcated beginnings and endings." Testing is low context; the students must perform within time limits. For example, the student cannot go back even if he or she later realizes the answer to an earlier question (Westby C. 2005).
- High context: Activities begin "when the time is right and continue until they are completed." (Anderson, 2003). Based on a study conducted by Anderson (1989)
   Hispanic students tender to read and ponder each question. They did not watch the time limits and they did not skip questions when they were not certain of the answers (Westby C.2005)
- Time for high context cultures can, therefore, be a major contributor to failure on an assessment. Students from high context cultures may become anxious when pressed to complete an assessment within a specified timeframe (Anderson, 2003). Their stress level may be compounded by the challenges of having to complete an English-based test as a bilingual student.

#### **b.** Group versus individual orientation:

- Low context: In mainstream, westernized cultures, individual achievement is valued.
- High context: The value is on "fitting into the group and on responsibility to the group" (Westby C. 2005).

- Activities are not done alone, as usually is required by tests. For example, in a test taking situation, the high context student will wait until others start and in the middle of taking the test, the student may ask others a question about the test to connect with his or her classmates.
- c. Means of learning: "Learning occurs in different ways in different cultures"
  - Low context: Mainstream (USA) children are most often taught with words.
     Students are often expected to perform a task after the first time an adult explains the task.
  - High context: In traditional cultures learning "occurs by observing others"

    (Westby C. 2005). The student watches until he/she can perform the task. Even if the student understands the words and the instructions, he/she may not feel comfortable doing the task until he/she is shown how to do it. For example, in the Nelson-Denny reading test, students must complete multiple choice questions by filling in the appropriate answer circles. The examiner may demonstrate on the blackboard the correct way to answer the questions while reading the instructions out loud to the students. Then, the examiner would most likely walk the students through completing the example questions.
- **d.** Language styles: "Language differences complicate any testing" situation (Westby C. 2005). Under language styles, three subtitles follow: language function, language topics, and structure of language (Anderson, 2003). Within these categories, two have the following subdivisions: Under language function falls regulatory versus reflective, asking questions and symmetrical versus asymmetrical relationships; under language topics falls

topic-associated versus topic-centered discourse and where is the meaning? In the context of this study, language function and language topics are the most relevant categories.

#### \* Language function

#### Regulatory Versus Reflective

- High context: Language is used to "regulate social interactions or to get something done." It is uncommon that language is used to "reflect on past information or predict future events." In those cultures with high rates of people with low socio-economic status, the past and future are not spoken of with the same frequency as present, given that immediate concerns surrounding housing, food, shelter, and family care predominate and most people do not concern themselves with questions related to their future.
- Low context: Language is used to "reflect on past information or to predict future events." Cultures with higher socio-economic classes tend to concern themselves more with past and future events, and students are taught from an early age to predict outcomes.

#### Asking Questions

- High context: According to the author, the act of questioning varies considerably from culture to culture in terms of who asks questions and the types of these questions (Westby C. 2005). Genuine questions are usually when the questions is asked because someone needs information. Usually in mainstream cultures also engage in pseudo questioning it means the child finds an opportunity to perform even though they know the adult knows the answer (2005).

Low context: There are other cultural groups that make minimal use of pseudo
questioning and pseudo questioning is rare for many Native American children. In
the case of elders they would not ask the student questions and expect them to
show their knowledge that may be seen presumptuous.

#### Symmetrical vs. Asymmetrical Relationships

- High context: Relationships and communication are "symmetrical" and "anyone may take the opportunity to speak and speakers can help each other if communication breaks down."
- Low context: Relationships and communication are "asymmetrical," "one-person talks and others listen." The speaker is responsible for organizing the entire discourse in a manner that listeners will understand. Mainstream (USA) students are typically raised to participate in this type of discourse, listening quietly to instructions, lectures, etc.

#### \* Language topics

#### Where is the Meaning?

- High context: "High context cultures rely on the context of conversation to
  convey much of the meaning. The context carries more weight than the words that
  are spoken." Cues are important when discerning meaning. Individuals familiar
  with cues from authority figures respond without questioning the information.
- Low context: Skilled with contextual cues and syllogistic reasoning that requires "reasoning from words," which is especially important when test taking.

Awareness of these behavioral characteristics associated with different cultures is important when evaluating student performance and planning how one will deliver information to students, especially during test taking, an exercise that can present multiple challenges for students from high context cultures attending school in low context culture settings, like America.

Hall's concept of high and low context cultures explains how in high context cultures, like Asian and Hispanic, people give more attention to situational cues and shared knowledge with friends when trying to understand and engage in processes than those in low context cultures. In a low context culture, like American, people give more attention to specific words that are spoken when trying to understand and engage in processes. For example, Hispanic students are often raised to have a high level of respect for authority figures, especially in the home, so when in school, their behavior toward test examiners may mimic this relationship, and they may not be quick to ask questions when confused or in need of specific information to complete a task. The student will anticipate some sort of cue, often body language-based, instead of a word, inviting students to pose questions. The student may struggle with figuring out instructions on a test because he or she did not feel questions of the test examiner were warranted. This, in turn, will affect the student's time management during test taking and may negatively impact his or her test outcome.

#### 2.4 Hispanic/Latino Americans Culture

In the context of this study, Hispanic culture has had the greatest impact on test outcomes because all students involved in the testing experience were Hispanic, but not all were from the same Hispanic cultures. The term "Hispanic" (Official U.S. Government designation) grouping (Derald Wing Sue, David Sue, 2007) indicates the

common Spanish language that ethnically diverse people share. The U.S. Census recognizes the term as an ethnic designator and not a racial one. Hispanics can be members of any racial grouping. Hispanics share many characteristics, but distinct differences exist both within and between different groups. It is important to note that not all students that participated in this study used the same Spanish language vocabulary, because of the variation of the language in every culture. Translating the document from English to Spanish does not ensure better performance. American English has far less variation in the language that could affect student test outcomes.

Sometimes language can be an impediment to test performance in unexpected ways because the words that are used in one culture may not be the same as those used in another culture that shares the same language. For example, words related to weather conditions can be very different from one Spanish speaking country to the next. In Ecuador, what English speaking people may call a "torrential downpour" to describe extreme, fast, large amounts of rain would be referred to by Ecuadorians as *tempestad*, while in the Dominican Republic similar conditions would be called *tormenta*, and in Colombia, such weather would be known as *aguacero*. Such variation in the Spanish language may cause test takers loss of time as they try to make sense of words that they recognize as Spanish, but are not used in their own Spanish language. This may result in the test taker's inability to answer questions correctly or arrive at answers through a process of elimination.

#### 2.5 Socio-Cultural Factors

In South America, students accustom learn language primarily by talking rather than reading. In Asia, students are encouraged to learn language by writing rather than speaking. In Europe, most students learn language through reading rather than talking or writing. The professionals encounter more clients from diverse backgrounds that differ from themselves in terms of identity, ideology, race, and culture. The author mentions that ethnocentric monoculturalism is dysfunctional in a pluralistic society such as United States (Sue, 2007). According to the author there are some components of ethnocentric monoculturalism such as, Belief in Superiority, Belief in Inferiority, Manifestation in Institutions, The Invisible Veil and The Consistent Set. In the following paragraphs will be a brief description of each of these components.

#### **Belief in Superiority**

There is a strong belief that one group has a better status or it is better in different ways referring to their costumes, language, traditions, arts, history (Sue 2007). People used to describe them with phrases such as more advanced and more civilized.

Individuals from the society may possess conscious and unconscious feelings of superiority and feel that their way of doing things is the correct way. There are physical characteristics such as blond hair, blue eyes and other culture characteristics like religions or individualism. People possessing these characteristics are perceived more favorably and for them is easier to have to more privileges. The author mentioned the "the white privileges' (Sue 2007)'.

#### **Belief in Inferiority**

There is a belief that people have of race and ethnic minorities' entire cultural heritage(Sue 2007). It extends to their customs, values, traditions, and language. Some groups may be seen as less developed, uncivilized, primitive, or even pathological. It can be physical characteristics such as: dark skin, brown eyes. Cultural characteristics such as: belief in non Christian religions (Muslim, Islam, Polytheism). The author mentioned that individuals who are physically different, who speak with an accent, use nonverbal and contextual communication, and reliance on the oral different culture beliefs and practices are more likely to be evaluated more negatively in the schools, work places, and other public places (Sue 2007).

#### **Manifestation in Institutions**

The ethnocentric beliefs and values are manifested in the programs, policies, practices, structures, and institutions of the society. There are some systems like training and educational systems, communication systems, and management systems. All those system control their life and all of them are monocultural in nature. The author mentions that the intuitional racism as a set of policies, priorities are created in order to oppress and force to dependence on individuals that are from the large societies. Therefore, feeling like subordination, deprivation, inferiority appears in the people that pertain to other minority group (Sue 2007).

#### The Invisible Veil

People worldviews represent the invisible veil. It operates outside the level of conscious awareness. People think that regardless of race, culture and ethnicity everyone has the same nature of reality and truth. The author mentions that it can be harmful to minority groups to pretend that everything is normal and the way they behave is decent and moral (Sue 2007).

#### The Consistent Set

In a test taking setting the evaluator may be consistent in his or her attitudes toward the student in order to reduce any misunderstanding in their communication. The theory of Cognitive Dissonance says that when a person's attitudes or opinions or beliefs are met with inconsistencies cognitive imbalance appears (Sue 2007). When the student sees inconsistencies from the evaluator during the session it can be uncomfortable and may create lack of confidence. Within the cultural biases are some items interesting to mention that are covered as Microagressions.

Microassault refers to a nonverbal attack in order to have discriminatory and biased feelings. The student may perceive this type of attitude. The case is related to overt racism, sexism and heterosexism in which the people target groups using epithets (Sue 2007). There are three conditions that engage in an explicit racism, sexism and heterosexism.

Microinsults are unintentional verbal comments that expresses insensitivity degrade a person's racial heritage identity, gender, identity or sexual orientation identity. This type of expression is being described as a hidden action (Sue 2007).

Microinvalidations are a verbal comments or behaviors that negate or dismiss the psychological thoughts or experiential reality of the target group (Sue 2007). In a test taking setting this type of comments may be create a misunderstanding between the examiner and the student.

One important element between the examiner and the student in a test taking context is trustworthiness that is a motivational element (Sue 2007). It involved trust, honesty, and genuineness. It is important that between the professional and the student have a positive relationship and both been able to work together in a test taking context. The objective may be that the students feel that are being helped and guided. The examiner in this field may be trained on cultural diversity in order to be aware of their own biases, perceptions and knowledge related to diverse identity groups in a test context.

Students may underachieve for diverse reasons: lack of opportunity to learn or read, inappropriate programs for example lack of bilingual education o knowledge of diverse cultures, dysfunctional home life, and poverty, difficulties associated with learning English as a second language.

The goal of an evaluation should be to analyze the ability to read or learn. However this goal cannot be met sometimes in a formal test or on one time evaluation (Westby C. 2005). There are some answers that come from those students that bring solutions to the learning process. One strategy suggested by the author to understand other cultures is to know our proper culture. In order to understand the testing process in culturally diverse students, educators should notice the differences between cultures. Based on the previous research professionals that acquire sensitivity of cultural

differences in bilingual students will gain more accurate analysis of the results that they obtain from reading tests and enhanced criteria, after getting the results, when deciding the next path for the student or when giving and advice regarding to the results of the test.

In the article "Cultural Competence: Its Influence on the Teaching and Learning of International Students," (2010) Claudia Nieto and Margaret Zoller Booth note that "instructors reported a higher level of intercultural sensitivity than college students; that females scored a higher level of intercultural sensitivity than college students; that females scored higher than males or intercultural sensitivity; and that a significant difference was found between ESL instructors and non-ESL instructors in the area of interaction engagement." The researchers claim that it is important to notice the possible impact that language and cultural understanding have on instructor and student attitudes toward learning and perception of effectiveness of instruction. The article mentions three concepts of culture based on Sharon Ruhly's theory (Harris & Moran, 1987): The first level is technical and represents the characteristic of the culture, such as appearances or procedures. The second is the formal aspect where the rituals are visible, such as use of time, physical space, and religious beliefs. The informal level includes automatic responses to actions that take place unconsciously. This third level is interesting to analyze because the author compares it to an iceberg divided into three parts, and the third part (under the sea) is the one that is hidden. This third part equates to the way a student's cultural background influences his or her behaviors and attitudes in a classroom, ways that may not be easily detected by an examiner

#### 2.6 Reading Process for Bilingual Students

In the Educational field theorists agree that "Reading is not a single-factor process. It is a multivariate skill involving a complex combination and integration of a variety of cognitive, linguistic, and nonlinguistic skills ranging from the very basic low-level processing abilities involved in encoding visual configurations to high level skills of syntax, semantics, and discourse and to still higher order knowledge of text where representation and integration of ideas with the reader's global knowledge" (Hossein Nasssaji 2003). Undoubtedly, Spanish speaking individuals taking tests in English in school settings must contend with the same reading challenges all students face, but theirs are doubled in complexity when they must deal with differences in language because of differences in Hispanic culture.

Students that probably do not speak well English may do a poor performance in a reading test. Also, the circumstances related to lower socioeconomic status (SES) based on race and ethnicity may be a reason of failing because they may not be familiar with testing (Baca & Cervantes 1989). Certainly educators do not necessarily need to know other languages in order to make students succeed in their progress academically, but they must at least be informed on how other cultures works such as in their customs, logic order, critical thinking, religion and ways of learning at home. For example, as it was said before, if a teacher tells American students before a test starts to, "Do a great job," (Westby C. 2005) they may feel encouraged. However, students from South American cultures may hear this expression and feel nervous, overwhelmed, or frustrated because the meaning of the word "job" in their culture refers to an adult activity which

involves huge responsibility (Hall 2003). The expectation of bilingual education with the students is to improve cognitive and affective development.

#### 2.7 Language and Culture

Language is an important element in the concept of culture. Lev Vygotsky analyzed the relationship between language and culture, arguing that words become meaningful as soon as they are a representation of a speaker. Vygotsky viewed language as a tool in the process of learning a second language because second language speakers are "expected to create a new reality of their experience with the second language and the new social context" (Nieto and Booth, 2010, p. 408). That means that in any social situation the speakers create a "shared social world."

Nieto and Booth claims that cultural competence is particularly essential for professionals in the educational field whose profession requires that they incorporate knowledge and the dispositions necessary to relate to students from other cultures to be effective.

Cultural awareness is a key for successfully teaching all students. Second language classrooms require students to engage in the study of the dominant language, while teachers must maintain a respectful, empathetic, and safe learning environment. The authors cite that "as one's experience of cultural difference becomes more complex and sophisticated, one's potential competence in intercultural relations increases" (p. 410). Consequently, exposure to diverse cultures potentially increases one's ability to "construct a more diverse worldview." (p. 410).

Nieto and Booth highlight Krashen's (1982) "acquisition-learning hypothesis" that "states that individuals develop two different processes when developing competence in a second language: acquisition and learning" (p. 410). Acquisition refers to learning a language through exposure. In the second instance, "learning is a conscious process" (page 410), that occurs when the individual receives information about the rules and structure of language.

#### 2.8 Summary:

This chapter intended to illustrate from diverse previous studies the importance and transcendence that culture has in the test-taking process. The process of evaluating a reading- comprehension test involves the participation of the bilingual student and the examiner. Culture competence, language and testing were crucial terms for this study and those certainly were connected with the final purpose to observe how the student may succeed in his or her performance.

Culture is involved in the act of testing. A couple of authors were cited in order to explain that the act of testing itself is culturally biased. Most students have ways of understanding and engaging in the process of test taking that are dependent on how they have been taught within the context of their culture. One of the authors Hall identifies two types of context cultures that can influence a person's engagement in testing, high and low. The following behavioral characteristics define them: 1) perception of time, 2) orientation to the group or the individual 3) means of learning, 4) language styles and function.

Certainly, Spanish speaking individuals taking tests in English in school settings must contend with the same reading challenges all students face, but theirs are doubled in complexity when they must deal with differences in language because of differences in Spanish culture.

In the next chapter will be described the methodology and procedures to measure reading and comprehension test in bilingual students.

#### **CHAPTER III**

#### **Research Design**

#### 3.1 Introduction

In chapter one, the purpose of this study, significance of this study, and the major research questions were discussed. In chapter two, extensive literature review on cultural competence, high and low cultures context, language, reading ability, culture and test taking reading process for bilingual students, and socio-cultural factors. In chapter three, the design of the study was established. Participants of the study, research design, procedures, measures, and analysis type were all discussed.

#### 3.2 Participants

The participants of the study were Rowan University- Camden students.

Participants were a part of a class of ESL (English Second Language) program at Rowan University-Camden. None of the students who participated were under the age of eighteen. Participants received a gift for completing this study. The sample size consisted of 12 Hispanic students. No information was gathered on gender or socio-economic background.

#### 3.3 Methods

Each participant answered two tests in different sessions. In the first session participants completed was the Nelson- Denny- Reading Test in English version. In the second session test participants completed was the Nelson-Denny Reading Test in Spanish translated-version.

Nelson-Denny Reading Test has several uses as a screening instrument for different purposes. The author cites that "it may for example, be used as a general tool for identifying superior students who would profit from placement into an advanced or accelerated program or course" (Brown J., Fischco V, Hanna G, 2008). The data that is obtained from this test may be "useful information for administrators, teachers, counselors, and advisers as they deal with problems of curriculum construction, course organization, and the proper handling of individual differences.

According to the author "the test is of particular value in identifying students who may need special help developing reading skills in order to take full advantage of their course offerings. It should provide help in determining which students would profit most from placement in a reading clinic, a developmental program, or an accelerated reading class" (Brown J., Fischco V, Hanna G, 2008). Nelson Denny Test has consists of total administration time is about 45 minutes, which includes time spent instructing examinees (*Nelson*, 2010).

The Nelson-Denny includes two subtests and yields four scores. The first subtest, Vocabulary, consists of 80 multiple-choice items, each with five response options. The words were drawn from high school and college textbooks and vary in difficulty. The second subtest, Comprehension, requires examinees to read five short passages and to respond 38 multiple-choice questions about the contents of the passages. Approximately half of the items relate to specific factual content, while the other half are more inferential in nature. A total reading score is derived by summing the Vocabulary score with the Comprehension score which multiplies for two previous final score (Cormier, Altman, Shyyan, Thurlow, 2010). The analysis with the data can be by the raw scores first and

those can be converted to percentile ranks, grade equivalents, standard scores, and stanines (Brown J., Fischco V, Hanna G, 2008).

In the development of the test in the form H of the Nelson-Denny Reading Test, the vocabulary subtest was shortened from 100 to 80 items with administration time remaining the same and the comprehension subtest was changed to include seven rather than eight selections, however with five rather than four questions for each short passage. (Brown J., Fischco V, Hanna G, 2008). The vocabulary and comprehension subtests were contained in one booklet for each form. Instruction were easy to follow and at the beginning of the test three practice exercises were provided for the vocabulary subtests and one sample reading passage for the comprehension subtest. The author cited that the questionnaire indicated that select populations, such as students with English as a second language and returning adults, often need a significantly less pressured administration of the test and "it was decided to develop an extended-time administration for Forms G and H with special set of norms" (Brown J., Fischco V, Hanna G, 2008, page 2).

According to the author, the national item tryouts took place in the fall of 1990 and eight form of the test were administered to a sample of students. Minority representation consisted of 16 percent black, 4 percent Hispanic, 3 percent Asian/Pacific Islander, and four percent Native American (Brown J., Fischco V, Hanna G, 2008). For the purpose of this study the form H of the test was used to take to the twelve bilingual students.

According to the author a number of educational institutions have successfully used the Nelson-Denny as a screening instrument (Brown J., Fischco V, Hanna G, 2008, pag 8). For example, "a study completed in 1993, three California community colleges

collected data that indicate a notable relationship between scores on the Nelson-Denny and students' classroom performance' (Brown J., Fischco V, Hanna G, 2008, page 8).

Based on previous research, language and culture have an influence on bilingual student test performance (Brisbois Judith, 1992). Students may improve their scores on reading assessment tests if they take them in their primary language versus secondary language. Educational professionals' culture competence is important when evaluating bilingual students from different socio-cultural backgrounds and when choosing appropriate methods of instruction and test preparation.

Regarding the purpose of this comparative study the Nelson-Denny Reading Test was presented in both languages. The tests were presented in two sessions. The first session half of the group took the reading test in Spanish-version and the other half took in English-version. In the second session group took the test inverse test first. The results were analyzed to determine whether language and culture for bilingual students affects test performance and if there is a difference in the scores between taking first the Spanish-version and the first English-version versus taking the inverse test the second time. According to the author it is not appropriate for the clinical evaluation of reading disorders; however it may be used to identify students in need of remedial reading instruction (Brown J., Fischco V, Hanna G, 2008).

The suggestion was that examiners should not over interpret the scores. Test results do not have evidence regard to do a diagnostic to specific reading problems. The author explained that there is no evidence that the test can be used as predictor of success in college (Brown, J., Fishco, V., & Hanna, G. (n.d). 2010). Nelson- Denny would be best used in combination with other reading indicators such as work samples,

observations, and perhaps, other reading tests. (Brown, J., Fishco, V., & Hanna, G. (n.d). 2010). When evaluating bilingual students it is important to notice this information in order to do an accurate analysis including other criteria's.

### **3.4 Procedures**

In this study before any data could be collected, the students read an Alternate and Informed Consent Form which stated that the survey was voluntary, responses would be kept confidential and anonymous, and the principal investigator's and faculty advisor's name, email, and number in case of any questions after completing the survey. The students had the option to leave the room if they didn't want to complete the test. In all cases, the students agreed to take the tests, which were distributed in a classroom at Rowan University-Camden. There were no more than 12 students at a time taking the test within the classroom. During the test half of the students were finished with the test in Spanish-version they took a break and then they had to continue with the test in Englishversion. The other half did the same with inverse tests. Once they finished they turned over the test and left. After all students left, the researcher organized and collected the data and placed in a folder. Data was collected during spring semester during the months of March and April. Once all of the data was collected, the Reading Test Nelson-Denny, Spanish and English version were scored and interpreted based on the information of the original manual.

## 3.5 Analysis Design

It was hypothesized that language and culture have an impact on bilingual student test performance. Students may improve their scores on reading assessment tests (Nelson-Denny) if they take them in their primary language versus secondary language.

Educational professionals' culture competence is important when evaluating bilingual students from different socio-cultural backgrounds and when choosing appropriate methods of instruction and test preparation. Using the scores for vocabulary and comprehension ratings, a Mixed Design with repeated measures was performed.

# 3.6 Summary

In Chapter three, the research design was discussed in detail and included information as to the students, type of test, measures, exact procedure, and the type of analysis of data. The results between the tests in English and Spanish version were compared in order to support the hypotheses stated previously. With the use of validated measures and interpretation from the original manual of the Reading Test Nelson-Denny, this thesis provided valuable information, pertaining to the hypotheses and noted some interesting cultural and intellectual information. In the following chapter, the data analysis and results of the study will be described. In the last chapter, findings and implications of the study will be discussed.

## **CHAPTER IV**

#### Results

# 4.1 Introduction and Restated Hypothesis

The purpose of this study was to compare thorough testing bilingual students' reading ability in English and Spanish using the Nelson-Denny Reading Test. The version of the reading test in English was translated to the Spanish for the specific purpose of the study. The results were analyzed to determine whether language and culture for bilingual students affects test performance. There was one hypothesis in this study based on previous research: Language and culture have an impact on bilingual student test performance. The students were expected to do a better score in the Spanish test than in the English test. Students may improve their scores on reading assessment tests (Nelson-Denny) if they take them in their native language versus secondary language.

### 4.2 Results:

The results of my research supported the above hypothesis. It was applied a Mixed Design with repeated measures to find the data. Twelve students completed the test in English and in Spanish. During the administration of the test, six students complete it in English-version first and the other six students completed in the Spanish-version after, while the other six were completing it in Spanish first and then in English.

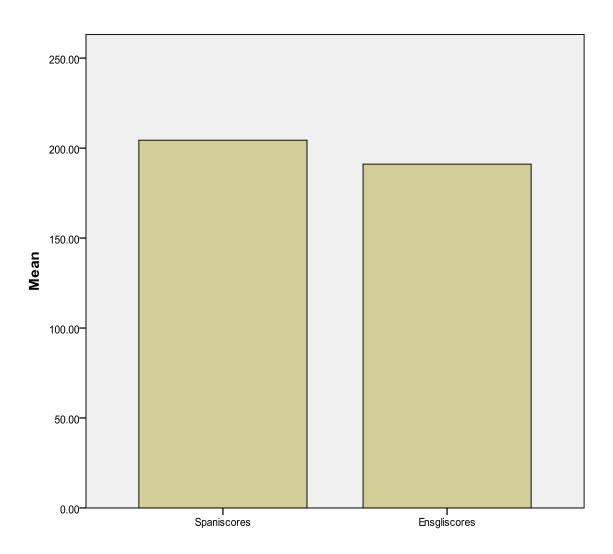
As predicted, most of the students whose native language is Spanish performed better on the Spanish version of the reading comprehension test than the English one. In

the study student's that took the test in Spanish obtained a higher score in the test with a mean of 204.42 and in the English version with a mean of 191.08.

Based on a Mixed Design with repeated measures it was found that there is no significant difference between which tests was given first. This means that scores were not affected by weather Spanish or English was given first. There was also no interaction.

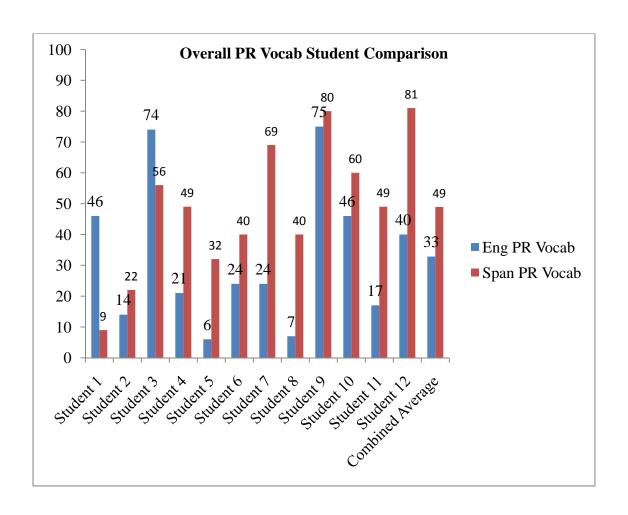
There was a modest difference with taking English and Spanish test. This means that Spanish test scores were overall higher. (F=6.408, significant = .030) (See Graph 4.3)

Graph 4.3



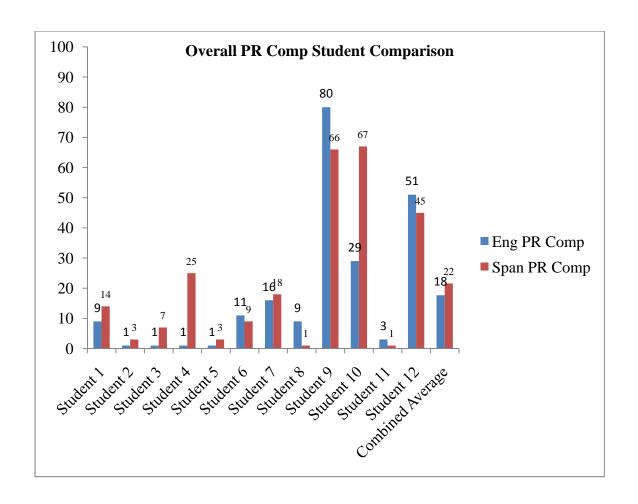
Out of twelve test-takers, only two scored higher on the English version. The vocabulary test results were the same as reading comprehension. (See Graph 4.4)

Graph 4.4



In the comprehension part the group did better in Spanish as well. (See graph 4.5)

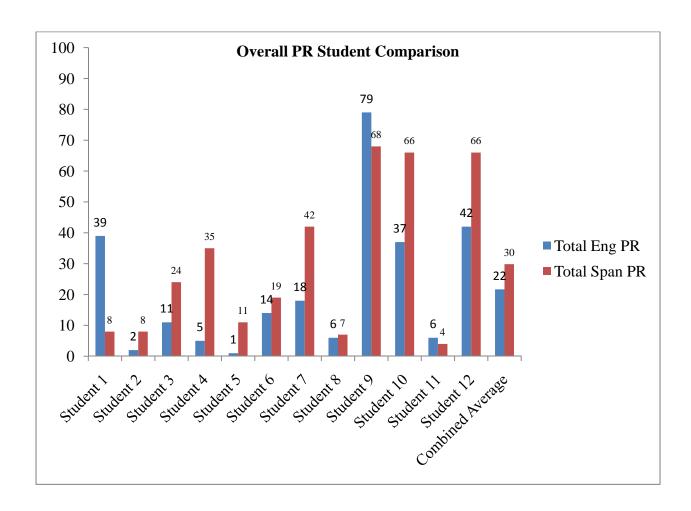
Graph 4.5



It is important to mention that even though the test was translated in to Spanish, the students may have come from different Hispanic ethnicities with different language practices. In addition, the time limitations of the test, regardless of the language it was delivered in, may not had complement the students' test-taking abilities, which may be related to their general level of academic achievement.

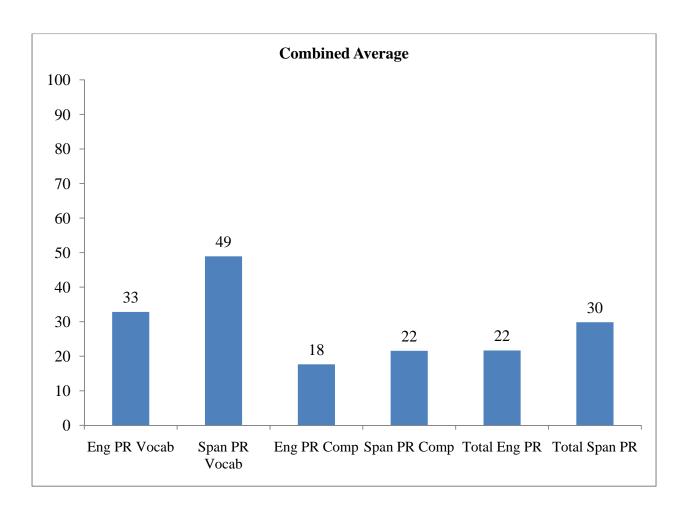
The graph illustrate that except for two, scored better on the Spanish versions than English regardless of which test version they took first. (See graph 4.6)

Graph 4.6



This graph shows that the bilingual test-takers had better percentiles in Spanish than in English when responding to a reading comprehension and vocabulary test. (See Graph 4.7)

Graph 4.7



# 4.8 Summary

This chapter has served to outline the results of administering the Nelson-Denny Reading Test to 12 adult students for whom which Spanish is their primary language. All of the students performed slightly better when taking the test in Spanish, except for two individuals whose scores were higher on the English versions of the test. Language proficiency was reflected in the test results, suggesting the impact it may have on a bilingual student's performance on a reading test.

#### **CHAPTER V**

# **Discussion and Implications**

## 5.1 Summary of Findings

As predicted, most of the students whose native language is Spanish performed better on the Spanish version of the Nelson-Denny Reading Test than the English one. In the study, students that took the test in Spanish obtained a higher score with a mean of 204.42 and a mean of 191.08 on the English version. A Mixed Design with repeated measures indicated that student test results were not affected by which test version was administered first, English or Spanish. There was also no interaction. There was a modest difference with taking English and Spanish test. This means that Spanish test scores were higher overall. (F=6.408, significant = .030) According to the hypothesis, language has an impact on test performance. Regarding cultural competence, it was interesting to observe how behavioral characteristics associated with Hall's theory of low context cultures influenced student test performance during the test taking process. Behavioral characteristics observed: 1) perception of time, 2) orientation to the group or the individual 3) means of learning, 4) language characteristics.

These findings agree with most literature regarding this topic. However, there was not found significant difference between taking the English-version of the test first, or the Spanish-version. The students commented that they felt comfortable taking in English may be because they were in advanced level of ESL and were more proficient in an academic task in English.

Regarding the percentage on the reading part it was not as expected specifically on the comprehension part. In this study was included in the theory part the concept of

high context and low context in order to link the importance of cultural competence that professionals may have when evaluating bilingual students. Therefore, the importance of being cultural competent to understand that is not sufficient the process of translating the test to other language in order to improve the scores. There were other elements in addition to the language which the professionals may be aware when administering a test to bilingual students. Those elements regarding the Hispanic culture involves: use of time, group versus individual orientation, language styles and means of learning.

## **5.2 Limitations**

It is important to consider the limitations of using only one reading test to evaluate if there is any influence on taking in Spanish or in English. Participants may have obtained better score if they were more trained in multiple choice tests. The research was also limited to Rowan University-Camden ESL students from one specific class in advanced level. Since the purpose of the test was to do a comparison the test was translated to Spanish from the original booklet but the language and its connotation might differ from other Hispanics culture. The test in Spanish version was not standardized based on specific ethnicity.

The study was also limited to a small sample size of only twelve students. A final limitation to this study is that socioeconomic background, parents' occupations, numbers of siblings were not observed neither asked. Knowing how well educated was their closer family might have explained results a little better as well.

## **5.3 Future Directions**

According to this particular study that has provided some insight into the bilingual and cultural influence on the performance when taking a reading test; much more research is needed in the socio-cultural area. In this type of research is important to acquire information of the background of the student that will be evaluated. A replication of this thesis on a larger scale could provide more significant evidence as to at what degree socio-cultural factors may also influence on test taking performance, some creative techniques on administering a reading test and additional accommodations for bilingual students.

Concentration on cultural background, standardized tests, and socioeconomic background might also yield interesting findings. Future studies should focus on investigating the socio cultural background by adding a questionnaire that reflects the details of the student's antecedents and see if how their family interacts and life style influence their performance in a test taking process. Another interesting direction is which accommodations can fit with the theory of low and high context in a test taking process. It would be interesting to see if the Hispanic students' improve their scores if there they were exposed to controlled accommodations on a reading test on both versions.

A final direction would be to do a qualitative study based on socio cultural theory. It would be interesting to analyze the influence of other factors rather than language can improve the student's performance, and how to create other ways to examine those giving strategies to bilingual students to take standardized tests. Results from such a study might provide insight on the cultural influence on tests taking performance and that may evolve to create techniques to train bilingual students in order to take standardized tests.

## **List of References**

- Anderson, N. (1989). Presentation at the Teaching Cultural Diversity Within the professional Education Curriculum Conference, Sea Island, G.A.
- Baca Leonard M.. (1991). Language Minority Students with Disabilities. *Exceptional*Children at Risk
- Baca, Leonard M.. (1990). Theory and Practice in Bilingual/Cross Cultural Special

  Education: Major Issues and Implications for Research, Practice, and Policy. I<sup>st</sup>

  Symposium: Theory and Practice in Bilingual/ Cross Cultural Special Education.

  http://ncela.gwu.edu/pubs/symposi/first/theory.htm
- Berk, L. E. (2007). *Development Through the Lifespan* (Fourth ed.). ny, U.S.A.: Pearson Allyn and Bacon.
- Beth, H. (2008, Spring). Collaboration With Culturally and Linguistically Diverse Families: Ideal Versus Reality. *Exceptional Children*, 74(3), p372-388,17p. Retrieved from http://login.proxy.libraries.rutgers
- Brown, J. I., Fishco, V. V., & Hanna, G. (2008). *NELSON-DENNY READING TEST, Manual for Scoring and Interpretation Forms G&H*. The River Side Publishing

  Company.
- Brown, J. I., Fishco, V. V., & Hanna, G. (2008). *NELSON-DENNY READING TEST*, *Directions for Administration Forms G&H*. The River Side Publishing Company.
- Brown, J., Fishco, V., & Hanna, G. (n.d.). Nelson-Denny Reading Test, Forms G and H.

  Retrieved from Mental Measurements Yearbook with Tests in Print database.
- Brown, K., Welsh, L., Hill, K., & Cipko, j. (2008, November 1). The Efficacy of Embedding Special Education Instruction in Teacher preparation Programs in the

- United States. *Teaching and Teacher education: An International Journal of Research and Studies*, 24(8), 2087-2094. (ERIC Document Reproduction Service No. EJ809207) Retrieved from Eric Database.
- Cartledge, G., & Lefki, K. (2008, Spring). Culturally Responsive Classrooms for Culturally Diverse Students With and At Risk for Disabilities. *Exceptional Children*, 74(3), p351-371,21p. Retrieved from Professional Development Collection database.
- Chakraborty, B., & Stone, S. (2008, Winter2008). Teaching Tolerance and Reaching Diverse Students Through the Use of Children's Books. *Childhood education*, 85(2), 106G-106J. Retrieved from MasterFILE Premier database.
- Chamberlain, S. P. (2005, March). Recognizing and Responding to Cultural Differences in the Education of Culturally and Linguistically Diverse Learners. *Intervention in School and Clinic*, 40(4), 195-211. Retrieved from https://loginproxy.libraries.rutgers
- Chen, G., & Starosta, W. (2000, November). The development and validation of the Intercultural Sensitivity Scale. Presented at the annual convention of the Intercultural Sensitivity Scale. In Presented at the annual convention of the National Communication Association, WA.
- Colombo, M. C. (2007, Spring). Developing Cultural Competence: Mainstream Teachers and Professional Development. *The official Journal of the National Association for Multicultural Education. Multicultural Perspectives*, 9, doi:10.1080/14675980802078624
- Cultural competence: a conceptual framework for teaching and learning. Derald Wing

- Cushing, L., Carter, E., Clark, N., Walls, T., & Kennedy, C. (2009). Evaluting Inclusive Educational Practices for Students With Severe Disabilities Using the Program Quality Measurement Tool. *Journal of Special Education*, 42(4), 195-208.

  Retrieved from Master FILE Premier database.
- DeJaeghere, J., & Zhang, Y. (2008, June). Development of Intercultural competence among US American teachers: professional development factors that enhance competence. *Intercultural Education Routledge Tylor & Francis Group*, 19, doi:10.1080/14675980802078624
- Diaz, L. S. (2007). *The Praeger Handbook of Latino Education in the U.S.* Westport, CT: Praeger Publishers.
- Feist, J. & Feist, G. (2002). *Theories of Personality* (Fifth ed.). New York, NY: McGraw Hill. Gerald, C. (2009). *Theory and Practice of Counseling and Psychotherapy* (Eighth ed.). Belmont, CA: Thomson Brooks, Cole.
- Ford, Donna Y. (2008). *Culturally Diverse Exceptional Students*: Remembering the Past,

  Looking Toward the Future. *Exceptional Children*. Retrieved from

  <a href="http://login.proxy.libraries.rutgers">http://login.proxy.libraries.rutgers</a>
- Guerra, P., NELSON, S.(2009, January). Changing Professional Practice Requires

  Changing Beliefs. Phi Delta Kappan, 90(5), 354-359. Retrieved from MasterFILE

  Premier Database.
- Guiberson Mark. (2009). *Preventing School Failure*; Hispanic Representation in Special Education: Patterns and Implications. Retrieved from <a href="https://login.proxy.libraries.rutgers">https://login.proxy.libraries.rutgers</a>
- Guiberson, M. (2009, Spring). 53(3), p167-167,10p. doi:1045-988x

- Hall, E.T. (1959). The silence language. New York. Doubleday.
- Hall, E.T. (1976). Beyond culture. New York: Double day.
- Hallagan, H. P. James M. Kauffman, Paige C. Pullen (2009). *Exceptional Learners* (Eleventh ed.). Boston, MA: Pearson.
- Harris, P., Moran, R. (1987). Managing Cultural Differences. Houston, TX:Gulf Publishing.
- Harry. Beth. (2008) *Exceptional Children*; Collaboration with Culturally and Linguistically Diverse Families: Ideal vs. Reality. Retrieved from <a href="http://web.ebscohost.com">http://web.ebscohost.com</a>, <a href="https://login.proxy.libraries.rutgers">https://login.proxy.libraries.rutgers</a>
- Hart, J. (2009, Spring2009). Strategies for Culturally and Linguistically Diverse StudentsWith Special Needs. *Preventing School Failure*, 53(3), 197-208. Retrieved fromProfessional Development Collection database.
- Hossein Nassaji, Higher- Level and Lower- Level Text Processing Skills and Advanced ESL Reading Comprehension. (2003). *The Modern Language Journal. Retrieved from EBSCOhost http://ezproxy.rowan.edu*
- Kamps, D., Abbot, M., Greenwood, C., Arreaga-Mayer, C., Wills, H., Longstaff, J., ...
   Walton, C. (2007, Summer). Use of Evidence-Bases, Small Group Reading
   Instruction For English Language Learners in Elementary Grades: Secondary-Tier
   Intervention. . Learning Disability Quarterly, 30(3), 153-168. Retrieved from
   https://login.proxy.libraries.rutgers
- Keengwe, J. (2010). Fostering Cross Cultural Competence in Preservice Teachers

  Through Multiculural Education Experiences. *Early Childhood Educ J (2010)*38:197-204, doi:10.1007/s10643-010-0401-5

- Klingner, J., Edward, P. (2006, January). Cultural considerations with Response to Intervention models. *Reading Research Quarterly*, 41(1), 108-117. Retrieved doi:10.1598/RRQ.41.1.6
- Krashen, S. (1982). *Principles and Practice in Second Language Acquisition*. Oxford, UK: Pergamon.
- Larroude, B. (2004, January 1). Multicultural-Multilingual Group Sessions: Development of Functional Communication. *Topics in Language Disorders*, 24(2),. (ERIC Document Reproduction Service No. EJ704117) Retrieved from ERIC database.
- Liang , X., & Gang, Z. (2009, March). Indicators to evaluate pre-service teachers' cultural competence. *Evaluation & Research in Education, Routledge Tailor & Francis Group*, 22, doi:10.1080/09500790903082354
- Nieto, C., & Zoller, B. M. (2010, September). Cultural Competence Its Influence on the Teaching and Learning of International Students. *Journal of Studies in International Education*, 14, doi:10.1177/1028315309337929
- O'Hara, S., & Pritchard, R. (2008, January 1). Meeting the Challenge of Diversity:

  Professional Development for Teacher Educators. Teachers Education Quarterly,
  35(1), 43-61. (ERIC Document Reproduction Service No. EJ810649) Retrieved
  from Eric database.
- Peng, S. (2006). A comparative perspective of intercultural sensitivity between college students and multinational employees in China. Multicultural perspectives, 8, 38-45.

- Pickar, D. B. (1986). Journal of Youth and Adolescence. In *The Learning Disabled Adolescent:* (Vol. 15, p. 12). USA, USA: (Reprinted from *Journal of Youth and Adolescence*, 1986, *15*, 12)
- Reindal, S. (2008, May 1). A social Relational Model of Disability: A Theoretical

  Framework for Special Needs Education?. European Journal of Special Needs

  Education, 23(2), 135-146. (ERIC Document Reproduction Service No.

  EJ788700) Retrieved from Eric database.
- Rinaldi, C., & Samson, J. (2008, June 8). English Language Learners and Response to Intervention. *Teaching Exceptional Children*, 40(5), p6-14,9p. Retrieved from Professional Development Collection database.
- Roseberry, A. R., & Eicholtz, G. E. (1994, July). 25, 156-164. doi:0161-1461/94/2503-0156
- Sattler, J. M. (2001). Assessment of Children, Cognitive Applications (Fourth ed.). San Diego, CA: Jerome M. Sattler, Publisher, Inc. San Diego.
- Seeleman, C., Suurmond, J., & Stronks, K. (2009). Cultural competence: a conceptual framework for teaching and learning. *Medical Education, Cultural and Interprofessional diversity*, doi:10.1111/j.1365-2923.2008.03269.x
- Steege, M. W., & Steuart, T. W. Counseling the Culturally Diverse Theory and Practice (2nd ed.). New York, NYC: The Guilford Press.
- Sue, Olson, S. (1998, December). A computerized vocabulary tutorial as a pre-reading exercise using Nelson-Denny. Disseration Abstracts International Section A, 59, Retrieved from PsycINFO database.

- Westby, C. (2005, March). Assessment of Culturally Diverse Students: Why There

  Cannot Be a Culture- Free Test. Word of Mouth, 16(4), 4-6. Retrieved from

  ERIC: www.proedinc.com: <a href="https://login.proxy.libraries.rutgers">https://login.proxy.libraries.rutgers</a>
- Wing, D. S., & Sue, D. (2007). *Counseling the Culturally Diverse Theory and Practice* (5 ed.). Hoboken, NJ: John Wiley & Sons, INC, New Jersey.