Spring 1-1-2017

The Academic Experiences and Trajectories of Gifted, Spanish-Speaking, Latino/a Bilingual Students: a Multicase Study

Clara Elvia Smith

University of Colorado at Boulder, clarasmith.cu@gmail.com

Follow this and additional works at: https://scholar.colorado.edu/educ_gradetds

Part of the Bilingual, Multilingual, and Multicultural Education Commons, and the Gifted Education Commons

Recommended Citation


https://scholar.colorado.edu/educ_gradetds/99
THE ACADEMIC EXPERIENCES AND TRAJECTORIES OF GIFTED, SPANISH-SPEAKING, LATINO/A BILINGUAL STUDENTS: A MULTICASE STUDY

by

CLARA ELVIA SMITH

B.A., University of Northern Colorado, 1995

M.A., University of Arkansas, 2007

A thesis submitted to the

Faculty of the Graduate School of the

University of Colorado in partial fulfillment

of the requirement for the degree of

Doctor of Philosophy

School of Education

2017
This thesis entitled:
The Academic Experiences and Trajectories of Gifted, Spanish-Speaking, Latino/a Bilingual Students: A Multicase Study
written by Clara Elvia Smith
has been approved by the School of Education

______________________________
Kathy Escamilla, Ph. D.

______________________________
Margarita Bianco, Ph. D.

______________________________
Sue Hopewell, Ph. D.

______________________________
Deb Palmer, Ph. D.

______________________________
Esther Brown, Ph. D.

Date __________________

The final copy of this thesis has been examined by the signatories, and we find that both the content and the form meet acceptable presentation standards of scholarly work in the above mentioned discipline.

IRB Protocol #16-0342
Abstract

Smith, Clara Elvia (Ph.D., Education)
The Academic Experiences and Trajectories of Gifted, Spanish-Speaking, Latino/a Bilingual Students: A Multicase Study
Thesis directed by Professor Kathy C. Escamilla

Gifted, bilingual students are underrepresented in gifted education. The reasons are examined in the literature and include unfair assessments, varying definitions of giftedness, lack of teacher training or clear guidelines, and teachers’ perceptions. The purpose of this qualitative, multi-case study is to add to the lack of research currently available on the experiences of gifted bilingual students. This investigation centers on 4 students in a K-8, public, dual language school in an urban district, and sought to answer these research questions: (a) What are the nomination and identification processes used to determine the need for gifted education? (b) What are the experiences of these students in this school? (c) What are the instructional practices used to serve them? The findings from this study show that while GT support improved, more was needed at the school level, classroom teachers need more professional development to understand how to support gifted bilingual students, more instructional strategies are needed to support gifted bilingual students in the classroom, and the guidelines used for identifying and programming gifted bilingual students are confusing and insufficient to best meet the needs of this special population of students. The implications from the findings of this study will add to what is known about the nomination and identification practices used with gifted bilingual students, to understand the challenges and successes of gifted bilingual students in an academic setting, and the instructional practices used with gifted bilingual students in a dual language school setting. Also, important implications from this study stem from the findings on how nomination and identification practices might add to the problem of the underrepresentation of gifted bilingual students in GT programs, and that instructional practices used may not meet the needs of this special population of students.
Dedication

To my husband, Ted Smith, for his unwavering support and love throughout my entire doctoral program. Also to my daughters Cori Jo Foote and Jamie Foote, and my step-daughters, Katrina Smith and Taylor Smith, my sources of inspiration and encouragement.
Acknowledgments

Throughout my years as a doctoral student, I received support and guidance from several individuals: Dr. Kathy Escamilla graciously agreed to be my advisor and chair of my committee after the death of my original advisor and chair, Dr. Janette Klingner. Both were key in helping me believe in myself throughout my Ph.D. journey. I would like to thank Dr. Margarita Bianco who served as the expert on gifted education on my committee and provided invaluable input for both my prospectus and final dissertation. I would also like to thank Dr. Sue Hopewell, Dr. Deb Palmer, and Dr. Esther Brown, for agreeing to serve on my dissertation committee, and for providing me with excellent suggestions and advice for my final thesis. I would like to also thank my original prospectus committee which included Dr. Guillermo Solano-Flores, Dr. Lucinda Soltero-González, and Dr. Ester González. These individuals provided important perspectives that helped to guide my study design and data collection. During the final year and a half of my career as a doctoral student, I had the privilege of working for two supervisors who provided me with a job and an assistantship and supported me in my journey with many words of encouragement and professional development opportunities: Dr. Mark Werner and Sophie Low. Thank you to my entire family for your love and your patience. Finally, I would like to thank all the participants in this study for their time and for sharing their experiences.
# Table of Contents

Chapter 1: Introduction........................................................................................................ 1  
  Unfair Assessment Practices............................................................................................ 1  
  Definitions of Giftedness and Underrepresented Gifted Students................................. 3  
  Need for Teacher Training in Gifted Education .............................................................. 4  
  Teachers’ Expectations and Perceptions of Emerging Bilingual Students..................... 5  
  Characteristics of Monolingual Gifted Children and Bilingual Gifted Children .......... 8  
  Types of Gifted Programs ............................................................................................... 12  

Statement of the Problem ................................................................................................. 16  

Purpose Statement........................................................................................................... 16  

Theoretical Framework .................................................................................................... 16  

Research Overview .......................................................................................................... 20  

Significance ....................................................................................................................... 27  

Chapter 2: Literature Review ............................................................................................ 29  

Methods for the Literature Search .................................................................................... 29  

Instruction for Bilingual students .................................................................................. 29  

Instruction for Gifted Students ......................................................................................... 42  

Instruction for Gifted Bilingual Students ........................................................................ 55  

Conclusion .................................................................................................................... 67  

Chapter 3: Methodology .................................................................................................. 69  
  Research Site .................................................................................................................. 70  

Selection of Student Participants ...................................................................................... 71  

Qualitative Data Sources and Collection Methods .......................................................... 72  
  Student Interviews .......................................................................................................... 73  

Interviews with Teachers ................................................................................................. 76  

Interview with the GT Coordinator/teacher...................................................................... 76  

Interview with the Principal ............................................................................................. 77  

Interviews with Parents .................................................................................................... 78  

Observations .................................................................................................................... 78  

Data Analysis .................................................................................................................. 81  

Chapter 4: Findings .......................................................................................................... 86  
  Identification Procedures for Eastwood’s School District .............................................. 86  
  Gifted Service Plans (GSP) .............................................................................................. 87  
  ACCESS Scores for the Participating Students .............................................................. 88  
  Participating Student Profiles ......................................................................................... 90  

vi
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating parents</td>
<td>103</td>
</tr>
<tr>
<td>Participating Teachers and Administrators: Background and Context</td>
<td>109</td>
</tr>
<tr>
<td>Emerging Themes</td>
<td>127</td>
</tr>
<tr>
<td>Theme three - parental support of the gifted bilingual students in this study</td>
<td>134</td>
</tr>
<tr>
<td>Theme five - giftedness and bilingualism as an attribute.</td>
<td>137</td>
</tr>
<tr>
<td>Research Questions Answered</td>
<td>147</td>
</tr>
<tr>
<td>Chapter 5: Discussion and Implications</td>
<td>149</td>
</tr>
<tr>
<td>Discussion of the Findings</td>
<td>149</td>
</tr>
<tr>
<td>Teacher Professional Development</td>
<td>152</td>
</tr>
<tr>
<td>Instructional Strategies for Gifted Bilingual Students</td>
<td>153</td>
</tr>
<tr>
<td>Teacher Perceptions</td>
<td>155</td>
</tr>
<tr>
<td>Parental Support of Gifted Students</td>
<td>157</td>
</tr>
<tr>
<td>Languages Used at Eastwood</td>
<td>158</td>
</tr>
<tr>
<td>Gifted Nomination and Identification Guidelines and Assessment</td>
<td>159</td>
</tr>
<tr>
<td>GSPs</td>
<td>161</td>
</tr>
<tr>
<td>Musical Giftedness at Eastwood</td>
<td>163</td>
</tr>
<tr>
<td>ACCESS Scores</td>
<td>163</td>
</tr>
<tr>
<td>Limitations and Recommendations for Eastwood</td>
<td>164</td>
</tr>
<tr>
<td>Implications</td>
<td>165</td>
</tr>
<tr>
<td>Conclusions</td>
<td>166</td>
</tr>
<tr>
<td>References</td>
<td>168</td>
</tr>
<tr>
<td>Appendix A: Tests used for assessing giftedness</td>
<td>178</td>
</tr>
<tr>
<td>Appendix B: Characteristics of Students Who are Gifted</td>
<td>183</td>
</tr>
<tr>
<td>Appendix C: Characteristics of the Bilingual Gifted Student</td>
<td>185</td>
</tr>
<tr>
<td>Appendix D: Student Interview Protocols</td>
<td>188</td>
</tr>
<tr>
<td>Appendix E: Teacher Interview Protocol</td>
<td>194</td>
</tr>
<tr>
<td>Appendix F: GT Coordinator Interview Protocol</td>
<td>196</td>
</tr>
<tr>
<td>Appendix G: Principal/Administrator Interview Protocol</td>
<td>197</td>
</tr>
<tr>
<td>Appendix H: Parent Interview Protocol</td>
<td>198</td>
</tr>
<tr>
<td>Appendix I: Activity Log for Classroom Observations</td>
<td>200</td>
</tr>
<tr>
<td>Appendix J: Activity Log for Field Notes</td>
<td>201</td>
</tr>
</tbody>
</table>
Appendix K: Identification Guidelines for the district where Eastwood is located ...............202
Appendix L: Teacher Training Questionnaire .................................................................213
TABLES

Table 1. Demographic information at the school, district, state and national level.................. 7
Table 2. Demographic information of Eastwood (pseudonym)............................................... 71
Table 3. Ana’s ACCESS Scores from the first year she was identified as gifted to the current year........................................................................................................ 91
Table 4. Alberto’s ACCESS Scores three years after he was identified as gifted...................... 95
Table 5. Rosa’s ACCESS Scores from the first year she was identified as gifted to the current year................................................................................................................ 98
Table 6. Martha’s ACCESS Scores for the first year she was identified as gifted...................... 100
FIGURES

Figure 1. Theoretical framework ........................................................................................................................................... 17
Chapter 1: Introduction

The issue of underrepresentation of English language learners (ELLs) in gifted and talented (GT) programs is a critical problem that has been well documented (Esquierdo & Arreguin-Anderson, 2012; Bernal, 2001; Lara-Alecio, Irby, & Walker, 2008). ELLs represent the fastest growing population of students in the United States (National Center for Education Statistics, 2013), but comprise only a small percentage of those in gifted education (Callahan, 2005). According to scholars in gifted education, the reasons for this disparity vary widely and include: unfair assessment practices, varying definitions of giftedness, need for teacher training in gifted education, lack of clear guidelines on characteristics of monolingual gifted children and bilingual gifted children, and teachers’ expectations and perceptions of emerging bilingual students.

Unfair Assessment Practices

Students nominated and considered for placement into gifted programming usually undergo testing to determine their eligibility (Ford, 2004). Tests might include controversial intelligence testing (also known as cognitive ability tests), or the more widely acceptable achievement test, such as the Comprehensive Test of Basic Skills, or CTBS (Gray, McCallum, & Bain, 2009). Oftentimes intelligence testing is fraught with issues and limitations that make it unsuitable for assessing giftedness in students who are culturally, racially or linguistically diverse. Indeed, cognitive tests are one of the biggest obstacles for ELLs to receive gifted programming (National Center for Research on Gifted Education, 2015). As an example of
assessments being unfair, Black students consistently score lower on intelligence tests when compared to white students (Ford, 2004). The presumption by some who are not trained in testing and assessment methods is that a low score on an intelligence test means that the individual has low cognitive ability and potential. Furthermore, many believe incorrectly that these types of tests are exact measures of intelligence, or that intelligence is fixed or innate. Deficit thinking and test biases also contribute to unfair assessment practices for the underrepresented gifted student. Despite the many options that are available for assessing gifted students that are culturally, linguistically or ethnically diverse, all have different limitations for their use with this special group of students (Gray, McCallum, & Bain, 2009) (See Appendix A for a list of tests commonly used for assessing giftedness). However, language reduced screening methods have been proposed by some scholars, which might be a better way to assess students who primarily speak another language besides English (Gray, McCallum, & Bain, 2009). Examples of language-reduced tests, or nonverbal tests include the Naglieri Nonverbal Ability Test (NNAT) which was used for screening giftedness at the school in this study, or the Test of Nonverbal Intelligence (Naglieri & Ford, 2003). There are currently three different types of the NNAT available through Pearson Publishers - Assessment: NNAT-2 Online, NNAT-2, and the NNAT-3. As newer versions become available, the older versions are slowly phased out. For example, the NNAT-2 will retire on July 1, 2018, and the NNAT-3 was available in the spring of 2016. The NNAT-3 is available in a traditional “paper and pencil” format, as well as an online platform for a computer or tablet. According to Pearson, this assessment is widely used to identify gifted and talented students from K-4th grade. Furthermore, Pearson states, “NNAT provides a nonverbal, culturally neutral assessment of general ability that is ideal for use with a diverse student population. With the use of progressive matrices across grade levels, this
versatile test is well-suited for identifying gifted and talented students. The test features pictorial direction and requires no spoken or written language, making it particularly useful for assessing minority students and those who might be English language learners or who may have limited academic skills.” Pearson also states that the NNAT, “uses progressive matrices to allow for a culturally neutral evaluation of students’ nonverbal reasoning and general problem-solving ability, regardless of the individual student’s primary language, education, culture or socioeconomic background.” For more information about this test, see Appendix A.

Definitions of Giftedness and Underrepresented Gifted Students

The definition of giftedness is the key to who qualifies for special programming to meet their academic needs, and who does not (Bonner, Lewis, Bowman-Perrott, Hill-Jackson, 2009). The first federally recognized definition from 1972 has guided states in their policies regarding gifted programs, but has gone through several versions over the decades (Stephens & Karnes, 2000). Even though a definition has been recognized federally in the past, gifted students remain without the benefit of a federal mandate for gifted programs (Lara-Alecio, Irby, & Walker, 2008). There is not one universal definition for giftedness (Cross & Cross, 2005), and definitions of giftedness vary greatly among states and school districts (Stephens & Karnes, 2000). Many different versions of definitions have been set forth over the past few decades (Renzulli, 2002). Only eight states specifically address “culturally and ethnically diverse” students in their state definition (AL, CO, KY, MD, MN, NC, PA, WI), and nine states (AL, AZ, CO, FL, KY, MN, NC, PA, WI) recognize “ESL/ELL” (English as a Second Language/English Language Learner) students in their official definition of giftedness (National Association of Gifted Children, State of the States in Gifted Education, 2014-2015). Additionally, scholars cannot agree on what characterizes giftedness (Renzulli, 2002). Some definitions are based on intelligence quotient
scores (Misset & McCormick, 2014) and/or deficit thinking of underrepresented students in
gifted education (Ford, Harris, Tyson, & Trotman, 2002). Ultimately, the most important aspect
of any definition is that it is culturally responsive to recognize giftedness across any gender,
culture, linguistic, or economic group (King, Kozleski, & Lansdowne, 2009). The special
characteristics that distinguish a student who is both bilingual and gifted are not being
recognized, especially in terms of meeting their programming needs, including the formal
definition that is used to identify them (Esquierdo & Arreguin-Anderson, 2012).

Schools and districts need a solid definition that is guided by state legislated definitions
and policies in order to avoid instability in gifted education. A lack of consistency in how these
students are defined and serviced perpetuates myths and misrepresentations, and can affect how
gifted bilingual students are identified.

**Need for Teacher Training in Gifted Education**

Recent research has focused on teacher training programs designed to prepare educators
to best meet the needs of gifted students (Karsenty, 2014). Others have studied teachers’
underlying assumptions and professional practical knowledge, recommending that further
training is needed to prepare them for teaching the gifted (Berman, Schultz, & Weber, 2012;
Coleman, 2014). As mentioned in the section above describing unfair assessment practices, some
teachers still believe that giftedness is the same as intelligence (Borland, 2009). Furthermore,
teacher training is imperative to understanding the academic needs of gifted students from
underserved areas (Swanson, 2006), including emerging bilingual students (Lara-Alecio, Irby, &
Walker, 2008). Teachers become “gatekeepers” for gifted education because they are usually the
first ones to acknowledge and nominate students for special programming, and can be influenced
by their underlying assumptions and attitudes about who qualifies for gifted education (Bonner, Lewis, Bowman-Perrott, Hill-Jackson, 2009; Swanson, 2006).

Teachers are faced with many responsibilities in the classroom, and one of the more unique duties a teacher might encounter is the responsibility to nominate those students who have potential to be gifted learners in the general population of students so that they can further undergo the identification process. This task is not as easy as it might sound, especially when a student who displays gifted characteristics is a second language learner as well. Another possible confounder to this problem is that teachers may not have the training necessary to be able to recognize giftedness in their students who are learning a second language, or if they come from a different cultural background than they do. It is important as gifted educators to help teachers have a broad, fundamental understanding of students from culturally and linguistically diverse backgrounds because it might affect their ability to identify gifted learners within that scope. This is increasingly important because the literature shows that teachers are usually the ones to first initiate an identification process for students they believe might be gifted (Bianco, 2005).

**Teachers’ Expectations and Perceptions of Emerging Bilingual Students**

Recent literature shows that teacher nominations of nonmajority students for gifted and talented programs has been problematic (Siegle & Powell, 2004). Studies where teachers rate students to screen them for gifted programs have shown a bias toward Anglo-American students (Brice & Brice, 2004; McBee, 2006). Teachers participating in a study that examined their views about gifted students revealed that the majority of them held stereotypical views of gifted students, imagining a Caucasian gifted student when given a profile (Carman, 2011), or holding negative attitudes toward gifted students (Geake & Gross, 2008; McCoach & Siegle, 2007). Indeed, some educators and researchers perceive gifted education as elitist and antidemocratic.
(Subotnik, Olszewski-Kubilius, & Worrell, 2011; Borland, 2005). Studies have examined teacher perspectives and underlying beliefs of the potential of gifted non-majority students (Harradine, Coleman, & Winn, 2014; Hargrove & Seay, 2011; Siegle, Moore, Mann, & Wilson, 2010). Teachers’ perceptions or biases against underrepresented gifted students affect their nomination into a gifted program (Michael-Chadwell, 2010; Moon & Brighton, 2008; Neumeister, Adams, Pierce, Cassady & Dixon, 2007). All of these studies suggest that the underrepresentation of nonmajority children in gifted education could be related to the nominations of teachers who hold preconceived notions of who gifted children should, or shouldn’t be.

The underrepresentation of Latino/a, Spanish speaking bilingual students in gifted and talented (GT) programs is important to address because there are an estimated 3 to 5 million gifted students from K-12 in this country, and according to the National Association for Gifted Children (NAGC) it is unknown how many of those are receiving the services they need. According to the Department of Education Civil Rights data, in 2010 there were twice as many White students in gifted and talented programs than there were other minority students, and the number of “Limited English Proficient” students made up less than 4% of the total. See Table 1 for a comparison of gifted students, and gifted ELL students at the national, and state level, as well as the proposed district and school site.
Table 1. Demographic information at the school, district, state and national level

<table>
<thead>
<tr>
<th></th>
<th>School (Eastwood)</th>
<th>District</th>
<th>State</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enrollment</td>
<td>406(^a)</td>
<td>81,078(^e)</td>
<td>905k (^i)</td>
<td>50.4 million (^j)</td>
</tr>
<tr>
<td></td>
<td>(of PK-12 public schools)(^f)</td>
<td>(of K-12 public schools)(^i)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free &amp; Reduced Lunch</td>
<td>354 or 84.7(^b)</td>
<td>62,977 or 71.7(^c)</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>ELL</td>
<td>264 or 65(^a) (^a)</td>
<td>~30 or 37(^c) (^e)</td>
<td>129,237 or 14.28(^f)</td>
<td>4.4 million or 9.2(^i)</td>
</tr>
<tr>
<td># of non-exited ELLs</td>
<td>220 or 54(^a) (^a)</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Redesignated/Exited ELLs</td>
<td>44 or 11(^a) (^a)</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Gifted &amp; Talented</td>
<td>43 or 9.81(^c) (^c)</td>
<td>11,274 or 13.91(^c) (^c)</td>
<td>68,663 or 7.7(^g) (^i)</td>
<td>3,189,757 or 6(^h) (^i)</td>
</tr>
<tr>
<td>ELL that are in GT</td>
<td>38 or 0.09(^d) (^d)</td>
<td>---</td>
<td>1,212 or 2.2(^h) (^d)</td>
<td>86,867 or 2.7(^h) (^d)</td>
</tr>
</tbody>
</table>

\(^a\) 2014 District website enrollment report on English Language Learners
Furthermore, the characteristics of a gifted bilingual student are different than those of a “mainstream”\(^1\) student (Esquierdo & Arreguin-Anderson, 2012). Following is an overview of the characteristics of monolingual as well as bilingual gifted children, to illustrate their complexities, similarities and differences.

**Characteristics of Monolingual Gifted Children and Bilingual Gifted Children**

Every gifted child has a unique set of characteristics that define their cognitive and language abilities, interests, learning styles, and motivation (Davis, Rimm, & Siegle, 2011). Parents of gifted children are usually the first to recognize some of the earliest signs of giftedness (Silverman & Golon, 2008), and the recognition of these characteristics is facilitated when parents are given a list of attributes to look for, such as the following from Silverman’s Characteristics of Giftedness Scale (1993):

*Compared to other children your child’s age, how many of these descriptors fit your child?*

- Reasons well (good thinker)
- Learns rapidly
- Has extensive vocabulary
- Has an excellent memory
- Has a long attention span (if interested)
- Sensitive (feelings hurt easily)

---

\(^1\) The word “mainstream” is used by these authors to connote monolingual, English-speaking, White students.
• Shows compassion
• Perfectionistic
• Intense
• Morally sensitive
• Has strong curiosity
• Perseverant in areas of interest
• Has high degree of energy
• Prefers older companions or adults
• Has a wide range of interests
• Has a great sense of humor
• Early or avid reader (if too young to read, loves being read to)
• Concerned with justice, fairness
• Judgment mature for age at times
• Is a keen observer
• Has a vivid imagination
• Is highly creative
• Tends to question authority
• Has facility with numbers
• Good at jigsaw puzzles

Silverman and colleagues developed this list of characteristics with this criteria in mind: a) these attributes are applicable to a wide range of ages, b) they are generalizable to children of different socioeconomic and ethnic backgrounds, c) are not specific to any gender, d) can be observed in the home environment, e) are stated in simple terms so that parents can easily interpret and understand them, and f) are supported by research (2008). Unfortunately, many lists of characteristics found in teacher handbooks or in gifted literature oftentimes do not take into account the characteristics that are specific to bilingual gifted students, or worse, do not specify which population that the traits refer to, with an unwritten assumption that they are for monolingual, English-speaking students. For example, Davis, et al, state, “Most of the descriptions that follow are ‘usual’ characteristics, traits that have appeared and reappeared in studies of gifted children and adults” (p. 32). Interestingly, Davis, et al, do not specify who their populations of gifted individuals are, only to say that they are gifted. This omission by Davis and
colleagues leads to the assumption that gifted kids are White, monolingual, English-speaking students, and do not mention race, ethnicity, or language when presenting lists of characteristics.

In contrast, these three sets of authors, Esquierdo and Arreguin-Anderson (2012), Castellano (1998), and Lara-Alecio, Irby and Walker (2008) have created lists of characteristics that are specific to bilingual gifted students. The complete list is long, so I chose a sample of the characteristics that they compiled, that seemed to me to be the most interesting:

1. Keen social and academic language: use of expressive, elaborate, and fluent verbal and written behaviors both in English and Spanish (Esquierdo & Arreguin-Anderson, 2012)
2. Strong familial connections: child has strong interpersonal relationships among family members and can often take over interpretative caretaker roles between the home, school and/or community (Esquierdo & Arreguin-Anderson, 2012)
3. They rapidly acquire English language skills once exposed to the language and given an opportunity to use it expressively (Castellano, 1998)
4. They are “street wise” and are recognized by others as youngsters who have the ability to “make it” in the Anglo-dominated society (Castellano, 1998)
5. They not only like to read, speak, listen, and write in their native language, but they also achieve well in those areas (Lara-Alecio, Irby & Walker, 2008)

(See Appendices B and C for the complete lists of characteristics by four sets of authors, for both an unspecified population of gifted students, and for Spanish speaking bilingual students.)

It is imperative that teachers know and understand how characteristics for monolingual and bilingual gifted students might be the same in some cases, and in others might be contradictory (Esquierdo & Arreguin-Anderson, 2012). As noted earlier, the definition used for giftedness will determine who is eligible for gifted services, and every definition needs to reflect
this unique population. For example, scholars and researchers such as Lara-Alecio and Irby (2000) recommend that there be a “socio-linguistic-cultural” feature added to current definitions that incorporate Renzulli’s (1999) three dimensions of “above average ability,” “creativity,” and “task commitment.” Their reasoning for this inclusion is that they believe that not only are bilingual gifted students able to excel in academics and/or the arts, but also their experiences of growing up in a linguistically and culturally diverse community affords them a different experience than that of a monolingual student (Lara-Alecio & Irby, 2000 in Esquierdo & Arreguin-Anderson, 2012).

More evidence exists that being bilingual is an advantage that sometimes is overlooked, even with gifted students. For example, Guadalupe Valdés (2003) presents research on gifted bilingual students and the advantages of bilingualism, interpreting and translating. Valdés describes how these young immigrant children take on this responsibility for their families, and how challenging these cognitive processes are. Valdés and colleagues argue for an expansion of current definitions of giftedness that can include the immensely complex abilities that immigrant Latino youngsters display when interpreting for their families. Furthermore, Valdés acknowledges the challenges that educators face when understanding the gifts and talents of Latino bilingual children. Some of those challenges for teachers incorporate a shift in the importance placed on the “unidimensional” English language to a more inclusive “multidimensional” framework validating bilingualism (Valdés, 2003). This would include changing how they feel about certain behaviors, assumptions, cultural norms, biases, attitudes, stereotypes, and myths that they may have concerning emerging bilingual Latino children. Hughes, Shaunessy, Brice, Ratliff, & McHatton (2006) have a similar argument that codeswitching, or alternating from one language to another common among bilingual individuals
(Valdés-Fallis, 1978), could possibly be an indicator of giftedness. Hughes, et al, argue that in order to codeswitch efficiently, students would need to have sophisticated knowledge of the two cultures, and the two language systems and structures. Furthermore, Hughes, et al, challenge the deficit view of “semiliterate background” and view codeswitching as a cognitive benefit (p. 7).

Unfortunately, many teachers are not familiar with the characteristics of gifted bilingual students, which perpetuates the problem of the underrepresentation of these students in gifted education by misinformed or biased teachers (Brice & Brice, 2004; McBee, 2006). In order to help teachers recognize the unique characteristics of gifted English language learners, they need explicit training in this area (Swanson, 2006; Lara-Alecio, Irby, & Walker, 2008).

**Types of Gifted Programs**

Scholars have begun to investigate how to best meet the academic needs of gifted bilingual/multilingual students. Bianco and Harris (2014) propose a strength-based Response to Intervention (RTI) model in the classroom for gifted ELLs that would bolster their academic needs, and assist with identification of gifted students. This model of RTI focuses on the strengths of a student, rather than relying on deficit-based practices or assessments. The benefits of using a strength-based RTI model includes the emphasis of a culturally responsive curriculum, as well as pedagogy that focuses on differentiation, enrichment, and acceleration, while steering clear of the traditional use of RTI that identifies and focuses on deficits.

Jaime Castellano (1998) surveyed gifted programs in the U.S. and summarized their approaches: acceleration for precocity of gifted students, more enrichment opportunities, greater depth when examining content, increasingly complex subject matters and individual instruction based on interests, ability, and learning styles. Castellano outlines which options are most cited in the research and provides adaptations that are suitable for English-language learners. A study
that examined the type of identification, placement, and instructional methods for gifted ELLs showed that in the states with the highest concentration of Hispanic students, very few (about 8%) have a program designed specifically to serve this special population of students (Bermudez & Rakow, 1993). Castellano maintains that a proper gifted program should provide for the needs of the students that it serves, which includes special consideration for English language learners (1998).

There are two general categories of gifted education programming that schools can use to meet the needs of their gifted students: part-time temporary programs, and full-time homogenous/heterogeneous groupings (Castellano & Diaz, 2002). Following is an overview of both types, with special emphasis placed on the ways that these programs can be adopted to meet the needs of English language learners.

**Part-time temporary programs adapted for ELLs.** The types of part-time programs that serve gifted students that are easily adapted to meet the needs of English language learners include: (a) pull-out programs – for schools with a small number of gifted learners, and in which the student is able to learn in the language which she feels most comfortable in, (b) mentorship programs – identifying expert adults that speak the heritage language of the student for sharing ideas and experiences, (c) subject skipping – an emphasis on acceleration where bilingual students can access advanced assignments once they have mastery of content and skills, such as foreign language curriculum, for example, (d) telescoping – collapsing several years of coursework into a shorter amount of time, including content area classes in the native language of a gifted English language learner, (e) early admission to college/dual and joint enrollment – contingent on placement tests, English language learners may enroll in early admission to college, or joint-enroll while still in high school, to take courses administered in their native
language, (f) accelerated classes – similar to subject skipping, English language learners may enroll in accelerated courses that are taught in their heritage language, with the flexibility of using additional methodologies such as technology and telecourses, (g) grade skipping – traditionally one of the methods for acceleration, precocious gifted ELLs can easily and cost effectively move through grade levels ahead of schedule; (h) correspondence courses – a method to obtain college credit for enrichment purposes while attending high school, with a logical choice of starting with a foreign language class to increase their listening, speaking, reading and writing skills in their own language, (i) telecourses – for a smaller school or district with few gifted ELLs or necessary staff to meet their needs, with the available technology to do so (Castellano & Diaz, 2002).

**Full-time homogenous/heterogeneous groupings adapted for ELLs.** Full-time designs of gifted programs should be considered after part-time and temporary programming has been developed and implemented (Castellano & Diaz, 2002). Dr. Jaime Castellano is co-author of the book, *Reaching New Horizons: Gifted and Talented Education for Culturally and Linguistically Diverse Students*, and is considered a leader in the field of serving gifted bilingual students. Castellano and his colleague Eva Diaz include examples of full-time programs in their book: (a) magnet schools – this term has different meanings throughout the US, but generally these are schools that provide acceleration and enrichment experiences; while the recruiting efforts from magnet schools targeting underserved students has not been without issues, the goal is to provide an environment that is conducive to the development of gifted ELLs; (b) special schools – these schools are designed for students with special abilities and talents, in both academics and enrichment opportunities; examples of special schools include math and science academies, with opportunities to accommodate ELL students; (c) school within a school – an appropriate option
for gifted ELLs, where part of the day is spent with specially trained teachers, and the rest of the
day in the “regular” curriculum; advantages include low school schedule interruptions, and the
ability to remain in the neighborhood school close to family and community; (d) self-contained
classrooms – higher order and critical thinking skills are promoted in this enrichment curriculum,
and staffed by full time teachers or specialists; Castellano and Diaz (2002) recommend that this
option be considered by school districts with a large number of ELLs who qualify for GT
instruction, and has been used by schools in San Diego, California, Chicago Public Schools, and
in different cities in Texas (p. 125) (These two authors do not specify why they recommend
large, urban districts to choose this option, but it could likely be because of the financial ability
by larger schools to hire a full time teacher or specialist in GT); (e) ability tracking/cluster
grouping – designed for upper level grades such as middle school and high school, to meet their
high-level needs; should be taught by a content-area specialist, and not by general education
teachers with no content-area expertise, who can differentiate the curriculum by modifying the
content or process as needed for ELL students; (f) multiage/multigrade classrooms – mostly in
use at the elementary school level, appropriate when there are few gifted ELLs at varying grade
levels; younger students learn from older students, which reflects collaboration values that many
Hispanic cultures espouse; (g) curriculum compacting – a good option for districts that do not
have gifted programs, so that gifted ELLs can progress quickly through a traditional academic
curriculum, while allowing time for enrichment opportunities (Castellano & Diaz, 2002).

To review, the literature defines how unfair assessment practices, ambiguous definitions
of giftedness, undertrained and underprepared teachers, and teacher bias perpetuates the
underrepresentation of gifted ELLs in public schools. We also know from scholars that there are
many ways that we can improve these practices, as well as better ways to develop talent in these
students. What is missing in the current literature is a way to illustrate how these issues manifest themselves in schools, and how they can be addressed by case studies of several gifted bilingual students such as those in this dissertation. These case studies can focus on how these students were nominated, identified, and subsequently served in their schools.

Statement of the Problem

Gifted Latino/a bilingual Spanish-speaking students are underrepresented in gifted education. The many possible reasons for this disparity are examined in the literature and include unfair assessment practices, varying definitions of giftedness, lack of teacher training, and teachers’ perceptions.

Purpose Statement

The purpose of this study is to address the lack of research that is currently available on the trajectory and experiences of gifted Latino/a Spanish speaking bilingual students from non-gifted programs into a gifted program. The analyses focus on these areas: 1) What are the nomination and identification practices used with this set of four gifted, bilingual students? 2) How do these gifted bilingual students and their parents describe their experiences? 3) What are the instructional practices being used with this group of gifted, bilingual students in a dual-language school setting?

Theoretical Framework

There are three main theoretical perspectives that are best suited to investigate these issues: sociocultural, sociolinguistic, and executive function theory (See Figure 1 below).
Sociocultural theory. Lev Vygotsky, a cultural-historical psychologist, created sociocultural theory as a way to explain how interactions with people and culture shape a person’s mental abilities (1978). John-Steiner and Mann outline the ways that sociocultural theory can be used to inform instructional methods to best fit the needs of culturally and linguistically diverse students (1996). One of the ways includes the use of the “zone of proximal development” (ZPD). Vygotsky developed the concept of ZPD as a way to explain how learning takes place in a social environment (1978). He describes it as "...the distance between the actual developmental level as determined through independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). In other words, a child will follow an example set by an adult, and eventually will gain the ability to do the task on his or her own without help.

Another way that sociocultural theory can help teachers provide instruction that can be tailored to linguistically and culturally diverse students is in a collaborative teaching method:
John-Steiner and Mann describe how “reciprocal teaching,” an instructional method where students and teachers alternate roles when leading conversations about a shared text, exemplifies sociocultural theoretical themes through the co-construction of knowledge and fostering a learning community (1996).

McGlonn-Nelson explores the connections between sociocultural theory and gifted education (2005). This scholar maintains that the ZPD can inform gifted education assessments, individual learning, progress monitoring and can be used to tend to the social and emotional needs of children. Teachers are in a unique position to notice when gifted students master new material quickly and easily, and the ZPD is a way that they can assess this development in students. Put differently, in order to appropriately place students where they need to be, teachers must determine their zone of proximal development. Furthermore, in order to place the focus on future potential rather than past development as Vygotsky asserts, educators can avoid overlooking students who are gifted by using the ZPD. This would allow students to explore their academic potential by working collaboratively with others as well as through independent study opportunities, both of which are central to sociocultural theory (McGlonn-Nelson, 2005).

Sociocultural theory maintains that a child’s cognitive development cannot be separated from their cultural and historical background, therefore students who come from culturally and linguistically diverse backgrounds cannot be identified correctly if the means for identification are not aligned with their own cultural and historical backgrounds (McGlonn-Nelson, 2005). Likewise, giftedness and its many definitions can be best understood through the lens of sociocultural theory, because definitions for gifted education have been based on the social and cultural aspects of education since the 1920s (Stephens & Karnes, 2000).
Teacher bias and teacher training both reflect sociocultural fundamentals that are helpful to understand how teachers respond to gifted bilingual Latino students (Michael-Chadwell, 2010). The sociocultural theoretical perspective can be used to investigate how teachers participate and draw on cultural artifacts and social cues when deciding which students they will nominate for gifted education, and subsequently how they best meet their cognitive needs in the classroom. Additionally, because gifted bilingual Latino students have special language needs beyond what the general, monolingual, English-speaking classroom can offer, a sociocultural perspective is imperative because bilingualism is developed in a sociocultural context (Kramsch & Whiteside, 2007).

**Sociolinguistic theory.** Linguistic inequality is often perpetuated by ideologies and educational practices (Wardhaugh & Fuller, 2015). Sociolinguistic theory will help inform this investigation by examining the language of choice in the classroom. The language that is privileged in the context of classroom discussions, or in the larger school environment was noted in the observations. It was important to note when and how each language is used, to identify which language is considered the “important language” (Escamilla, 1994). If there are differences in language use between those of the students and those of the school, analysis of the observational data will highlight the contrasting values placed on the language of choice of the participating students, teachers and parents (Ernst-Slavit, 1997).

**Executive functioning.** In addition to the sociocultural and sociolinguistic perspectives, the studies conducted by Ellen Bialystok and colleagues F. Craik and J. Ryan demonstrate another perspective on bilingualism that is beneficial to this investigation (2006). They showed that some people who are bilingual exhibit an advantage in the executive processes of the brain over those who are monolingual (2006). “Executive functions” are the umbrella terms for
cognitive processes that include goal setting, planning, problem solving, reasoning, execution, and more (Rabbitt, 2004). The potential benefits of bilingualism further demonstrate the need to investigate how educators are not only identifying gifted bilingual children, but how their educational needs are met as well.

The basis of this study by Bialystok was further examined by Carlson and Meltzoff (2008) by measuring the executive function of Spanish and English bilingual children and found that these children performed significantly better on a battery of executive function measures over other groups of children. These researchers found a measurable advantage for these children on tasks that called for “managing conflicting attentional demands.” Furthermore, they concluded, “these findings suggest that when bilingual children are not equally matched with their monolingual peers on verbal ability and SES (as is the reality for many Spanish-English bilingual children in US schools today), they may be able to compensate or achieve the same ends by an alternative route, namely, in our view, honing of the cognitive operations involved in language switching.”

In summary, teaching and learning is fundamentally tied to the social and cultural contexts within which it occurs, and these issues deal with not only cognitive processes, but sociocultural processes as well (McGlonn-Nelson, 2005). Sociocultural theory, sociolinguistic theory, and the notions set forth by researchers on the executive functions of the brain were imperative to guide this case study of gifted Latino/a Spanish speaking bilingual students.

**Research Overview**

This investigation centered on four students in a K-8, dual language school that is in one of the fastest growing urban school districts in the US. This school district is characterized by having close to half the population identified as “English language learners,” and over half of the
students are identified as Hispanic or Latino. This study focused on the nomination and identification processes and experiences of a group of 4 focus students, who have already been identified as gifted, and who are Spanish speaking, bilingual Latino/as, and the instructional practices being used to teach them in a dual-language school setting.

The first area of focus for this study was the nomination and identification process of the 4 students. Another area of focus were the experiences of the students themselves, and their perceptions of how they are being served regarding both gifted and bilingual education. The last area of focus was an examination of the instructional practices used to meet the needs of gifted, Latino/a, Spanish speaking bilingual students.

Interviews of parents and family members examined the history of each student to review their trajectory in gifted education. Also, students were interviewed to gain insight into their experiences, and observations and teacher/administrator interviews focused on the instructional practices used for these students. These data helped to answer the following research questions by getting a descriptive picture of the experiences that gifted Latino/a, Spanish speaking bilingual students have while in school.

**Research Questions.** This study looked to answer the primary research questions: (a) What are the nomination and identification processes that were used for each of the four focal students to determine their need for gifted education? (b) What are the experiences and perceptions that these four gifted Latino/a Spanish speaking bilingual students and their families have in this dual-language public school? (c) What are the instructional practices used to serve these four gifted Latino/a Spanish speaking bilingual students?

**Labels used for English Language Learners.** Labels used to describe a subset of students who are not typically monolingual English speakers have changed over the years in
educational literature. One of the earliest labels given to students who did not speak English was “Limited English Proficient,” which is no longer used widely because it espouses a (a) deficit view which focuses on the deficiencies of a child, rather than the strengths, (b) and it also implies that the English language is more important than any other language (Matthews, 2006). Other labels such as English as a Second Language, Bilingual Education, and English to Speakers of Other Languages mostly are used to describe programs, and not individuals. Some scholars prefer the label English Language Learner, which is widely used, while other scholars prefer and advocate for a more inclusive term, such as Emergent Bilinguals, or Emerging Bilingual Students, to distinguish between the needs of monolinguals and these students whose educational needs are different and ongoing (Garcia, Kleifgen, & Falchi, 2008).

This study focused on gifted Latino/a students, who are Spanish speaking, bilingual, English language learners, due to their increasing numbers in the public-school system, as well as their underrepresentation in gifted education (Naglieri & Ford, 2003). To illustrate, the National Center for Education Statistics (2013) reported that 21% of all the K-12 students in the United States speak another language besides English in the home. Furthermore, during the 2011-2012 school year, 22% of K-12 students identified as Hispanic (National Center for Education Statistics).

Terminology. For this analysis, I used the term “emerging bilinguals” to refer to students whose primary language is not English, as well as the term “English language learners” because it is widely used in the current literature. Also, I will use the terms “gifted,” “gifted and talented” or “GT” when referring to students who have been identified as gifted, or the instructional programs that serve these students. Additionally, those students that are designated as being of Latin American descent will be referred to as “Latino” or “Latina.” When I interviewed the
participants in this study, they did not always refer to themselves using the term “Latino/a,” but instead used the term “Mexican.” This is in line with the findings of a nationwide survey that shows that most individuals who are from Spanish-speaking countries prefer to identify themselves with their family’s country of origin, rather than the terms “Hispanic” or “Latino” (Taylor, et al, 2012.)

I have also chosen not to use the words “mainstream,” “regular,” or “normal” to describe classrooms or studies that include mostly monolingual or English-speaking students, unless that is how an author describes this population. If I choose to use those words, or similar words for the same purpose, I will put them in quotes, and add a footnote to indicate the original authors’ use of the term, and what that author means by the word. I draw on Kip Austin Hinton’s work (2016) for this decision, in which he examines the use of popular terminology that describe English-medium programs as well as bilingual education programs in the US. Hinton uses critical discourse analysis to examine these labels and what they mean in social and cultural contexts, and determines that many of these terms are confusing and unsuitable.

**Research Site Facts.** Eastwood (pseudonym) is a K-8, dual-language school in a large urban school district. Their website defines what it means to be a dual-language school: their goals include all students to be bicultural, bilingual and biliterate by the time they reach the 8th grade. They maintain that classes are taught in both languages, that the environment is “pure,” meaning that only one language is used when teaching, that content is taught for six weeks, and then the teachers will switch to the other language. In other words, no content is “re-taught” using one language first, and then the other. They intend for students to transfer knowledge from one language to the other. There are no links on this school web page describing the GT program, nor the identification process to be accepted into the program. A person wanting this
information must go to the district website. The district website states that there are multiple ways that a student can be identified as gifted in three areas: specific content (such as reading, writing, math, science, social studies, or a world language), specific talent (such as visual/performing arts, music, dance/psychomotor abilities, creativity and/or leadership abilities), or “general intellectual ability.” The district website states that this last area is used only rarely, and when a student scores in the 95th percentile or above on a cognitive test, with no other data from achievement or performance. When making a gifted determination on a student, the district requires a body of evidence as well as standardized assessments. A parent does not need to request a body of evidence to be collected, the collection of this evidence is an ongoing process, and the educational need is determined by a team. The district does not accept a private assessment as the only means of identifying a student for services, and an acceptable ability assessment score must come from a school district. This school district conducts universal screening with the CogAT assessment (2005) during second and sixth grades, and relatively recently has started including Kindergarten, to widely assess students for gifted services.

The CogAT is a group-administered, nationally-normed ability test to “assess students’ abilities in reasoning and problem solving using verbal, quantitative, and nonverbal (spatial) symbols.” The publishers of this test claim that (a) the CogAT can be used to select students for GT programs and (b) the latest version (Form 7) is “more accessible to ELL children.” Houghton, Mifflin & Harcourt, publishers of the CogAT state, “On Form 7, only one of the three tests on the Verbal Battery (Sentence Completion) and none of the items on the three Quantitative tests require comprehension of oral language—resulting in a more meaningful assessment of every student's reasoning ability.” (http://www.hmhco.com/hmh-assessments/ability/cogat-7#features-english-language-learner). The publishers say that the
primary edition (levels 5/6, 7 and 8) of this assessment does not require reading, the administrator is instructed to read the test directions out loud, and is supposed to pace all the students through the items together. The website information for this assessment claims that each test item is reviewed by the authors and staff for “appropriateness,” and then analyzed by “Bias and Fairness Reviewers” who are a group of heterogeneous educators from different areas of the United States. These reviewers are tasked with ensuring that every item “neither advantages nor disadvantages any particular cultural group.” Furthermore, this district recognizes gifted students that score in the top three percentiles on ability assessments, as a subset, or exceedingly gifted students. The district has designated certain schools to house programs for this subset of students.

The guidelines for identifying a student for the GT program in the district where Eastwood is located include multiple ways in which a student might be considered for programming in the areas of intellectual ability, academic aptitude, and talent aptitude. The requirements include standardized assessments, and a combination of portfolios, rubrics, and observational data, shown below.

The federal definition for gifted and talented students nationwide is as follows:

The term ‘gifted and talented,’ when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities (No Child Left Behind Act, P.L. 107-110 (Title IX, Part A, Definition 22) (2002); 20 USC 7801(22) (2004)).
The state definition for gifted and talented students is as follows. Note that it has more information than the federal definition regarding disabilities, socio-economic status, and ethnic and cultural populations:

“Gifted and talented children” means those persons between the ages of five and twenty-one whose abilities, talents, and potential for accomplishment are so exceptional or developmentally advanced that they require special provisions to meet their educational programming needs. Children under five who are gifted may also be provided with early childhood special educational services. Gifted students include gifted students with disabilities (i.e. twice-exceptional\(^2\)) and students with exceptional abilities or potential from all socio-economic and ethnic, cultural populations. Gifted students are capable of high performance, exceptional production, or exceptional learning behavior by virtue of any or a combination of these areas of giftedness: General or specific intellectual ability, specific academic aptitude, creative or productive thinking, leadership abilities, visual arts, performing arts, musical or psychomotor abilities.

The definition used by the district for gifted and talented education (where Eastwood is located) is as follows. Note that there is a slight difference from the state definition in wording, but essentially, they are the same:

“Gifted and talented children” mean those students whose demonstrated abilities, talents and/or potential for accomplishment are so exceptional or developmentally advanced that they require special provisions to meet their educational needs. These students perform, or show the potential of performing, at remarkably high levels in intellectual, specific

\(^2\) Twice-exceptional is the term used for individuals that have been identified both as gifted and have special needs; sometimes the abbreviated form “2e” is used.
academic or creative areas when compared with others of their age and experience.

Gifted and talented children are present in all student groups, regardless of gender, disability, English language proficiency, economic status, ethnic or cultural background.

**Significance**

Instruction for gifted bilingual students needs to take into account the unique characteristics of a student who speaks two languages, as well as the presence of gifted potential. ELLs represent the fastest growing population of students in the United States, but represent only a small percentage of those in gifted education (Callahan, 2005). Research that addresses the intersection of these two aspects is scant, despite the growing numbers of students in our schools that are identified as speaking two languages. A case study of gifted, Spanish speaking, bilingual Latino/a students from a dual language school with high numbers of bilingual students would be helpful to begin examining how educators can best meet the needs of this special population. Furthermore, this study will provide insight for future research on instruction for students who need extra support linguistically and academically, beyond what instruction for the general population provides. All students need and deserve an equal chance of success in our school systems, and the changes in the demographics of the US demands a closer look into how educators are attending to these changes. This study would add to the existing literature by describing what middle-school Latino/a Spanish speaking bilingual students receive instructionally, and their trajectory from non-gifted programming to gifted programming.

Specifically, this study examined the nomination and identification processes for a focal group of students, experiences and perceptions of instruction from these middle school students at a dual language school, and an investigation of the instructional practices used to serve them. Issues that were important to take into consideration are the tools used to nominate typical gifted
students (such as lists of characteristics, which may not be appropriate to use with gifted bilingual students) and much of what is known in the literature about underrepresentation of special populations of gifted students comes from studies that focus on African-American/Black students (Ford, 2010).
Chapter 2: Literature Review

For this literature review, the following was surveyed: (a) the overall instructional needs of bilingual students, (b) the instructional needs of gifted students and (c) the instructional needs of gifted bilingual students. My review found that there is much that has been examined for the first two areas, but for the third area, there are not as many studies that are available that address instruction specifically for gifted bilingual students.

Methods for the Literature Search

I conducted this literature review using electronic database searches, as well as searching the references of relevant articles. The search terms included various combinations of the following: gifted/giftedness, gifted and talented/GT/TAG, high achieving, bilingual, English language learners, emerging bilingual, minority language, culturally and linguistically diverse/CLD, limited English proficient/LEP, underrepresentation/underserved, non-dominant, instruction/programs, and educational needs. When I examined the results of my search, as well as any references from relevant articles, I followed this criterion to determine if the articles were appropriate for this review: the articles needed to address instruction for gifted, bilingual students, instruction for bilingual students, or gifted programming that did not specify the population of students. Publications from 1995 to the present were included in this search for relevancy. I chose mostly research studies, but included conceptual pieces as well for the lack of studies for every topic.

Instruction for Bilingual students

Goldenberg’s research synthesis (2013) reviews articles that are found mostly in peer reviewed journals, some chapters in books, practitioner teaching guides, and a paper presented at a national educational conference. This synthesis outlines areas of importance found in the
literature that pertains to research on effective instructional practices for English learners: 1) instruction that is effective for the “general” student population will likely be effective for English learners, 2) English learners need more instructional supports in the classroom than native English speakers, 3) and the use of a students’ home language is helpful in their academic development.

**Instruction effective for ELLs.** The studies that Goldenberg reviews show the following key attributes of instruction that have proven to be effective for ELLs: 1) objectives and goals that are clear, 2) challenging material that is level and age appropriate, 3) intentionally designed instruction, 4) as students learn new skills, helpful instruction and guidance is needed, 5) teachers should employ modeling in their instruction, 6) students should be encouraged to actively participate, 7) teachers should provide detailed feedback, 8) students should be provided with opportunities to apply new concepts, practice them, and shown how to transfer these new skills to other situations, 9) instructional practices should be reviewed periodically for appropriateness and effectiveness, 10) students should be allowed to interact with other students in a structured environment, 11) students should be assessed frequently and re-taught as necessary, 12) and teachers should establish clear classroom routines and behavioral norms. Goldenberg drew upon studies that showed the success of many of these instructional attributes for ELLs, as well as research reviews when compiling this list.

**ELLs need more instructional supports.** Goldenberg’s review found “sheltered instruction” (a focus on the acquisition of academic content and skills for students who are

---

3 These authors use the word “general” to mean the student population that is monolingual, White, and English-speaking.
4 Goldenberg cites the work of Jana Echevarria, MaryEllen Vogt, and Deborah J. Short,
learning the English language) to be a popular support model that researchers have proposed as an instructional method for ELLs which could include: capitalizing on students’ experiences and content that is familiar to them, providing background knowledge, use of graphic organizers, clear instruction, use of pictures and demonstrations, providing interactive learning activities, providing repetition of concepts and practice, using both language and content objectives, use of models and scaffolds, and differentiated instruction dependent upon each students language learning needs. However, Goldenberg states that even though “sheltered instruction” is widely used, studies have not shown more than a moderate effect on ELL student gains in learning advanced academic content and skills, nor does it show that these strategies help them keep up with non-ELL students. Despite the paucity of studies showing “sheltered instruction” as effective for ELLs, Goldenberg recognizes that these strategies are still generally good instructional practices for both ELLs and non-ELLs alike, and all make intuitive sense as methods to support students learning English.

**Academic development using home language.** Goldenberg’s research synthesis outlines the controversial topic of using students’ home language as a method of instructing ELLs in academic content and skills. This method also uses home language as a support to explain concepts, while keeping much of the instruction in English. However, it is also the basis of the “bilingual education debate,” with one side arguing that teaching in the home language delays English language development, while the other side contends that strengthening the first language helps to acquire English language skills and helps students become literate in two

*Making Content Comprehensible for English Learners: The SIOP Model*, 3rd ed. (Boston: Allyn and Bacon, 2008) for the sheltered instruction definition, as well as a complete list of “sheltered instruction” strategies and resources at: https://people.stanford.edu/claudeg/cqell/about.
languages (Goldenberg, 2013). For the latter, Goldenberg cites meta-analyses that have shown that bilingual education is better than English immersion in reading comprehension outcomes for ELLs (Greene, 1997; Norris & Ortega, 2000). Furthermore, bilingual education produces positive outcomes in the home language, with the advantages of bilingualism and biliteracy.

Goldenberg also maintains that despite the gains in knowing how to improve instruction for English learners in our schools, gaps remain such as the ability for struggling readers to tackle the complex texts that are required by the Common Core State Standards (CCSS) (2013). Goldenberg concludes that schools must give teachers the ability to collaborate with other teachers to understand and meet the goals of the CCSS, and to collect and review student work to track progress continuously (2013).

**Summary.** The review by Goldenberg helps to identify instructional practices that are effective for English language learners, shows that this group of students need more support in the classroom than their monolingual, English-speaking peers, and that the use of their home language is an advantage in their academic development. This current case study will add to what is known by describing the experiences of bilingual gifted students in their dual-language school classroom, regarding these best-practices in the field of bilingual education.

The following articles cited in Goldenberg’s synthesis are relevant to this study. The first by Coleman and Goldenberg (2012) critique the “Common Core State Standards” (CCSS) stating that they do not give sufficient acknowledgement to the challenges that ELLs face, and feel that the supplementary guidelines given by the CCSS are too vague to be useful. These researchers suggest the following supports for ELLs for instruction in the content areas: 1) Effective teaching that is good for all learners such as clear goals and objectives, structured tasks, opportunity for practice and interaction with others, appropriate assessment, a focus on the development of oral
reading fluency, writing, vocabulary and reading comprehension; 2) sheltered instruction that targets both language and content objectives: clear instructions and expectations, visual aids that help comprehension such as charts and diagrams, use of the primary language for support, reading content that is familiar in content, and ample opportunity for practice and repetition; 3) teachers and educators should evaluate for themselves the effectiveness of any strategy used, whether formal or informal; and 4) explicit instruction of academic language, because most ELLs learn conversational language and informal writing skills first; a common example of academic language that should be taught explicitly is the concept of “compare and contrast.”

Furthermore, Coleman and Goldenberg suggest the following supports for ELLs in regards to English language development: 1) ELLs should receive explicit instruction on the elements of the English language as well as practice using it on a daily basis; 2) they should be taught academic language and given opportunities to use it; 3) opportunities for producing language, such as open-ended responses; 4) English language development instruction should last until the student has reached at least the advanced-intermediate level of speaking English, and preferably until they have reached advanced or native-like proficiency; 5) teachers should carefully group ELLs, without segregating them by language proficiency levels; and 6) provide opportunities for ELLs to participate in academic verbal interactions (2012).

Summary. The study by Coleman and Goldberg (2012) address the challenges that ELLs face while developing their English language skills, and suggest supports that target this development. This current case study will add to what is known about instructing ELLs while supporting their language development, by targeting the experiences of gifted bilingual students in a dual-language school classroom, and describing their challenges in learning English as gifted students.
Another article found in Goldenberg’s 2013 research synthesis that is relevant to this study is Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively, and White’s (2004) investigation on the reading comprehension performance of English language learners (ELL) and English-only (EO) speakers and its relation to their vocabulary knowledge. These researchers tested an intervention designed to enhance the academic vocabulary skills of 142 5th grade ELLs, and 112 EOs from three different states with a quasi-experimental design. Classrooms observed were both bilingual as well as “mainstream,” and in schools where many of the teachers and administrators were bilingual. Students in the study were tested using the Peabody Picture Vocabulary Test Revised measure to assess their vocabulary, and their reading comprehension skills were assessed using multiple-choice cloze passages. Researchers found that a curriculum that challenges both ELLs and EOs and focuses on explicitly teaching academic vocabulary, and uses strategies to enhance reading comprehension, improved the performances of both sets of students in all areas, to equal degrees. They confirmed that the instruction designed and used for both groups can be used in mixed-language classrooms with success. Carlo, et al, gave the following recommendation and example of a successful intervention for classrooms with mixed language abilities: “…teachers should introduce novel words in the context of engaging texts, design many activities such as Charades that allow learners to manipulate and analyze word meaning, heighten attention to words in general…ensure that learners write and spell the target words several times, ensure repeated exposures to the novel words, and help children note how the word meaning varies as a function of context” (p. 203, 2004).

---

5 The researchers in this study use the word “mainstream” to denote monolingual English-speaking students.
**Summary.** Carlo, et al (2004), show how an instructional intervention helped both ELLs and EOs alike in their development of academic language skills. This current case study will add to what is known by describing the kind of instruction gifted students receive in a dual language classroom, as well as their challenges and successes in the development of their own language skills.

Also included in Goldenberg’s 2013 review is Janzen’s (2008) research synthesis, in which she reviewed studies and conceptual articles from 1990 to 2008 that examine methods of teaching English Language Learners in the core areas of history, math, English, and science. Janzen analyzed and organized the findings from each of the content areas into the following three domains: 1) the linguistic, cognitive and sociocultural issues of academic literacy and best practices of teaching academic literacy; 2) general investigations of instructional practices; and 3) teacher education issues or professional development. Janzen concluded that the four content-area disciplines have addressed the teaching of ELLs in varying ways, with the science discipline having the most amount of researchers investigating different issues in depth. Janzen discovered that cognitive issues in teaching ELLs have received the least amount of attention in all the content areas. Janzen found three major themes: first, the most common issue was the importance of language in content teaching, as well as the comprehension level of ELL students. Janzen found a secondary theme that was not as evident in the literature: the practice of explicit instruction in cognitive behaviors (i.e. learning or reading strategies). Lastly, Janzen discovered that a third theme, professional development, did not receive as much attention in the literature as the other two themes.

**Summary.** Janzen’s (2008) research review highlights three areas (academic literacy, instructional practices and teacher education and professional development) in the instruction of
ELLs in the core areas of history, math, English, and science. This current case study of gifted bilingual students will add to what is known by describing some of the instructional practices that were used to serve them in the classroom, in a dual-language school.

There are several articles in Janzen’s review that help to inform this study. The first is an article by Schleppegrell and Achugar (2003), in which they use linguistic analysis to show that reading and writing in history instruction, as well as the language used in history textbooks is particularly difficult for ELLs. They present activities that were developed in collaboration with the California History-Social Science Project with the objective of creating instructional practices to be used in monolingual, English-speaking classrooms that have English language learners. These scholars worked with 14 history teachers and conducted observations over a period of three months to identify language issues that ELLs were having in learning history. They analyzed their field notes and videos of the classroom instruction, and found that history content is mainly construed with the use of the English language, and that students need to be able to read effectively to be able to master the content. These authors recommend that social studies teachers explicitly teach grammatical aspects of language used in history texts to help students acquire reading and writing proficiency, and need to also provide more background knowledge when presenting historical topics. There are three other authors in Janzen’s review that make similar claims to Schleppergrrell and Achugar regarding specific linguistic aspects of reading and writing in social studies: Nussbaum, 2002; Reppen, 1994; Tang, 1992.

**Summary.** Schleppegrell and Achugar’s (2003) article present instructional activities they created based on feedback from their observations in monolingual, English-speaking history classrooms. Their recommendations (such as explicitly teaching grammatical aspects of the English language, and providing more background knowledge) are targeted to best support ELLs
in a “mainstream\textsuperscript{6}” setting. This current case study of gifted bilingual students add to what is known, by describing the instructional practices used with this focal group of students, in a dual-language school setting, specifically in the core areas of math, science, language arts and social studies.

Another article included in Janzen’s 2008 review that is relevant to this investigation is Szpara and Ahmad’s (2007) study that examined different methods of teaching social studies to ELLs. This study was conducted in a school that serves students from a low socioeconomic neighborhood in the suburbs of New York City, with many of the students being English language learners, and the first in their families to potentially receive a high school diploma. The teacher participants in this study were five high school social studies teachers, and classroom instruction was conducted in English. The researchers looked for the following areas of best practices in their observations: 1) classroom environments that are socially supportive, 2) the use of Cognitive Academic Language Learning Approach (CALLA) to teach academic skills, 3) and lastly, strategies that help to reduce cognitive load while increasing the accessibility of complex content. The authors proposed a tiered approach to help ELLs access the social studies content in a “mainstream\textsuperscript{7}” classroom: 1) providing social and cultural support (examples include creating a classroom environment where ELLs feel comfortable learning English and social studies and placing value on the students’ home language and culture), 2) using a method called the “Cognitive Academic Language Learning Approach” that employs explicit academic strategies to access in-depth content (examples include learning how to identify key words in multiple choice questions, or looking for definitions of words in the glossary of a textbook), 3) using

\textsuperscript{6} The authors use the word “mainstream” to denote monolingual and English-speaking.

\textsuperscript{7} The authors use the word “mainstream” to denote monolingual and English-speaking.
strategies that reduce cognitive load while learning social studies content (examples included teaching students how to identify key aspects of the content and describe it in the simplest terms possible, using outlines and bulleted points, and using lists of key vocabulary words).

**Summary.** Szpara and Ahmed’s (2007) study was useful in uncovering some of the strategies that are best practices for all types of students in a social studies classroom, and particularly for English language learners, since much of the content for history is delivered in English language text. This current case study will add to what is known by describing and highlighting instructional strategies for gifted bilingual students in a dual-language classroom setting, particularly in respect to their core classes, which were taught in both Spanish and English.

Slavin and Cheung (2005) conducted a synthesis of research that focuses on studies that investigate the language of instruction used with English language learners. These researchers used a “best-evidence synthesis” (p. 253) method that systematically considers inclusion criteria as well as effect size estimation in their analysis of all the studies. They compared bilingual and English methods of teaching reading in elementary and secondary grade level classrooms, and included 17 studies in their review that compared bilingual and English-only reading programs used with English language learners. Slavin and Cheung concluded that aside from the paucity of high-quality studies investigating the effects of bilingual and immersion programs for English language learners, 12 of the 17 studies in their review found effects that supported the use of bilingual education, and 5 found no differences at all. They also found that none of the studies favored English immersion. These researchers think that more evidence is needed, using longitudinal studies employing both qualitative and quantitative research methods to better
explain how different methods of instruction affect the reading development of English language learners.

**Summary.** The synthesis that Slavin and Cheung (2005) reviews studies to compare bilingual and English methods of teaching reading in schools, and concluded that the evidence from many of the studies favors bilingual approaches, especially the practices that include both native language and English language instruction at different moments each day. This current case study will add to what is known about bilingual instruction, by describing the experiences of gifted bilingual students in a dual language classroom setting, and in a school that purports to use Spanish and English in “pure” environments, switching the language used in the classroom every few weeks.

A study by Yeung, Marsh, and Suliman (2000) reviewed in Slavin and Cheung’s synthesis is relevant to this case study: these researchers used the National Education Longitudinal Study of 1988 database to examine the relationship of first/home language use, with first/home language maintenance, English proficiency and academic achievement. Using structural equation modeling (SEM) on longitudinal data, they found that for bilingual students that had prior proficiency in their first language, these students had strong positive effects on the maintenance of their first language, and little negative impact on their English language acquisition, or on their academic achievement. Rather than being a detriment, their first language proficiency suggested to these researchers that it had a “possibility of a facilitative effect of first language proficiency on achievement in English and other academic areas” (Yeung, Marsh & Suliman, 2000, p. 1018).

**Summary.** Yeung and colleagues’ (2000) study examined the relationship of home language mastery with its maintenance, English mastery and maintenance, and achievement in
core subjects using SEM on longitudinal data. Their results showed that it was to the bilingual students’ advantage to have had prior proficiency in their first language, and had little negative impact on their English language skills acquisition. This current case study will add to what is known, by describing the language proficiency of gifted bilingual students in a dual language school, as well as the changes in their language proficiency, and the type of instruction they received in core areas.

Another study included in Slavin and Cheung’s synthesis that is relevant to this case study, is Lee and Schallert’s 1997 investigation of how a child’s reading proficiency in their first language is a strong predictor of their English reading and academic performance. The participants in this study were 809 Korean middle- and high-school students tested in their reading abilities in both Korean and English, as well as English language proficiency. The scores from the three measures were analyzed three ways: descriptive, inferential, and correlational. The researchers tested two hypotheses: 1) does L2 proficiency have a greater effect on L1 and L2 reading abilities than does L1 reading ability on predicting L2 reading ability; 2) there exists a threshold level of language proficiency, such that students with low levels of L2 proficiency shows little effect on their L1 and L2 reading ability, but students with higher L2 proficiency show a positive relationship between their reading performance in L1 and L2. Lee and Schallert attribute the notion of “threshold language proficiency” to James Cummins (1979) work on the linguistic development of bilingual students. Their findings supported the idea of the threshold hypothesis of language proficiency, that the contribution of L2 proficiency and L1 reading ability have on L2 reading ability.

Summary. Lee and Schallert’s (1997) study tested two hypotheses: the first hypothesis was based on whether L2 proficiency would be more strongly associated with L2 reading ability,
than would L1 reading ability. The second hypothesis was based on the “threshold level” of L2 proficiency, and the relationship between L1 and L2 reading performance. Both were positively validated through their statistical analyses. This current case study will add to what is known by describing the language proficiency scores of the gifted bilingual students, as well as the instructional strategies used in a dual-language school setting.

August and Shanahan’s (2006) summary of the research on literacy and second-language learners examined instruction for language minority students, and professional development related to literacy in ELLs. Their review is focused on the following research questions: 1) What impact does language of instruction have on the literacy learning of language-minority students? Is it better to immerse students in English-language instruction, or are there benefits to first developing a firm basis in the home language? 2) What can be done to improve achievement in reading, writing, and spelling for language-minority children? 3) what do we know about classroom and school practice designed to build literacy in language-minority students? 4) What do we know about literacy instruction for language-minority students in special education settings? 5) What does the research tell us about teachers’ beliefs and attitudes related to literacy development in language-minority students? What does the research tell us about the kinds of professional development that have been provided to teachers and how this professional development relates to teachers’ beliefs and practices? (August and Shanahan, 2006, p. 351). The inclusion criteria for this chapter is consistent with the rest of the synthesis volume (studies that focus on literacy development, relationships between various language learning skills, and the instructional methods used for language-minority students), with the exception that it included a longer time frame. August and Shanahan (2006) reviewed studies for this chapter that used a variety of research methods including experiments, quasi-experiments, and single-subject
designs, calculated effect sizes for each study, and presented those along with descriptions of each of the studies to compare different approaches. August and Shanahan (2006) found that there were not enough quasi-experimental and experimental studies to offer a complete description of how to best meet the educational needs of language minority students in literacy (p. 353). August and Shanahan contrasted these findings to the large amount of studies on reading instruction that focused on native English speakers. August and Shanahan’s review found several suggestions for adjustments to instructional practices that would benefit students learning a second language: (a) presenting and clarifying difficult words and passages within texts, (b) synthesizing knowledge by summarizing texts, (c) extra practice with new words and texts, (d) vocabulary emphasis, (e) comprehension checks, (f) new ideas presented verbally and in writing, (g) paraphrasing students’ remarks, (i) and using physical and visual cues.

**Summary.** August and Shanahan’s (2006) summary of the research on literacy and second language learners and the instruction and professional development used related to ELLs literacy focus on several areas related to instruction, improving literacy achievement, classroom practices for use with language minority students as well as special education settings, and teacher beliefs and attitudes related to literacy development in language-minority students. This current case study will add to what is known, by describing the instructional practices that are used with gifted bilingual students have in a dual-language school setting.

**Instruction for Gifted Students**

It is important to note the method I used to review the literature for “instruction for gifted students:” I chose studies and articles that describe instruction for gifted students in general terms, meaning that the authors did not specify how instruction for gifted students needs to account for students that come from culturally or linguistically diverse backgrounds. I
purposefully did this to show that there is a vast amount of literature on gifted education that, a) does not account for the changing demographics of this country, b) perpetuates the underrepresentation of gifted bilingual children in gifted education by not acknowledging their specific needs, and c) by not including the population of growing students in schools that are culturally and linguistically diverse, makes assumption that gifted instruction is for students that are monolingual, English speaking students.

Rogers (2007) synthesis of research on educational practices for the gifted and talented outlines five “reconceptualizations” or “lessons” of how to serve the gifted student. This synthesis is the result of an effort put together by a group of individuals from a large Midwestern school district which had received a poor review of their “pull-out” gifted program, and used this opportunity to restructure their program. They accomplished this by forming an online study group dedicated to the survey of gifted literature to uncover best practices in the field. The studies represented in their review were chosen with these parameters in mind: sound design, relevancy, and if the studies were current. Literature articles were also included if they were relevant for each “reconceptualization” area. The review was extensive: the authors include a table with over 50 “lesson elements or practices,” and for each of those, the authors included the number of “research studies” and the number of “literature articles” that were reviewed. Each Lesson Element/Practice had at least 1 research study attributed to it, and up to 199. Also, each Lesson/Element/Practice had at least 2 literature articles attributed to it, with a maximum of 433. For both studies and articles, the Lesson Element/Practice that had the most literature was “Subject-based acceleration.”

These individuals produced the following “lessons” that they learned from their wide-ranging review: Gifted learners need (1) to be challenged on a daily basis in their specific area of
talent. If they are not challenged, studies have shown that children experience psychological distress, and researchers suggest that students be regrouped in like-ability groups and provided with cooperative tasks. If grouping is not possible, then structured independent learning in advanced studies should be offered; (2) opportunities for independent, unique work should be given regularly, and for those students who have shown task commitment and preference to work independently, these opportunities have been shown to be successful. The methods that are appropriate for extending the student’s opportunities to learn independently, and are given credit for extra achievement include credit by examination, curriculum compacting, and credit for prior learning. The third lesson that Rogers research synthesis uncovered was the need for educators to (3) provide different forms of subject- and grade-based acceleration as needed. The options included early entrance to school, subject acceleration, university-based programs, individualized distance or online learning, cross-graded classes, advanced placement or international baccalaureate courses, dual enrollment, and mentorships. The fourth consideration presented in the research synthesis is for educators to (4) provide opportunities for gifted students to socialize and learn in like-ability groups. Rogers states that there have been many studies examining the positive academic effects of full-time ability grouping, performance grouping for specific instruction, within-class grouping or cluster grouping, and pull-out groups for extended differentiation in a resource room. The last consideration in this research synthesis is that educators should (5) differentiate the pace, the amount of review and practice, and the organization of content presentation for gifted students. In other words, gifted students should be presented material at their actual learning rate in order to retain what they have learned. Furthermore, for each content area, consideration for the pace at which the student acquires new knowledge should be taken into account and adjusted accordingly. Rogers’ review of the
literature on best practices outlines the implications for educators as a way to reconsider “previously held perspectives,” in order to provide gifted learners with consistent and daily challenges, as well as opportunities for independent work that is fast paced and complex (2007).

**Summary.** Rogers’ (2007) work summarizes and analyzes gifted literature on educational practices, and organize them into five broad categories, or “lessons” on how to best serve the gifted student: 1) daily challenge, 2) independent work, 3) acceleration opportunities, 4) like-ability groups, and 5) differentiation. This current case study supports some of their findings, and will add to what is known by describing some of the details in gifted bilingual students’ educational experiences in a dual-language school.

The study by Swiatek and Lupkowski-Shoplik (2003) included in Rogers’ 2007 research synthesis is relevant to this case study, because the student participants self-report on their educational experiences as gifted students receiving special services. Although the researchers account for gender, grade level, type of school, and above-level test scores, they do not mention or consider students who might be culturally or linguistically diverse, or that are bilingual learners. These researchers surveyed 4,515 third through sixth grade students who participated in the Elementary Student Talent Search promoted by the Carnegie Mellon Institute for Talented Elementary Students (C-MITES). Their search employed a two-step process: 1) students first took a standardized achievement test administered in their home school district, and then 2) those students who scored in the top 5% moved on to take another “above-level” test (a test appropriate for students several grades ahead of them) which helped to identify and separate the “moderately gifted” from the “highly gifted” students. Most of the student participants were White (84.7%), with small percentages of other ethnicities: Asian-American (4.1%), African-American (1.3%), Hispanic (0.2%), Native-American (0.1%), and those who listed more than
one race (2.3%). Five percent of the participants chose not to specify their race, 1% marked “other” and another 1% did not answer the question. No description of the languages used by the student participants was included in the study. Swiatek and Łukowski-Shoplik found that gifted students may be underserved in schools, in both overall gifted programming and in math specifically. Furthermore, their results suggested that “pull-out” programs may not be enough support to meet the needs of the highly-gifted students, because “pull-out” programming often only occurs one or two hours a week, and the gifted curriculum is often not aligned with the core curriculum of the school.

**Summary.** Swiatek and Łukowski-Shoplik’s (2003) study examined the type of involvement in academic activities of talent-search participants, and found that pull-out programs and academic competitions were the most common, but in general, may be underserved in their schools. This current case study supports some of their findings, in that pull-out programming might not be sufficient to support gifted ELLs, and will add to what is known by describing student experiences in gifted programing in a dual language school, specifically regarding the issue of bilingualism.

Reis and Renzulli’s (2010) examination of recent research on gifted education reviewed thirty-three studies, from 1988 through 2009. The methods varied from observational studies, surveys, case studies, and longitudinal studies, with a range of participants from 7 to more than 7000, from primary to post-secondary school status. Their findings highlight six themes: (a) a lack of research-based definitions to describe the gifted and talented population of students. The implications include a need to expand the definition of giftedness to include an increasingly diverse group of learners with a broad range of personal and learning characteristics, and not rely on IQ scores alone. Their research review also shows (b) a continuing absence of challenge for
the gifted in schools, specifically at the elementary and middle school levels, and some of the reasons for unchallenging material such as insufficient differentiation, or a lack of teacher training in gifted pedagogy. The review of research also included (c) findings that achievement is increased when gifted students are grouped together for accelerated instruction; and the use of (d) enrichment, differentiation, acceleration and curriculum enhancements as having a positive effect not only for gifted students but for the general population of students as well. Documentation in gifted research shows (e) benefits of gifted programs for struggling, special needs, and twice-exceptional students when used in a variety of settings. And lastly, research reviewed by Reis and Renzulli showed the (f) longitudinal benefits of gifted programs for gifted and talented students. For example, studies have shown that gifted education programs have helped students’ college aspirations, post-secondary and career planning, and had long-term positive impacts on cognitive, affective, and social development of students who participated.

**Summary.** This review of recent research has implications that affect gifted and talented students in regular classroom settings, enrichment experiences, and accelerated programs, which can affect dropout rates and underachievement among gifted individuals (Reis & Renzulli, 2010). However, what is missing from this review, similar to others, is the mention or consideration of students who are bilingual, and how identification or instructional needs are different for this special population of gifted students. This current case study on gifted bilingual students will add to what is known by specifically describing the challenges and successes of the gifted bilingual students in a dual language school, specifically regarding issues with bilingualism.

Westberg, Archambault, Dobyns, and Salvin’s (1993) study that is part of Reis and Renzulli’s 2010 research review is relevant to this case study because they examine instructional
and curricular practices with elementary school gifted students to determine if and how teachers are meeting the needs of gifted and talented students within their regular classroom settings. These researchers observed 46 third and fourth grade classrooms in school districts in four regions of the United States, from rural, suburban, and urban communities. A little more than half of the districts provided formal gifted programming, and the rest did not have formal gifted education. For each observation day, one gifted student, and one non-gifted student was selected to compare the curriculum and instruction that was given to both students within the same regular-instruction classroom setting. Sampling procedures ensured that “minority” and “economically disadvantaged” students were included in the overall sample, but the researchers did not mention bilingual students as part of the sample criteria. Data included classroom observations and semi-structured interviews. An instrument called “Classroom Practices Record” was developed to record the types of differentiated instruction that students received. Descriptive and inferential statistical procedures were used to analyze the data, as well as a content analysis on the anecdotal information summaries. Westberg and colleagues found that gifted students received very little differentiation in content area (reading, language arts, math, science, social studies) instruction within a “regular” classroom setting. Furthermore, these researchers believe the implications of this study are far reaching: they recommend that preservice and professional teacher development needs to be increased as well as revised, to include awareness of the need for strategies to meet the needs of high ability students. Of notable absence in their discussion of

---

8 These authors used the word “minority” to mean students who are not monolingual, White, English-speaking.
9 These authors used the words “economically disadvantaged” to mean student from low-socio-economic status.
10 These authors used the word “regular” to mean non-gifted, or specialized instructional setting.
the results, is that bilingual gifted students have unique instructional needs that also come with their own set of professional development objectives.

**Summary.** Westberg, Archambault, Dobyns, and Salvin’s (1993) “Classroom Practices Study” examines gifted and talented classroom settings to see if students’ needs are being met in “regular” classroom settings. Their findings indicated little differentiation was used to support gifted students. This current case study will add to what is known about best practices in gifted education, with particular attention to English language learner needs.

Westberg and Archambault, Jr. (1997) conducted a multi-site case study to examine best practices for high ability students at 10 elementary schools known for meeting the needs of high ability students. The schools were located in rural, suburban and urban communities and the researchers selected them by calling state gifted education directors, state curriculum specialists, university instructors, student teacher supervisors, and regional directors of education services for recommendations on which schools would be the best examples of providing excellent services in gifted education. Some of the districts selected for the study had formal gifted programming, all the classrooms observed had students who had been identified as gifted, or had been informally identified by teachers as having gifted potential. A team of researchers assembled case studies of each of the ten schools, and collected both observational classroom data, as well as interview data of students, parents, community members, gifted specialists, teachers and other school personnel. Westberg and research colleagues analyzed the data using qualitative inductive coding and found six themes across the sites: (a) the majority of the teachers had advanced degrees in areas such as special education and reading, (b) teachers were agreeable to make changes to their practice and to experiment with new strategies, (c) teachers collaborated with gifted education specialists and other classroom teachers, (d) teachers used a
variety of differentiation strategies in their instruction for high ability students, (e) teachers were aware of the individual differences in their students, (f) and lastly, teachers felt well supported by leadership and administration at their schools. This study is useful to this current examination because of the similar methods of data collection, data analysis, and the results showed what types of instructional strategies teachers used that led the schools and districts to have reputations for being able to successfully meet the needs of gifted students. What is missing from this study by Westberg and colleagues are successful strategies used by teachers to meet the needs of gifted bilingual students.

**Summary.** Westberg and Archambault, Jr.’s (1997) multi-site case study examined best practices for high ability students across 10 diversely located elementary schools. Their findings uncovered various practices that contributed to their reputation of successfully meeting the needs of their high-ability students. This current case study will add to what is known about serving gifted students, by describing the instructional practices that are used with gifted bilingual students, in a dual-language school setting, while this case study was in a monolingual English speaking school setting.

Robinson, Shore and Enerson (2006) describe 29 practices from evidence-based investigations, organized into three areas where they most likely would be used: home, classroom and school. These researchers present their findings as a practical guide for both parents and educators, and for the “general reader.” Scholars involved in this collaborative project were asked to compile a list of questions about the development of talent, high-ability, and gifted youth that would be of interest to parents and practitioners. They asked the following three questions, 1) “What questions do we need to be able to answer about educational and home practices effective with high-ability youth?,” 2) “How do we frame these questions to be
maximally useful to practitioners?” and 3) “What existing research informs these practical questions?” From these three general questions, small groups of scholars in the project collectively created a list of 150 more specific questions and suggested research that could inform their inquiry. During the next phase of their research, the scholars compiled a list of searchable terms, which were used to gather the most relevant empirical research that investigated high-ability youth, and instructional practices that are considered most important in the development of talent (such as strategies that promote higher-level thinking and challenging curriculum opportunities).

Each of the three general areas (home, classroom, and school-wide practices) are organized as sections in their review, and the relevant research literature is presented in sub-sections called, “What we know.” The recommendations based on their reviews are outlined in the sub-sections called, “What we can do.”

**Home practices.** Robinson, Shore and Enerson (2006) outline practices that are most likely to take place in the home that have proven to be beneficial for gifted students including the following: active parental involvement, appropriate social-emotional adjustment and good peer relations, supporting students who are twice-exceptional, acknowledging gender differences, developing specific talents, allowing for early literacy experiences for precocious readers, encouraging mentorship with appropriate guides, and allowing access to university-based programs if available. Robinson and colleagues cite the works of researchers whose work helps to build this list of best practices. The following are studies within Robinson, et al’s review of home practices that are relevant to this current investigation: a) The case study of 15 gifted students from low-socioeconomic backgrounds by VanTassle-Baska (1989) showed the advantage of family support in the success of these students. Qualitative data from questionnaires
and student and parent interviews were analyzed and organized into themes that showed how a strong family support system, as well as the support of the school system, factored in to the academic success of these gifted students; b) Tomlinson, Callahan and Lelli (1997) similarly investigated the experiences of eight low-income students. Observations in classrooms, as well as interviews of the students, parents, teachers, and key personnel comprised the qualitative data for this study, which was analyzed and organized into themes. Their study showed that parental involvement, mentorship of the program for high-achievers, as well as teacher and school support helped these students succeed academically; c) A study (included in Robinson, et al’s review) by Dai and Shader (2010) is relevant to this investigation because it examines parents’ motivation for supporting their child’s participation in music training. The participants in this study were parents of 203 students attending precollege programs at three different music schools. A high percentage of the parents were first and second generation immigrants born outside of the US. Parents were given a survey designed to uncover the intrinsic and extrinsic reasons why they would support their children’s music training, and each survey item response had a 7-point Lykert-like scale from which the parents could choose from. The researchers conducted a factor analysis of the survey data to assemble the findings into two categories: extrinsic and intrinsic reasons. A fundamental finding of this study was that parents who support their child’s music training highlighted the intrinsic rewards over the extrinsic ones. This study is relevant to the current investigation because of the involvement of the four case study students in the after-school Mariachi music band.

Classroom practices. Robinson and colleagues found the following classroom practices to be beneficial for gifted students included the following: encouraging creativity, acknowledging and developing multiple intelligences, encouraging and fostering higher level
thinking, inquiry-based learning and teaching, compacting the curriculum, using flexible grouping in the classroom, employing instructional technology, using primary sources in history instruction, and advanced language arts, reading, and science resources and instruction methods. The resource within Robinson et al’s review that is relevant to this investigation, is Kitano and Espinosa’s (1995) inquiry into the issues pertaining to the identification and support of gifted, English language learners. Kitano and Espinosa identify one major obstacle in meeting the needs of these students: there is a broad diversity in respect to their primary language and proficiency, their English language proficiency, their cultural backgrounds and experiences, and their areas of talent. Kitano and Espinosa recognize the wide range of identification practices, that are based on “traditional” assessment models, with varying degrees of adaptations and strategies across the United States. Kitano and Espinosa are hopeful that new approaches to identification of diverse gifted students will replace traditional models which include the following: a broader definition of giftedness, “alternative” constructs of giftedness (developed for economically disadvantaged students, and students who are ELLs that focus on aptitudes and behaviors, motivation/interest, communication, problem solving, memory, inquiry, reasoning, imagination/creativity and humor), and assessments that are developed for specific populations (p. 242).

**School-wide practices.** Robinson, Shore and Enerson (2006) outlined school-wide practices that were promising for gifted students including: access to career education, overall acceleration in subjects, courses available to learn multiple languages, school programs for different interests, having mathematics and arts in the curriculum, using multiple criteria for identification, an aim to develop talents in culturally diverse learners and those from low-income backgrounds, and appropriate professional development for teachers (Robinson, Shore, & Enerson, 2006).
Summary. Robinson, Shore and Enerson (2006) describe 29 practices from investigations of educational research on gifted youth, organized into three areas where they most likely would be used: home, classroom and school. Their work is intended to be a guide for both parents and educators to help them best meet the needs of gifted students. This current case study adds to what is known about instruction for gifted students, by highlighting the experiences and instruction given to gifted bilingual students in a dual language school setting, while this study was based in a monolingual, English speaking school setting.

In an effort to uncover best practices in gifted education, VanTassel-Baska and Brown (2007) reviewed existing research on 11 curriculum models and examined key features that contributed to student learning, teacher use, contextual fit, alignment to standards, and use with special populations of gifted and non-gifted students. These researchers included curriculum models that were designed for use with a particular student population, that were transferable for use in all content areas, were for use in a K-12 school, for use in a variety of group settings and schools, and lastly, it had to be explicit in how it met the needs of the gifted learner. The selected models then had to undergo a secondary selection process: a rubric was used to assess each model to see if they had evidence of impact on student learning, positive teacher receptivity, a teacher training component to the model, a history of operation in a school for at least three years, alignment to national standards, and longitudinal evidence to be effective with gifted students. Some of the key findings showed that six of the models reviewed had evidence of effectiveness with gifted learners in comparison to other treatments or no treatments, most of which were inquiry-based models of instruction. Based on this investigation, the researchers were able to show evidence that supports the use of curriculum that is advanced in core subjects that have been accelerated for gifted learners. They concluded that best-practices would include
grouping students in subject areas for advanced work, with a flexible organization based on each students’ level of academic learning. Furthermore, best practices would also include using higher-level thinking skills within each subject area to enhance learning, the use of inquiry in multiple modalities, and the use of student-centered learning tasks that tackle issues or problems that are directly relevant to students’ lives (VanTassel-Baska & Brown, 2007).

**Summary.** VanTassel-Baska and Brown (2007) reviewed 11 curriculum models to determine best practices in instruction for gifted students. Through their systematic investigation, they determined that six of the models had evidence of effectiveness, which included strategies such as accelerated curriculum in core subjects, grouping gifted students for advanced work, as well as student-centered, problem-solving tasks and instruction. This current case study will add to what is known about instruction for gifted students, by specifically focusing on the experiences and instruction for gifted bilingual students in a dual-language school setting.

**Instruction for Gifted Bilingual Students**

Although language acquisition research and literature (i.e. James Cummins) shows that knowing a second language is considered to be a cognitive advantage (Bialystok, Craik & Ryan, 2006), there is scant research on gifted instruction for emerging bilinguals.

A recent research synthesis by the National Center for Research on Gifted Education (http://ncrge.uconn.edu) reviewed the practices used to identify and teach gifted English language learners (2016). The scholars on this project used the following research questions to guide their review of the literature: 1) What empirical and non-empirical research exists on how to identify ELs for school gifted programs? 2) What is the status of ELs being identified and participating in school gifted and talented programs? 3) What are perceived best practices for identifying ELs for school gifted programs? 4) What types of personnel are involved in referring
and assessing ELs for gifted programs? 5) What are perceived best practices for serving ELs in school gifted programs? The researchers used keywords in their search for relevant articles, limited their search to peer-reviewed articles, used studies that focused on K-12 education in the US, and used article and studies that specifically related to the identification or service for potentially gifted English language learners. From an initial search result of almost 600 citations, researchers selected 45 of the most relevant theoretical and empirical articles and organized them into four categories: nomination, screening/assessment, placement and services, and identification models that were either theoretical or in practice that are used with ELL students.

**Nomination.** These researchers concluded that based on the evidence of six studies and recommendations from theoretical articles in this category, teachers’ perceptions about GT education and GT students might negatively affect their recommendations of certain students into gifted programming. The data and methods that were used in these six studies varied and included the following: qualitative data gathered from focus group conversations; Likert-type scale survey data; analysis of a gifted screening tool; two large-scale, multiple-state studies that used surveys to investigate teacher perceptions of culturally, linguistically and ethnically diverse students; and an examination of an observation protocol used by teachers to identify potential in culturally and linguistically diverse students. Furthermore, they found that teachers might overlook the gifted potential of some students if they were not fluent in English. They also found that teachers tend to have a strong bias towards the monolingual, English-speaking culture and values such as individuality and oral capabilities. However, they also found that the studies completed within the last five years indicated there might be a change in this tendency by teachers: teachers are starting to recognize that gifted students can come from all cultures and language abilities.
Screening/assessments. The researchers found that almost half of the papers used in this research synthesis dealt with screening/assessments used with identifying gifted English language learners. The authors of this synthesis recognize that assessment methods that screen for giftedness, are one of the biggest obstacles that ELLs face in gifted identification, and that it has long been established that ELLs have difficulty with cognitive assessments that have English language verbal components due to cultural or linguistic aspects. Eight of the conceptual articles reviewed in this synthesis addressed the issue of assessments and how it relates to the underrepresentation of ELLs in gifted education. Although the eight articles were not studies, the authors had general recommendations for accommodating gifted ELLs: a) acknowledging that giftedness exists in all populations of students, and can be exhibited differently by culture, b) a shift from deficit to strengths-based thought, c) recognition that standardized assessments are problematic for use with ELLs due to language and cultural bias, d) multiple measures such as portfolios, checklists, classroom observations, parental input, etc. are a better way to identify gifted ELLs, e) more professional development is needed for teachers to learn how to identify giftedness in ELLs.

Seven of the articles were studies on nonverbal assessments, and included at least one of the following three most popular cognitive assessments used with the ELL population: The Raven’s Progressive Matrices (Raven, & Court, 1998), the Naglieri Nonverbal Ability Test (Naglieri, 1997), and the Cognitive Abilities Test Form 6 (CogAT-6) (Lohman & Hagen, 2001). The authors’ review recognized the popularity of the Raven’s Progressive Matrices (also known as the Raven) due to its minimal verbal requirements, it has been around the longest (developed by John C. Raven in 1936), and because the geometric tasks supposedly have no cultural bias (Arthur & Day, 1994). The controversy with the Raven are the issues regarding its non-
representative standardization sample, but in studies comparing the Raven to other non-verbal assessments (such as the School and College Ability Test; Educational Testing Service, 1980), the Raven was found to be the most equitable gifted screening tool used with ELLs, if used in combination with other data (such as parent/teacher rating tools) (Mills & Tissot, 1995).

Lohman, Korb, and Lakin’s (2008) study compared the NNAT, the CogAT-6, and the Raven, and scrutinized the norming methods for both the Raven and the NNAT. Furthermore, Lohman and colleagues determined that the comparison between student groups was unreliable because there was no standard criteria in place for the definition of “English Language Learner.” These researchers also compared the scores between ELLs and non-ELLs on all three tests, and found that ELLs scored .5 to .6 standard deviations lower than non-ELLs, which did not agree with the findings of Naglieri’s (2004) similar study (note that Naglieri is the developer of the NNAT, which was part of those studies). Furthermore, Lohman, et al, (2008) concluded that non-ELs assessed using the Raven, were more likely to score very high on the matrices. Based on their study results, Lohman and colleagues recommended that non-verbal tests for ELLs in determining giftedness, should be one part of a larger body of evidence. Furthermore, they suggest that national norms (like the ones used in non-verbal assessments) are not useful to compare students in the identification process, and instead, students should be compared to their peers and their cohort when identifying the top performers.

The research synthesis by the National Center for Research on Gifted Education showed that the Raven’s and the NNAT may identify more ELL students than traditional IQ testing, but they also discovered that those assessments may not be as reliable as a holistic approach to identifying gifted ELLs through the use of portfolios, and gathering a body of evidence for each student.
Placement/services & identification models. The researchers reviewed eleven articles for this category that were related to placement, potential services and student experiences: seven of the articles were empirical studies, and the rest were theoretical or descriptive.

Instructional approaches. Three conceptual articles in this research synthesis recommended dual or heritage language instructional approaches to serve gifted ELLs (Barkan & Bernal, 1991; Matthews & Matthews, 2004; Valencia, 1985). Matthews and Matthews (2004) recognize that heritage language classes are not always available in some school districts, but when they are feasible, they believe this could help motivate students by developing their linguistic and cognitive skills more fully. Barken and Bernal (1991) view bilingual instruction as an inclusive and beneficial step towards a strengths-based instructional model, and vital to meeting the needs of gifted bilingual students. Valencia’s (1985) recommendations for dual-language programs include teacher professional development in gifted education and specifically in identifying and serving gifted ELLs, as well as increased efforts in parental involvement.

Student experiences. A study included in this review by Brice, Shaunessy, Hughes, McHatton and Ratliff (2008) examined student discourse using discourse analysis to look at the interactions between bilingual students identified as gifted, and bilingual students who were not identified as gifted. Both sets of students were in “general education” classrooms in an urban, public, middle school. This was a mixed-methods study with 16 student participants, using qualitative and quantitative methodologies to answer the following research questions: 1) Do Spanish-English speaking adolescent students identified as gifted display greater use of pragmatic functions (i.e., the reasons for speaking) as measured by four pragmatic functions when compared to students in the general education program? 2) Do Spanish-English speaking adolescent students identified as gifted display greater use of vocabulary as measured by a
type/token ratio measure when compared to students in the general education program? 3) Do Spanish-English speaking adolescent students identified as gifted display greater use of language choice as measured by instances of English language use, Spanish language use, and code-switching/code-mixing use in their discourse when compared to students in the general education program? Brice, et al, (2008) found a slight advantage for the bilingual students in the gifted program for all three research questions, but recommended further quantitative research to verify the relationships found between bilingualism, language abilities, and giftedness. They also stated that, “…bilingual language abilities do not seem to be measured or captured in teacher perceptions…Therefore, it appears that teachers will need further information about traits of giftedness among bilingual students. Further research indicating why teachers may perceive Hispanic students differently may add to the body of knowledge that would be applied in correcting these misperceptions.” (p.26-27).

**Identification models.** The authors of this research synthesis reviewed three articles that described identification models: 1) a strengths-based Response to Intervention (RTI) framework (Bianco and Harris, 2014; Harris, et al., 2007), which is a multi-tiered model often used in special education. These scholars have found that this model is appropriate for gifted learners, twice-exceptional learners, and students who come from diverse cultural backgrounds. Bianco and Harris (2014) conceptualized this model to include three tiers: the first tier representing the overall curriculum of the school, which should include culturally and linguistically responsive instruction to allow the gifted potential of ELLs to be evident and develop. Bianco and Harris stress that at this level, all students should be universally screened (using tools that are culturally and linguistically sensitive) for giftedness, allowing for another opportunity for identification for ELLs with academic potential. Based on the results of the screening, Bianco and Harris
recommend that at the second level, Tier 2 interventions in the classroom should be used, such as differentiation of content, as well as enrichment opportunities. The third Tier is used when more intensive measures (such as intensive acceleration, or entering college early) are needed if the students’ needs are not being met at Tier 2 (Bianco and Harris, 2014). 2) A second identification model named in the research synthesis is by Carol Horn (2015) called Young Scholars that was developed to find and nurture academic potential in students that come from diverse cultural, ethnic, and linguistic backgrounds. Young Scholars has four levels of service, with the first being provided to all students from kindergarten through the sixth grade. Model lessons with specific strategies were designed to align with state standards, modeled by GT resource teachers, and then used by regular classroom teachers. Level Two is used for students who exhibit characteristics of gifted potential, and receive differentiated instruction (such as challenging content, extra resources, and instructional groupings) within the classroom via a collaborative effort with the regular classroom teacher and GT resource specialist (Horn, 2015). Level Three consists of part-time services to students who have been identified by a screening committee at the school, provided by the GT specialist, and designed in collaboration with the classroom teacher to challenge students to think at a higher-level and study more complex subjects (Horn, 2015). Level Four consists of a full-time, highly challenging academic instructional setting. Differentiation is designed to meet the needs of students who exhibit highly gifted characteristics, and consist of material focused on problem solving, creativity, critical thinking, decision making, and allows for students to interact with their peers at the same intellectual level (Horn, 2015). 3) A third identification model reviewed in this research synthesis is by Pierce, Adams, Speirs Neumeister, Cassady, Dixon and Cross (2007) called Project CLUE, which stands
for “Clustering Learners Unlocks Equity” and was funded by a Priority One Jacob J. Javits\textsuperscript{11} grant. Project CLUE was part of a pilot study conducted with 48 second-grade students who scored at or above the 90\textsuperscript{th} percentile on the TerraNova Comprehensive Test of Basic Skills, or the Ravens Progressive Colored Matrices test. Fifty-eight percent of the participants were African-American, 30\% were White, 9\% Hispanic, and 3\% were Multiracial, and all had been identified as gifted. Project CLUE is described as a “sift-down model” that used four criterion in an effort to include as many individuals as possible. The first criterion used existing test scores (standardized tests administered by the school) to make the “first cut”; the second criterion used the TerraNova assessment, a multiple choice, free-response formatted test that measures skills in reading, mathematics and language arts. The third criterion consisted of testing students who were not identified through the first testing round, using the Ravens test, chosen by the researchers because it is known to be language-free and “culture fair”, and appropriate to use with students from diverse populations. The fourth criterion is the Adams-Pierce Checklist, developed for this pilot study, used to identify gifted students from diverse backgrounds, who were not identified by traditional testing. This pilot study resulted in 26 students identified for gifted programming who had not been identified through the first round of standardized testing, or approximately 8\% of the final identified gifted population of students who would not have been included. These researchers concluded that non-verbal measures appear to help identify ELLs who may not score well enough on tests that require English reading and writing skills (Pierce, et al., 2007).

\textsuperscript{11} Jacob K. Javits was a Republican Congressman who was one of the first to pass legislation promoting gifted education. The Jacob K. Javits Gifted and Talented Students Education Act of 1988 was named in his honor, which funded research in gifted assessment, identification methods, and programming at the National Research Center of the Gifted and Talented from 1990-2013 (http://nrcgt.uconn.edu).
Summary. The research synthesis by the National Center on Gifted Education (2016) reviewed the best practices used to identify and serve ELLs for gifted programs, the status of their participation in gifted programs, the empirical and non-empirical research on identification process, and the types of personnel that refer ELLs for gifted programs. Based on the review of the studies in this synthesis outlined above, the authors of this synthesis concluded that teacher perceptions may negatively influence the recommendation of gifted ELL students to gifted programming, that screening and assessments are one of the biggest obstacles to gifted programming that ELLs face, dual language instruction is best for gifted ELLs, and lastly, these authors reviewed several identification models that were proven to be more effective in identifying students who are English language learners and/or from diverse backgrounds to gifted programming.

The quantitative study by Firmender, Reis, and Sweeny (2013) explored the range of fluency and comprehension scores of approximately 1,150 students in five diverse elementary schools, including a gifted and talented magnet school. They used the following research questions to guide their investigation: 1) What is the range of reading comprehension levels across all students in the five elementary schools across the country? 2) What is the average range of reading comprehension levels across classrooms at each grade level? 3) What is the range of reading fluency across all students in five elementary schools across the country? 4) What is the average range of reading fluency across classrooms at each grade level? (Firmender, et al., 2013, p. 6). Reading comprehension was measured using the Iowa Test of Basic Skills\(^\text{12}\)

\(^{12}\) The ITBS Reading Comprehension subtest, “…measures students' ability to read words in isolation and to use context and picture cues for word identification. There are also sentence and story comprehension questions.” (www.hmhco.com)
Additionally, reading fluency, described by these scholars as the “speed, accuracy and efficiency with which a student reads a particular test” was also assessed, by choosing reading passages selected to represent all three grade levels, third through fifth (Firmender, et al., 2013, p. 7). Raw scores on the ITBS were converted to standard scores, and descriptive statistics were analyzed to determine reading comprehension scores across each grade level for all schools. They found that reading scores ranged widely, from below the 10th percentile to above the 90th percentile, and reading fluency also ranged widely. Interestingly, the widest ranges in scores in both reading comprehension and fluency was found at the urban-located gifted magnet school. They speculated that the use of non-verbal aptitude assessments with gifted students identified students for programming using that method, albeit with a wide range of reading achievement. This study indicated that there was a need to differentiate both reading instruction and content to enable all students, both diverse and gifted, to make progress in reading. Firmender and her colleagues conclude that it is not suitable to have a “one-size-fits-all approach” to instruction when attempting to meet the needs of a diverse, gifted student population.

Summary. Firmender, Reis and Sweeny’s (2013) study of reading fluency and reading comprehension levels across a variety of schools with elementary school students proved that differentiation of content is important to challenge a broad range of students, including gifted and talented students.

Similarly, the qualitative study by Briggs, Reis and Sullivan (2008) examined 25 gifted programs nationwide to look for methods that would increase participation of culturally and linguistically diverse GT students. Briggs, et al., used interviews, questionnaires, observations, document reviews, and other artifacts as part of their data collection to examine the perceptions
of program coordinators and teachers. Briggs, et al., were interested in how these educators increased the numbers of students who are culturally and linguistically diverse to participate in gifted programming. These researchers used four phases to select programs for this study: 1) Phase one included inquiries to leaders in the gifted education field to have them nominate programs. Forty-six programs were nominated across the US, and included after-school, summer, and school-based programs for students from elementary to high-school age levels. 2) During Phase 2, program coordinators from the schools that were nominated were asked to fill out a questionnaire and program documentation describing the participation of culturally, ethnically and linguistically diverse students. This allowed the researchers the information needed to follow up with a smaller group of 25 programs, to interview program directors. 3) During Phase Three interviews were conducted with the coordinators and directors of the programs. The interview questions were designed to discern how the representation of diverse students in the gifted programs had increased, the identification practices used, instructional practices used, as well as any other information that allowed the increased participation of these students in gifted programs. The information gleaned from these interviews was summarized and qualitatively coded for emerging themes. Triangulation of the data was achieved by using multiple data points (such as interviews, observations and surveys). 4) During Phase Four, seven of the programs were selected for site visits based on several criteria which included, program design and innovation, region of the US where it was located, and the increase of culturally, ethnically and linguistically diverse students participating in the gifted program.

Briggs, et al., found three areas that would help achieve the increase of diverse students in gifted programming, (a) acknowledgement of the underrepresentation problem by teachers and administration – teachers nominate students for gifted programs who are aware of, and have an
appreciation of students’ cultural backgrounds to be able to recognize their unique and diverse talents, (b) an enhanced attentiveness of the impacts of culture on student performance in academics – teachers should recognize each students’ individual cultural differences and help to modify the classroom environment to best fit the students’ needs, and lastly, (c) creating program supports to help educators make changes – program directors that are committed to establishing practices to increase and support the number of culturally and linguistically diverse students. Every program director involved in the study had a primary goal of increasing representation of diverse students in their gifted programs, and 75% reported changing their programs to meet the needs of this special population of students.

A study by Priven (2010) in a public-school system in Ottawa, Canada, sought to investigate the intersection between bilingualism and giftedness. Priven conducted interviews with two teachers in a gifted program, that taught 3rd/4th and 5th/6th grades, as well as two bilingual gifted students from the 5th/6th grade class. The data was analyzed and reviewed to uncover curricular practices for bilingual gifted students at this school. They discovered that while “biculturalism” was encouraged at the school and program level (students were encouraged to explore their heritage and share it with their classmates), “bilinguality” did “not seem to be one of the principles of community building in the gifted program…as gleaned from the curricular practices” (Priven, 2010, p. 315). Priven argues that gifted bilinguals “could and should” be using their unique cognitive assets in their gifted program (p. 305). This author suggests ways in which educators can accommodate instructional needs for gifted emerging bilinguals which includes: promoting giftedness by challenging bilingual students in their home language skills, building on their strengths, building on academic skills in their home language to prevent language attrition as well as promote their home language achievement. Priven questions
the ability of a monolingual teacher to be able to evaluate her students’ work if he or she does not speak the second language(s) of the students.

**Summary.** Priven’s (2010) work on investigating the instructional practices with gifted bilingual students in a public elementary school in Ottawa, Canada, illustrates how educators might privilege a students’ diverse cultural background, but not necessarily support a students’ bilingual language abilities. Priven gives suggestions on how to best support gifted emerging bilinguals to help them use their cognitive assets in a school setting. This current case study will add to what is known by illustrating how gifted bilingual students are supported in a dual-language school setting.

**Conclusion**

How are educators meeting the needs of their gifted bilingual students? Researchers have found various adjustments to instruction that best serve bilingual students, and likewise, they have found adjustments that best serve gifted students. The area that I am interested in is the intersection of bilingual and gifted students that have shown that their skills in managing two languages in their life affords them a unique ability that adds another dimension to address when they are identified as gifted. Additionally, the research has also shown that bilingual students face many obstacles when being identified as gifted, another area that is important to address as part of this investigation. This case study will add to what is known by highlighting the nomination and instructional practices of gifted bilingual students in a dual language school setting. This will be different than other studies, because it will focus on the experiences of students that are enrolled in a school that is already set up to support students’ needs in two languages. Many students in the US who are bilingual do not have the option of attending a dual-
language school, and often do not get the second-language support they need, in addition to their gifted programming needs.
Chapter 3: Methodology

The research design for this investigation is a qualitative multicase study, using ethnographic methods to examine my research questions. The term “ethnography” refers to research that helps describe a particular culture (LeCompte, Preissle, & Tesch, 1993). Because relatively little is known about the experiences, nomination, identification, and subsequent gifted programming services for gifted, bilingual, Latino/a students, I investigated these issues from a qualitative perspective. A qualitative study is defined by Sharan B. Merriam (1998) as an "intensive, holistic description and analysis of a single entity, phenomenon, or social unit" (p. 27). Qualitative research methods will also allow me to illustrate the rich details of the context of the school site.

The primary goal of this study was to examine the educational experiences of four, middle-school, gifted, bilingual Latino/a students. This investigation is a multicase study, which according to Robert Stake (2006) is a “special effort to examine something having lots of cases, parts, or members” (p. vi). Furthermore, case studies allow for in-depth investigations to understand human behavior (Stake, 1995).

This study looked to answer these primary research questions: (a) What are the nomination and identification processes that were used for each of the four focal students to determine their need for gifted education? (b) What are the experiences and perceptions that these four gifted Latino/a Spanish speaking bilingual students have in this dual-language public school? (c) What are the instructional practices used to serve these four gifted Latino/a Spanish speaking bilingual students?
Research Site

It is important to note that the research site which I had originally intended to conduct my study, was designated as a public, gifted magnet school. It was located in an urban area, with a high population of bilingual students. Unfortunately, the gifted program had no bilingual students that had been nominated or identified to be included into the gifted program at the time that I had hoped to start my data collection. This was in a state that has been known to be more progressive about education in general, but more importantly, in gifted and bilingual education as well. This in itself is very telling about the need for more research into the underrepresentation of bilingual students in gifted education. Consequently, my search for a suitable research site was made more difficult by the requirement of having sufficient bilingual students that had been identified as gifted, to have a large enough sample for my multicase study.

Eastwood (pseudonym) is a public, dual-language school, in a large urban school district in the Western United States region, and serves students in grades Kindergarten through the 8th grade. This school was chosen as a “purposeful selection” (Maxwell, 2012), because the setting provides information for the research questions, due to having a gifted and talented program, as well as the presence of a high number of English language learners. The sixth-grade level was purposely chosen because the students would have had a few years of gifted programming services, of which I obtained a summary from parents and educators. The district in which Eastwood is located is one of the fastest growing urban districts in the country. During the 2013-2014 school year, it served nearly 90,000 students from kindergarten through 12th grade. Nearly 90% of the school population qualified for free and reduced lunch during 2016-2017 (enrollment information provided by the district website), and approximately three quarters of the students are designated as English language learners.
Table 2. Demographic information of Eastwood (pseudonym).

<table>
<thead>
<tr>
<th>Total Enrollment</th>
<th>Free &amp; reduced lunch</th>
<th>ELL</th>
<th># of non-exited ELLs</th>
<th>Redesignated/exit ELLs</th>
<th>GT</th>
<th>ELLs that are in GT</th>
</tr>
</thead>
<tbody>
<tr>
<td>406&lt;sup&gt;a&lt;/sup&gt;</td>
<td>354 or 84.7%&lt;sup&gt;b&lt;/sup&gt;</td>
<td>264</td>
<td>220 or 53%&lt;sup&gt;a&lt;/sup&gt;</td>
<td>44 or 11%&lt;sup&gt;a&lt;/sup&gt;</td>
<td>43 or 9.81%&lt;sup&gt;c&lt;/sup&gt;</td>
<td>38 or 0.09%&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> 2014 District website enrollment report on English Language Learners  
<sup>b</sup> 2016-17 District planning and analysis statistics  
<sup>c</sup> 2013-14 District published statistics on Gifted and Talented students  
<sup>d</sup> 2017 Information from the GT teacher at Eastwood via email to the researcher

**Selection of Student Participants**

I first sought the help from the principal for the selection of the students that were a part of the focal group. The principal helped guide me to the Gifted and Talented teacher for help in selecting the student participants who were Latino/a, gifted, and bilingual. The selection criteria included the following: gifted, bilingual, Latino/a, Spanish speaking, different genders, and historically from the same school district. It was important to choose students from different genders, given that studies have proven that there is a gender bias when including students in gifted education (Bianco, Harris, Garrison-Wade & Leech, 2011). However, even though I attempted to match the proportion of genders in the focal group to the proportion of gifted student genders at the school level, in the end, I was limited to the four students that returned their consent forms, and thus had three female student participants and one male.

Stake recommends that there should be no fewer than four, and no more than 10 in a multicase study (2006). Therefore, I chose these four students to be in the focal group, since it was difficult to find students that met the selection criteria, and these were the only four that
returned their consent/assent forms. Stake also recommends asking the following questions to narrow the list of qualifying individuals:

1. Is the case relevant to the quintain \(\textit{[in other words, does each student fit the criteria for the focal group being studied]}\)?

2. Do the cases provide diversity across contexts \(\textit{[in other words, do the students represent different genders]}\)?

3. Do the cases provide good opportunities to learn about complexity and contexts \(\textit{[in other words, will each student provide information about the complexity of their story]}\)?

**Qualitative Data Sources and Collection Methods**

I used interviews from students, teachers, parents, the GT coordinator from the school, the principal and classroom observations as the primary sources of data collection. The student and parent participants were given the choice of language in which to respond during their interviews. Letting them choose the language hopefully empowered the student participants (Shannon, 1995) and I believe resulted in rich discussions about their experiences as gifted, Latino/a, bilingual, Spanish speaking students.

I followed the five recommended steps for critical qualitative research outlined by Carspecken (1996):

Stage one: observation field notes, and audio to build up the primary record.

Stage two: preliminary reconstructive analysis of the primary record thus far.

Stage three: dialogical data generation of interviews after the first two stages have been conducted.

Stage four: discovering system relationships by examining other sites that are related.

Stage five: explanation of findings through social-theoretical models.
These stages helped to keep the investigation organized and thorough, and allowed me to focus on each stage of data collection, analysis, and the final stage of explaining the findings through the use of my theoretical frameworks.

**Student Interviews**

My primary research question sought to gain insight to the experiences of the students, so I used a “three-interview series” (Seidman, 2013) when interviewing students (see Appendix D for the set of three student interview protocols). This involved three separate interviews with each student participant, for a total of 12 interviews for the four focus students. Seidman states, “People’s behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them.” (2013, p.17). In this way, I had more than one opportunity to speak with each of the students, who are the main focus of this study. Seidman describes this method as a way to establish the context within the first interview, to reconstruct details of their experiences for the second interview, and then allow for reflection for the third interview. I allowed 40 minutes for each student interview, and conducted them during designated breaks that their teacher allowed, so as to not interrupt instruction. If the student preferred to conduct the interview after school, I sought permission from the parent to do so. I allowed each student to decide which language she or he wanted to use during the interview. One student out of the four chose to answer questions mostly in Spanish. However, all four of the students seemed to use both Spanish and English interchangeably when searching for words or ideas they did not know in one language or the other. For example, the student who chose to use Spanish primarily during her interview, did not understand the word “typical” in Spanish, and when I translated the word to English, she still needed more support in understanding what I was
asking her. In this case, I used a synonym for the word “typical” and restated the question in both languages:

Researcher: Muy bien. Gracias. Ahora la última pregunta: describe un día típico para ti, desde el momento en que te levantas hasta que te duermes. [Very good. Thank you. Now the last question: describe a typical day for you, from the moment you get up until you fall asleep.]

Ana (pseudonym): Que significa típico? [What does “typical” mean?]

Researcher: Típico es como un día normal. Como, describeme un día típico desde el momento en que te despiertas, como un día, como un día normal. [Typical means, like a normal day. Describe to me what a “typical” day from the moment you wake up, like a “regular” day.]

Ana: Can you say it in English?

Researcher: What do you do on a regular day? Can you describe it to me?

First student interview details (see Appendix D for all student interview protocols). For the first student interview, I attempted to put the student’s past experiences in context by asking them questions about themselves in terms of being bilingual, and being gifted. I asked them questions about their lives, their experiences with their families, friends, school, and neighborhood. I used open-ended questions that were meant to help them narrate the range of experiences that they have had. An example question for this included, “Tell me about your family, where are they from? How long have they lived here?”

Second student interview details. The purpose of the second interview was to examine details of the students’ present lived experiences as a gifted, Latino/a bilingual student. I asked them about the types of activities they did in school, and out of school, the relationships with
their teachers, other students, parents, and community members. In this second interview, I asked them to reconstruct a typical day from the moment they woke up until they went to sleep. These details were meant to inform the stories about their experiences in school and at home. An example question for the second interview included, “Do you have any favorite activities in school or out of school?”

**Third student interview details.** For the last interview, I asked the student participants to reflect on the meaning of their experiences, or in other words, the intellectual and emotional connections that they might have between being gifted and being bilingual. An example question included, “Given what you have said about your school experiences before this year, and a typical day for you now, what does it mean for you to be in gifted classes and being able to speak two languages?” This type of question is a higher-level question that might be difficult for elementary students to answer. I was prepared with a follow-up question in case the four student participants might need clarification. However, their answers were thoughtful, contemplative, and self-reflective.

It was important to maintain the integrity of the three separate interviews according to Seidman, so that each interview has a purpose by itself, and within the set of three interviews. For example, in the first interview, a participant might want to start to tell an interesting story about what is happening in the present, which is the focus of the second interview. As a researcher and an interviewer, it was necessary for me to try to keep a balance so the participant felt comfortable enough to be open but also have a focus so that the structure was maintained. The length of time for student interviews was appropriately short for their age. A 90-minute interview for adults according to Seidman is appropriate, but should be shorter for younger participants. For the students, I set aside 40 minutes for each interview, but most of them were
done in approximately 20 minutes. Seidman recommends the spacing of the three interviews to be from 3 days to one week apart, to maintain a level of connection between the student and the researcher. Unfortunately, due to the complicated school day schedule as well as the limited amount of time I had left to collect the data, not all interviews were ideally spaced by three days at a minimum, with one instance where they were spaced only two days apart.

**Interviews with Teachers**

Interviews of the teachers began with open-ended questions and conversational in nature, in order to allow the interviewee a chance to discuss the topics in depth. The questions focused on their philosophy of gifted education for bilingual students, and the strategies they used to teach them (see Appendix E for the teacher interview protocol). These interviews were conducted at the beginning of the data collection period after the principal interview, were audio-recorded, and later transcribed.

**Interview with the GT Coordinator/teacher**

Typically, the GT coordinator of a school is in charge of assisting with the identification of GT students. This person should know the identification plan put forth by the district, and should be comfortable and confident with the plan. School districts usually have a referral process in place as well as whole-grade screening processes. Ideally, these identification plans should include provisions for assessing and referring students from underrepresented groups, such as those who are culturally and linguistically diverse, or those who are economically disadvantaged, or have a learning disability. A GT coordinator should be comfortable with these referral processes, understand the psychometric properties of any test used to assess giftedness at their school, and be aware of any specific needs of the students with whom the test will be used. The GT coordinator is in a unique position to provide information to the district about the needs
of students, and the needs of teachers who will teach these students. This person can also be important to district strategic planning processes and help with the development of school improvement plans to help with the problem of underserved gifted students, seek and include input from parents of students who are gifted, provide written communication that is accessible and available to all parents, help the district stay up to date with current practices, and serve as the liaison for students, parents, and community members. The GT coordinator should ensure that any written communication sent home to parents at the school should reflect the background of students who attend, such as Spanish-speaking families.

The interview with the GT coordinator was an important part of this investigation, and showed the basis of GT programming at the school, including how the GT coordinator assists school personnel in the design of gifted education services, and to what extent this person leads and provides support to the teachers and principal (See Appendix F for the interview protocol for the GT coordinator). The GT teacher at Eastwood had just been hired in a half-time position to replace the former GT teacher, who had a ¼ time position at the school. This was a new position for the GT teacher, Sarah Anderson (pseudonym), and although she was certified as a GT coordinator, she had never been in a formal GT position prior to this job. She holds Master’s degrees in curriculum and instruction as well as a Master’s degree in education. She is bilingual (all teachers hired to work at this dual language school are required to be bilingual), with her primary language being English. She has an endorsement in the area of acquisition of the English language from the district, and is certified to teach Spanish in the district.

**Interview with the Principal**

The interview with the principal took place before the interviews with the teachers (see Appendix G for the Principal/Administrator interview protocol). The purpose for interviewing
the principal was to gain a better understanding of the school atmosphere, the philosophy of
gifted education that the principal uses to guide teachers, the kinds of relationships that the
faculty has with parents, and lastly, as a way to triangulate the information gathered from the
teacher interviews.

**Interviews with Parents**

Interviews with the parents of the four focal students that participated in the case studies
also began with open-ended questions (see Appendix H for the parent interview protocol). The
purpose of the parent interviews was to gain insight into the trajectory of each student in gifted
education, to understand their linguistic profile, and to gather information about their family
experiences. The data from these interviews helped to answer the research question that seeks
information for a description of the experiences of the focal student group.

**Observations**

The observation protocol included both direct observation and indirect observations (such
as observations reported by the teacher) necessary for when I am not present, to interview others,
ask for records, or examine artifacts (Stake, 2006). I observed the students on six separate days:
The first day I stayed for the entire school day (from approximately 8 am until 3 pm) to get an
overview of the flow of the school day. The other five days I arrived at 8 am and observed until
approximately 1 pm. I shadowed three students that were in the same group together for three
days, and one student who was by herself in a different instructional group for 3 days. The total
number of hours spent observing were approximately 27 hours from the end of October through
the first week of December. I observed gifted intervention three times: twice when the students
were “pulled-out” of the classroom; once when the GT teacher “pushed-in” to the language arts
classroom. I observed an approximately equal number of lessons in Science, Math, Language
Arts and Social Studies, and I also observed twice when the students went to Music class. All of the lessons were conducted in English, except for one math class, which was conducted in Spanish. All of the GT instruction, as well as the Music classes that I observed were conducted in English. The website for the school explains that the dual language curriculum is taught as follows: there are two classes per grade level, one is taught in English and the other in Spanish. The classroom environments regarding language are “pure” meaning that when Spanish or English components are taught, only one language is used during the entire component. Each unit of content lasts from 3-6 weeks, and then the instruction language used is switched. In other words, every teacher must be fluent in both Spanish and English in order to teach their content in either language throughout the year. I took qualitative notes while observing the four students in their classrooms, when interviewing the students, parents, teachers and administrator.

In addition, I collected samples of student work and communications sent to parents and families as data. I observed in classrooms during three months of the school year, weekly, as permitted by the teachers and their schedules. I took field notes during all observations and wrote memos and summaries after every observation. During observations, I collected artifacts such as handouts and worksheets and made copies for the purpose of analysis (see Appendices I and J for classroom observation and field notes log templates). During classroom observations, I gathered data about the classroom itself, such as books, educational posters, and other visuals, and I took note of the languages and/or cultures that are represented. I shadowed the four focal students for three full days each and recorded data from these observations, including information about their classroom activities, peer interactions, and language use.

Teachers that are included in the study were asked to fill out a questionnaire that inquired about the kind and type of training and professional development that they have had regarding
both gifted and bilingual education (see Appendix K). These questionnaires were emailed to the teachers, and given as a hard copy. All participants, except for one teacher, returned their questionnaire.

**Audio recording.** The purpose for audio recording the interviews was to glean a rich source of data, from which more can be revealed than just field notes alone, and to accurately transcribe what was said during the interviews. (Maxwell, 2012). In this way, I was able to focus on the interview process, to give undivided attention to what the participants were saying, and to have an accurate record of the interview data collected.

**Researcher role.** I took a “non-participatory role” in observations, in order to learn about the activities as a neutral observer (Emerson, Fretz & Shaw, 2011). Furthermore, I followed Robert Stake’s (1995) guide on case study research and avoided intervening in situations in which I was an observer. The role of the researcher that I took complemented the nature of this project, in that I explored the different types of instructional methods used in the classroom with gifted bilingual students.

**Positionality statement.** My positionality as a researcher had some influence on the topic, the participants, and the research process of this study. My world-view is influenced by my upbringing in the US as a bilingual Latina, and for half of my life, a Mexican citizen. I have had the privilege and opportunity to study and work in the US with no barriers nor obstacles, despite being a resident of the US (with a permanent visa) until the mid 1990s when I became a naturalized citizen. This has influenced my values and beliefs regarding the lack of opportunities that many people have, who live and work in the US, but who were born in Mexico. This had an impact upon my understanding and analysis of the data, as well as the selection of the participants in this study. The topic of giftedness was influenced by my interest in that area due
to my own daughters being in gifted education when they were in elementary school. This interest was honed by my doctoral studies, which was a program that prepared students for research and leadership in the field of bilingual and multicultural education. My doctoral program had a strong commitment to diversity and social justice issues, which shaped my interest in identification and assessment issues in gifted education for underrepresented bilingual students. This program directly influenced my decision to study the problem of the underrepresentation of gifted bilingual students in gifted education. I am aware that my position as a bilingual Latina, my experiences as a Mexican American in the US, my belief in the value of bilingual education, my social values of equity in education, my sensitivity to the cultural, political and social context of the participants has influenced this study as a whole.

Data Analysis

The data collected (interviews, observations, student artifacts, student records, and audio recording) required both qualitative data analysis, and some quantitative data analysis. All data was organized and stored in a password protected computer and/or server, and final reporting contains pseudonyms for both people and places.

Qualitative data analysis. I coded the data using a Microsoft Excel worksheet to organize the data by themes. The primary method of data analysis that I used was inductive coding, after I collected the data. I transcribed all the audio recorded interview data by listening to the recording and typing it into a Microsoft Word document. I coded all of the following: field notes from classroom observations, audio transcripts from all the interviews, and classroom artifacts. I followed Miles and Huberman’s qualitative data analysis methods (1994). They suggest three concurrent “flows of activity.” The first “flow” concentrates on data reduction, that began before data collection by anticipating and choosing which data I was going to collect. In
other words, Miles and Huberman state that data reduction happens when a researcher chooses a
counsel or theoretical framework, cases, research questions, and data collection methods. As
data collection continues, more data reduction happens when the researcher writes summaries
and memos, selects codes, and teases out themes that are woven throughout the data. These
authors emphasize that data reduction is not separate from analysis, rather it is part of the
analysis process. Furthermore, they claim that data reduction helps to sharpen and organize that
data so that conclusions can be drawn and validated.

The second “flow” is that of data display, which means taking the data and organizing it
in the best way for others to follow. Miles and Huberman claim that data displays are the best
way to understand a phenomenon and to take action. They say that humans are not adept at
processing large amounts of information, and that it is easier to reduce it into smaller chunks or
configurations. These authors claim that good data displays are the best way to have valid
qualitative analysis. Examples of displays are matrices, graphs, and charts that are compact and
accessible to the reader. Like data reduction, the authors emphasize that data display is not a
separate stage from data analysis, that it is instead a part of the analysis process.

The third “flow” is that of conclusion drawing and verification with an open mind and a
bit of skepticism. The conclusions may not be clear at first, but they become increasingly
“explicit and grounded” (p.11). Miles and Huberman believe it is imperative to verify
conclusions throughout the analysis process by checking field notes, member checks, or
feedback from another researcher. I kept the three flows of analysis organized using a matrix.

**Interview analysis.** I used Brinkmann and Kvale’s (2009) method of analyzing
interviews, since much of my data consisted of interview transcripts. They suggest a five-step
process that begins with allowing the participants to describe their experiences thoroughly.
During this step, it was important to allow the participant to speak freely, with only prompts to have them elaborate if needed. During this time, and even before the interview, I tried to establish rapport with the participant, I listened attentively, showed interest and understanding, and was respectful of what the participant said. Furthermore, I briefly introduced myself, the purpose of the interview, the use of the recorder, and asked for any questions before the start of the interview.

During the second step, a participant may discover new meanings based on their spontaneous descriptions. This step may or may not happen during every interview. An example might be a student who describes the effects of a grading policy, and then comes to think of how grades might be fostering competition among his or her peers. This is a form of interviewee self-analysis.

The third step is condensing and interpreting. During an interview and after, a participant may feel some anxiety if they had been open about personal experiences. However, sometimes a participant may feel genuinely happy to talk with an attentive listener. Either way, it is important for me as the researcher, to condense what they said, and offer an interpretation so that they feel validated, and a chance for them to give me feedback on what I interpreted. In other words, this third step was used to debrief with the participant. Examples of questions for this step, is to ask if they have anything more they would like to add, or to ask them about their experience of the interview.

The fourth step is to analyze using memos and codes. This is where I reviewed and coded all the data.

The fifth step is to re-interview if needed, and to give them the opportunity to comment on my interpretations, as a member check for validity. I did not re-interview, but I gave the
participants a copy of their interview transcripts and my contact information in case anyone wanted to clarify something that was said. Only one teacher took me up on that offer.

Validity. Carspecken states that validity claims in social research center on the assertion that data and records are true to the actual occurrence, and that the analysis performed was conducted accurately (1996). Furthermore, Carspecken identifies three ontological areas that correspond to a different type of validity claim: (1) the objective realm, or the idea that validity claims can be associated with events that take place in the world, (2) the subjective realm, or the notion that some have privileged access, and that they are associated with “feeling, intentions, and states of awareness,” (3) the normative/evaluative realm, which implies that there are cultural norms that are taken up that shape what is “right, wrong, good, or bad” (1996). For the first ontological category, the objective realm, this means that if I were to make a claim about something that I observe, then it presupposes that others will observe it in the same way and be in agreement with me. For the second, the subjective realm, this connotes a level of privileged access of which a person can control whether to disclose their “emotions, desires, intentions” etc. to others or not. However, there is an implied understanding that upon disclosure, it is an accurate and honest representation of their true emotion. Carspecken asserts that member checks are a valuable way to support claims about subjective ontological categories. I performed member checks with the participants at Eastwood in order to ensure that my data was accurate, by supplying them with transcripts of the interviews I conducted with them, and allowing them to make adjustments if necessary. Only the GT teacher in this study took advantage of that option. For the third normative/evaluative realm, this is understood as an evaluative claim that I might make of what I observe at Eastwood. It is important that any claim I make in this realm is one that is respectful of the people I will work with at Eastwood.
Triangulation is a strategy that lessens the risk that my findings or conclusions will be biased, and will allow me to gain an expansive appreciation of my investigation (Maxwell, 2012). This is another way to manage threats to validity. I used a variety of sources and methods to achieve triangulation, including field notes from observations, interviews with teachers, and lesson artifacts. Furthermore, interviews with students and administrators helped with triangulation, in that I was able to gain insight into other points of view. The last method of triangulation was the time in which I took to gather data which was spread out over a several weeks during the fall semester.
Chapter 4: Findings

Two key areas that are important to the GT program are the identification procedures used by the district, as well as the procedures used to make programming decisions for each student, which are known as “Gifted Service Plans\textsuperscript{13}” (GSP), both described below. Also important for this group of students are their scores for language proficiency, measured by an assessment developed by WIDA\textsuperscript{14} called ACCESS, that is used to determine if a student is eligible to receive English as a Second Language services.

Identification Procedures for Eastwood’s School District

The district where Eastwood is located has a set of guidelines that are used in gifted and talented programming (see Appendix K for the entire document with the name of the district redacted for the guidelines used at the time that the four case-study students were identified). This form helps to keep track of the “body of evidence” documents for each student, outlines the district guidelines for the screening instruments used for elementary and middle school students, guidelines for newly identified students, and sample portfolio and performance items. Section one (“Cognitive Ability”) of this guideline shows which scores for each screening instrument are considered “strong” or “moderately strong.” Section two (“Achievement in the Curriculum”) similarly has guidelines that show which scores for each test are “strong” or “moderately strong,” and includes the state standards tests in Spanish, the English language Developmental Reading Assessment (DRA), the Spanish language Evaluación del Desarrollo de la Lectura (EDL), and the Scholastic Reading Inventory (SRI/Middle School). Section three (“Additional Indicators”) includes the parent inventory scores needed, as well as the Teacher Specialist

\textsuperscript{13} GSP is a pseudonym to protect the anonymity of the school.
\textsuperscript{14} WIDA is formerly known as World-Class Instructional Design and Assessment, and was established in 2003 by the U.S. Department of Education.
Checklist score needed, and a spot to fill in the indicator given if the student was self-nominated. The section called “Creativity/Creative Thinker” states that it stands alone as a separate category for identification. Furthermore, these guidelines state that a total of three indicators must be recorded, that every student must be screened on at least four instruments, that two of the indicators must come from the first two sections (Cognitive Ability and Achievement in the Curriculum), and that underrepresented populations of students must score one grade level above in the area of achievement in the curriculum. These guidelines are also used for keeping track of students that achieve at higher levels, but do not yet qualify for gifted programming, and are kept on a “watch list.”

**Gifted Service Plans (GSP)**

The Gifted Service Plan (GSP) (pseudonym) used in this district is in compliance with the state mandate for gifted education, and is required for each student who is identified as gifted to be in place 30-45 days from the time of formal identification. This is the document that outlines the services needed for each gifted student in the area(s) of their strengths, their yearly growth, how their academic, social and emotional needs will be met each year, and system to show “parent engagement and input into GSP.” The GSP is designed to be created collaboratively with the student, teacher, parent/guardian, and GT representative at the school, be an ongoing document, and chart the next steps for each area. The state guidelines for the GSP describe this as a standards-aligned approach that conforms to best practices in gifted education, is based on both state and national standards, include achievement goals based on a student’s area of strength, and include affective goals reflective of personal, social, communication, leadership, and/or cultural competency development. According to the state guidelines, the affective goals can be measured in these ways: the student can self-evaluate by documenting a
behavior (i.e. journal, graph, calendar); or a teacher, parent, expert evaluation (i.e. interview of student and goal attainment, observation of the master of the goal). Interestingly and important to note is that the GSP documents for these participating students do not specify the language in which they were identified as gifted, only the date. This information was provided separately.

ACCESS Scores for the Participating Students

ACCESS\(^{15}\) is a large-scale English language proficiency test that is administered from Kindergarten through 12\(^{th}\) grade with students that have been identified as English Language Learners. This test was developed to align with WIDA English language development standards and assesses the four language domains of reading, writing, listening and speaking. The range of scores are from “1” or “Entering” to “6” or “Bridging.” The WIDA website lists the following purposes for the ACCESS assessment:

- Helps students and families understand students’ current level of English language proficiency along the developmental continuum.
- Serves as one of multiple measures used to determine whether students are prepared to exit English language support programs.
- Generates information that assists in determining whether ELLs have attained the language proficiency needed to participate meaningfully in content area classrooms without program support.
- Provides teachers with information they can subsequently use to enhance instruction and learning in programs for their English language learners.

\(^{15}\) ACCESS is the acronym used for “Assessing Comprehension and Communication in English State to State” for English Language Learners (www.wida.us/assessment/ACCESS20.aspx)
• Provides districts with information that will help them evaluate the effectiveness of their ESL/bilingual programs.

• Meets, and exceeds, federal requirements for the monitoring and reporting of ELLs’ progress toward English language proficiency.

Unfortunately, ACCESS underwent a change for the 2016-2017 year on how the raw score to the proficiency level scores is figured, and their website states:

To meet language demands of college and career readiness standards, we are raising the bar for language proficiency. Students will need to showcase higher language skills in 2016–2017 to achieve the same proficiency level scores (1.0 – 6.0). This is the result of a process called standard setting. Standard setting determines the student performance required for each proficiency level through a series of decisions made for each grade level by expert panels of teachers as well as district and state English language learner administrators.

Standard setting is expected to impact ACCESS for ELLs 2.0 scores in 2017 in the following ways:

Some students' scores may go down

Fewer students may exit program support

This made it difficult to compare how the case study students’ language proficiency changed from the time they started in the GT program to the current year. Furthermore, WIDA includes a “score look up calculator” on their website that, “Allows you to enter 2016 ACCESS for ELLs 2.0 scores to determine what those scores would have been with the new score scale applied. You can then compare scores from 2015-2016 to 2016-2017 on the same scale and determine where students made progress. WIDA recommends that this tool be used for students
whose scores decreased or who did not exit the program as expected, but you should not need to use the calculator for all students.” I asked for permission to access the score calculator from WIDA\textsuperscript{16}, and was told that the score calculator is only accessible by employees of the school district, and is meant for a “general understanding” of the proficiency level a student would be at, had the score changes gone into effect earlier; that this tool was not to be used to examine student growth, and was not designed for analysis. Furthermore, WIDA recommended that educators use the ACCESS score along with other holistic measures, including evidence from the classroom, observations from previous teachers, and other test scores to determine how a student is progressing.

**Participating Student Profiles**

All four students in this case study were both bilingual and identified as gifted, all of them spoke Spanish primarily, and were English language learners. All the names of students, parents, and teachers mentioned in this paper are pseudonyms.

**Ana.** Ana is a 6th grader at Eastwood. At the beginning of this study, she had been identified as gifted for three years, in the areas of reading and writing. Ana’s identification records show that she was identified as gifted in two criteria areas in the Spanish language for reading and writing, and by the Teacher or GT Specialist Inventory as the third criteria. Ana’s ACCESS scores from the year she was first identified as gifted are listed in the table below, up to the current year.

\textsuperscript{16} Email communication with a customer service representative of WIDA.
Table 3. Ana’s ACCESS Scores from the first year she was identified as gifted to the current year.

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Listening</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Literacy</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Oral</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Reading</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Speaking</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Writing</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Overall</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Interestingly, her scores were dramatically different in reading: from the first year that Ana was tested with ACCESS to the last, her reading proficiency score went from a 5 to a 2, and in one year, from 2015 to 2016, her Speaking score went from a “1” to a “6.”

Ana’s GSP establishes the “setting” to be in a Dual Language Classroom, and lists “positive regard to own language and heritage” as part of the affective goal information, but other than those two details, no other mention of language is present in Ana’s GSP. Ana’s affective goals for the current year were, (a) to “demonstrate evidence of application of organization skills as measured by teacher observation and monthly self-evaluation”, and (b) “demonstrate an understanding of what it means to be gifted as measured by teacher observation
monthly self-evaluation.” The instructional actions and strategies included, (a) “parents and teachers would model these skills in a variety of situations,” (b) “will be encouraged to research and discuss what giftedness means and to craft her own definition of what it means to be gifted, using the support of her family, peers, and teachers,” (c) “will be encouraged to practice organizational skills at home, in school, and a variety of settings,” (d) “GT teacher will collaborate with school psychologist to provide students and families with appropriate resources related to their affective goals.” The people listed as responsible for progress monitoring were the GT teacher, the two participant classroom teachers in this study, and two other individuals at Eastwood. Ana’s GSP indicated that she uses creative problem solving, as well as logical problem solving strategies and analysis to reach solutions to real life problems, and that she uses critical thinking skills to solve complex problems effectively. The personal, cultural, and communication competence attributes that are to be developed according to Ana’s GSP, is self-efficacy, motivation, curiosity, connection of effort to success, positive regard for her own language and heritage, effective communication with diverse peers, effective use of interpersonal communication, balanced biliteracy/multiliteracy, and advanced development and maintenance of first and second language.

For Ana’s second goal in the academic area of reading, she will have “participated in discussions to draw evidence from the text to support with written and oral analysis after reading literary and/or informational text as evidenced by self, peer, and teacher evaluation rubrics, curriculum-based tests, and classroom performance.” The instructional actions and strategies to help achieve her reading goals would have included GT pullout including Socratic Seminar discussions, participation in classroom discussions, and choosing from self-selected and teacher
provided texts across multiple genres. The people listed as responsible for this is Sarah Anderson, the GT teacher and Sam Johnson, the social studies and language arts teacher.

The third academic goal in Ana’s GSP for the year is in the area of writing, where Ana will have been able to “write arguments to support claims with clear, organized and logical reasons and include relevant evidence, to use words, phrases and clauses to clarify the relationships among claims and reasons, and to provide a concluding statement or section that follows the argument presented as evidenced by self, peer, and teacher evaluation rubrics and curriculum-based tests.” The instructional actions and strategies that were used to achieve this were similar to the reading goals, with the inclusion of GT “push-in” to support with planning and writing style.

Ana’s GSP included a long list of parent and family responsibilities:
“Parent(s)/Guardian(s) will, participate in GSP communication; seek out and share information about community resources with schools; coordinate, facilitate, or provide transportation for content extension opportunities as needed; offer support with content extension opportunities or assignments; monitor student progress and satisfaction; commit to attend parent, teacher, student conferences to review academic achievement and social-emotional development; provide homework space and time; establish ongoing collaboration with teachers and the student, be as involved as possible; talk about homework with child; model mistakes and humor in fixing mistakes; expect school attendance; help child with time management; help child with organizational skills; celebrate school successes; assist child with realistic life goals and aspirations; seek opportunities to praise students on their effort rather than innate ability; and encourage child to equate effort with success.” The participants listed on Ana’s GSP included
herself, both her parents, the GT teacher, her math/science teacher, and her language arts/social studies teacher.

**Alberto.** Alberto is also a sixth grader at Eastwood. Like Ana, at the beginning of this study Alberto had been identified as gifted for three years. Alberto has two criteria listed as the identification factors: the state assessment scores, and the Spanish language assessment score. Below are Alberto’s ACCESS scores from 2014 when he was first identified as gifted, up until 2017. It is interesting to note that in 2015 and 2016, his speaking score went from a 1 to a 6 in one year.
According to his GSP, his areas of giftedness include reading, writing and mathematics. Alberto’s affective goal for the year were to “demonstrate evidence of communication skills when feeling misunderstood, and evidence of application of stress management skills, as measured by teacher observation and monthly self-evaluation.” The instructional actions and strategies listed for these goals include, “parents and teachers will model these skills in a variety of situations; will be encouraged to practice stress management skills at home, in school, and a variety of settings and to be open with peers, teachers, and family members when feeling overly stressed; will be encouraged to practice a variety of communication skills at home, in school, and a variety of settings; and the GT teacher will collaborate with the school psychologist to provide the student and family with appropriate resources related to their affective goals.” The people
listed as responsible include the GT teacher, the math and language arts teacher, and two other individuals at the school. The personal, social, cultural and communication competence attributes to be developed include: confidence, resilience, stress management, positive social interactions with age peers, positive social skills with adults; positive regard for own language and heritage; collaborative skills in diverse groups; effective communication with diverse peers; effective use of interpersonal communication; effective use of non-verbal communication; understanding of different oral, written, and artistic communication strategies; balanced biliteracy/multiliteracy; and advanced development and maintenance of first and second language.

Alberto’s academic goals in reading for the current year according to his GSP included being able to participate in discussions to draw evidence from the text to support with written and oral analysis after reading literary and/or informational text as evidenced by self, peer, and teacher evaluation rubrics, curriculum-based tests, and classroom performance. The instructional actions and strategies listed to accomplish this included GT “pullout” including Socratic Seminar discussions, participation in classroom discussion, and choosing from self-selected and teacher provided texts across multiple genres. The people listed as responsible included the GT teacher and the Language arts teacher.

Alberto’s third goal in academics was in the area of mathematics, where he would be able to “read, write and evaluate numerical and algebraic expressions, identify equivalent expressions, and justify their reasoning orally and in writing as evidenced by class work with teacher feedback, oral and written justification observations and curriculum-based tests.” The instructional actions and strategies listed to help accomplish this goal included, “GT ‘pullout’ including the use of hands-on equations and a variety of practice writing expressions and identifying equivalent expressions; participation in math discussion groups with academic peers,
maintain a math journal documenting mathematical thinking, and self-assess using standards-based exemplar rubric, to be monitored by the GT teacher and the math teacher.”

Alberto’s fourth academic goal was in the area of writing. The goals outlined are the same as Ana’s goals of writing, as were the instructional actions and strategies, and the people listed as responsible for the accomplishment of these goals.

The responsibilities listed in Alberto’s GSP of the parent and family were the same as Ana’s list. The participants in Alberto’s GSP included himself, his mother, the GT teacher and the language arts and math teachers.

**Rosa.** Rosa is also a 6th grader at Eastwood. Like the other students, Rosa had been identified as gifted three years prior to the start of this study. The three selection criteria for Rosa included the state standardized testing in English, the Spanish language equivalent, and the EDL testing, also in Spanish. Below is the table with Rosa’s ACCESS scores from 2014 and three years later in 2017. As of Fall of 2017, Rosa will be redesignated by the Instructional Services Advisory Team because she has demonstrated English language proficiency according to last years’ state standards testing. She will no longer receive English language development classes, and will move into a Spanish language development class, which is only offered at Eastwood because it is a dual-language school.
Table 5. Rosa’s ACCESS Scores from the first year she was identified as gifted to the current year.

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Listening</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Literacy</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Oral</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Reading</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Speaking</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Writing</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Overall</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Like Alberto, the three areas of Rosa’s giftedness listed in her GSP are reading, writing and mathematics. Rosa’s affective goal for her GSP for the year included, “being able to demonstrate evidence of application of organization skills as measured by teacher observation and monthly self-evaluation.” The instructional actions and strategies listed include having the parents and teacher model these skills in a variety of situations, that Rosa will be “encouraged to practice organization skills at home, school and in a variety of settings,” that she will be encouraged to “find alternative ways of self-motivation and engagement in topics that seem uninteresting at home, in school and in a variety of settings,” and that the GT teacher will collaborate with the school psychologist to provide her and her family with appropriate resources related to her affective goals.
Rosa’s academic goals listed in her GSP for reading, writing, and mathematics were the same as Alberto’s, including the instructional actions and strategies listed to achieve these goals. The responsibilities listed of the parents were also the same as the other students. The GSP participants were Rosa, her mother and father, and the GT teacher.

Martha. Martha, a sixth grader at Eastwood, had also been identified as gifted for three years prior to the start of this study. Like Alberto and Rosa, Martha’s areas of giftedness included reading, writing and mathematics. The three criteria that identified her as gifted are the same as Rosa’s: the state standardized testing in English, the Spanish language equivalent, and the EDL testing, also in Spanish. Below are Martha’s ACCESS scores from the first year she was identified, but she was exited from the ELD program after 2014, so she does not have ACCESS scores after that year.
Table 6. Martha’s ACCESS Scores for the first year she was identified as gifted.

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>6</td>
</tr>
<tr>
<td>Listening</td>
<td>6</td>
</tr>
<tr>
<td>Literacy</td>
<td>6</td>
</tr>
<tr>
<td>Oral</td>
<td>6</td>
</tr>
<tr>
<td>Reading</td>
<td>6</td>
</tr>
<tr>
<td>Speaking</td>
<td>6</td>
</tr>
<tr>
<td>Writing</td>
<td>5</td>
</tr>
<tr>
<td>Overall</td>
<td>6</td>
</tr>
</tbody>
</table>

Martha’s first academic goal is in the area of reading. Her GSP states that by the end of the current year, she will participate in discussions to draw evidence from the text to support with written and oral analysis, after reading literary and/or informational text, as evidenced by self, peer, and teacher evaluation rubrics, curriculum based tests, and classroom performance. The instructional actions and strategies that are recommended in her GSP include, GT pullout including Socratic Seminar discussions, participation in classroom discussions, and choosing from self-selected and teacher provided texts across multiple genres. The “setting” listed in her GSP for reading includes flexible classroom grouping, general education with resource room, and dual language classroom. The “Level One Content Options” for reading include differentiated curriculum, pre-assessment and curriculum compacting with extensions, and
thinking skills development. There are no “Level Two Content Options.” The “Depth,
Complexity, and Novelty” section for reading lists, advanced level resources, alternative
resources, pre/post testing, related studies, Socratic Seminars and research. The “Higher Order
Thinking Skills” section listed on Martha’s GSP includes, using logical problem solving
strategies to analyze and solve problems, using critical thinking skills to solve complex problems
effectively, and using research skills to investigate and present data.

Martha’s affective goals for the year were that she would “demonstrate evidence of
application of perfectionism management skills, and will practice group presentation skills as
measured by teacher observation and monthly self-evaluation.” The instructional actions or
strategies listed were that “parents and teachers would model these skills in a variety of
situations,” that she would be encouraged to “practice perfectionism management skills at home,
in school, and a variety of settings, by prioritizing what is more important and having
conversations around feelings associated with perfectionism,” also, “will be encouraged to
practice small group presentations at home, in school, and a variety of settings,” and that the GT
teacher would provide the student and family with appropriate resources related to their affective
goals from the school psychologist. The people listed as GSP participants included Martha, her
mother and father, the GT teacher, and the math/science and language arts/social studies
teachers. The “setting” listed on the GSP for Martha includes flexible classroom grouping, and
general education with resource room. The “Higher Order Thinking Skills” listed include using
creative problem solving to reach solutions to real life problems, using logical problem solving
strategies to analyze and solve problems, and using critical thinking skills to solve complex
problems effectively. The “Affective Goal Information” for Martha states that the personal
competence attributes that will be developed include confidence, resilience, openness to risk-
taking, dealing with perfectionism, and stress management. The “Leadership Competence Attributes” to be developed include group communication skills. The “Cultural Competence Attributes” to be developed include positive regard for her own language and heritage, collaborative skills in diverse groups, and effective communication with diverse peers. The “Communication Competence Attributes” to be developed include the effective use of interpersonal communication, effective use of non-verbal communication, balanced biliteracy/multiliteracy, and advanced development and maintenance of first and second language. Martha’s third academic goal is in the area of mathematics, and by the end of the year the GSP states that she will read, write and evaluate numerical and algebraic expressions, identify equivalent expressions, and justify reasoning orally and in writing as evidences by class work with teacher feedback, oral/written justification observations, and curriculum-based tests. The “Instructional Actions/Strategies” listed for math include GT pullout including the use of “Hands on Equations” and a variety of practice writing expressions and identifying equivalent expressions, participation in math discussion groups with academic peers, to maintain a math journal documenting mathematical thinking, and to self-assess using a standards-based exemplar rubric. The “setting” for math includes flexible classroom grouping, general education with resource room, and a dual language classroom. The “Level One Content Option” for math includes differentiated curriculum, pre-assessment and curriculum compacting with extensions, and thinking skills development. There are no “Level Two Content” options. The “Depth, Complexity and Novelty” section lists advanced level resources, alternative resources, pre- and post-testing, related studies, differentiated questioning techniques and real world applications. The “Higher Order Thinking Skills” section lists using logical problem solving strategies to analyze and solve problems, and using critical thinking skills to solve complex problems.
effectively. Martha’s fourth academic goal in her GSP is in the area of writing, and by the end of the year it states that she should be able to write arguments to support claims with clear reasons and relevant evidence to introduce claims and organize reasons with clear evidence, support claims with logical reasoning and relevant evidence using accurate and credible sources demonstrating an understanding of the topic or text, use words, phrases and clauses to clarify the relationships among claims and reasons, and to provide a concluding statement or section that follow the argument presented as evidence by self, peer and teacher evaluation rubrics and curriculum based tests. The “Instructional Actions/Strategies” listed for writing includes GT pullout and push-in including support with planning and writing style, and choosing from self-selected and teacher provided texts across multiple genres to analyze in writing. The responsibilities listed of the parents were also the same as the other students.

**Participating parents**

Three parents of the four students agreed to be interviewed for this study. One of the parents responded to the interview by email. One parent and I had difficulty finding a common time to meet for an interview, and we met briefly for a few minutes, before she got a phone call that there was a death in the family and she had to leave to go to Mexico the very next day. Because of the IRB protocol time limitations, the time ran out for me to be able to interview her again.

**Rosa’s mother, Alejandra.** Alejandra is a homemaker, speaks Spanish primarily, but has been trying to learn English, therefore I conducted the interview in Spanish. She said that she had been in this country for 20 years, and has been trying to learn English the entire time. At the beginning of the interview, Alejandra told me that she was confused about the details regarding the gifted program in general. At first she thought that the reason why I wanted to interview her
was because I was going to give her more information about the gifted program. After I explained to her that I was interviewing her for this study, she agreed to participate regardless. I asked her if she understood what gifted means, and she said that it meant that a student might learn very easily, that often times they didn’t need to study for exams, and that while in the classroom receiving instruction, they were like “little sponges absorbing everything.” Alejandra said that her daughter has been in the program for several years now. I asked Alejandra what benefits she saw in having her daughter be in the gifted program, and she described to me a science competition that she participated in where she competed both as a team and as an individual. She was very happy that her daughter was able to showcase what she learned, that she was able to run a science experiment by herself, that it allowed her an opportunity for her creativity to be highlighted, and that it motivated Rosa to do her very best. Alejandra said that her daughter likes to learn, and likes to participate in the after-school club (for gifted students). As a parent, she tries to motivate her daughter to always give it her best try (“échale ganas”), and despite the fact that Rosa is in 6th grade, Alejandra tells her that she needs to think about a career she might want in the future, and to start preparing for it in school. Alejandra said that she praises all her children whenever they receive good grades on their schoolwork, and she tells them to always help the students at their school who have just arrived in this country by helping them understand the English language. She asks them to put themselves into the shoes of the newcomer student, and reminds them that she too does not understand much English, and wants them to always be kind and helpful to them, just as they are to her. Spanish is the language that is primarily used in their household, although her children will often speak in English to each other. Alejandra said that it is very important for her that her children are involved in activities at school, whether it be a sport, or any other kind of activity. She thinks that by participating in
activities, that it helps them in their academics. Alejandra has been very happy with the gifted program in general, and is happy that her children continue to be outstanding in their academics. Another aspect which she believes is important to a child’s academic success, is the support of a parent. She described how she has observed some parents merely dropping their children off outside of the school, sending them off without either a kiss or encouraging word to do their best. She thinks that a parent needs to do much more to support their children while they are in school. In addition, Alejandra said that she and her husband find it important that their children “not lose their Mexican culture.” They also want to be sure that their children maintain and receive instruction in both Spanish and English. She said that when they get to the high school level, they will be free to study another language if they wish, but in the meantime, she wants them to focus on Spanish and English. Alejandra also added (English translation follows),

Pero siempre yo les inculcó el estudio. Les digo que no es mejor futuro que el estudio. O por tan solo pónganse a pensar en Uds. Que quisieran algo, y papi y yo no podemos darle todo. Sin embargo, si Uds. estudian para tener un buen futuro, o sea porque nosotros no lo hicimos. Les digo que Uds. puedan dar a sus hijos lo que les pidan. Pueden tener aquí una casa no vayan sufriendo y es lo que siempre les recomiendo más les digo el deporte está muy bueno y saludable porque verdad tengo miedo de que mis niños se vayan ir por el lado de los vicios eso no me gustaría siento que me dolería mucho.

[But I always emphasize to them the importance of studying. I tell them there is no better way for their future, but to study. At the very least, think of yourselves. If they have ever wanted something, their dad and I, we have tried to give them everything. Of course, you kids will have to study to have a good future, in other words, we didn’t do that. I tell them, that way you can give your kids everything they’d like. You can have a house, and
not have to suffer, and that is why I always recommend to them to take up a sport, because participating in a sport is very good and healthy, because honestly, I am afraid that my kids will fall prey to the vices, I would hate that, and it would hurt me so much.]

Alejandra said that she comes from a family that includes teachers, mechanics, and a veterinarian in Mexico. She studied to be a secretary herself while she was in Mexico, but never finished her studies, because she was encouraged by her husband to stay home to take care of their children while they are in the United States.

Ana’s mother, Mercedes. Like the previous parent, Ana’s mother, Mercedes admitted being very confused about the gifted program and its’ goals. She said she received some communication from the school the year prior, but then did not receive any more information until she got a request to participate in this study this year. She said she wanted to learn more about what “gifted” meant, beyond knowing that it means that students are more advanced in certain areas. I gave her a brief explanation of the gifted and talented program, and outlined the reasons for this study. Mercedes said that her daughter Ana has been in the gifted program for a couple of years, but had not received much information about it during that time. Mercedes said that Ana is learning English as a second language at school, and that she finds it difficult at times to keep up. Ana tells her that the other students “make fun of her” if she doesn’t use the English language correctly. Mercedes said that it is both embarrassing and painful for Ana when she gets ridiculed about her English-speaking abilities, but encourages her to keep trying regardless, because that is the best way to learn: from mistakes. Because Ana is hesitant to make a mistake in front of her peers, she does not speak out in class much, and Ana’s teachers have recommended that she participate more in the classroom. Her mother thinks she knows the content well, and can communicate her knowledge in Spanish, but does not, to avoid criticism by
her peers. Mercedes says that she tells her children often that they will not inherit anything from their parents, other than the opportunity to get a good education in school. Mercedes said (English translation follows),

Y ella tiene que echarle ganas para que no sea igual como nosotros limpiando y todo eso y, pos ella dice que ella quiere ser doctora primeramente dios y apoyarla ella hasta donde ella quiere. Pero yo creo por eso ella le hecha gana porque, mire como yo le digo mírese a nosotros. ¿Nosotros estamos trabajando o sea Ud. no quiere eso verdad? Este tiene que estudiar. Y en esa manera…Quiere ser doctora, y que lo siguiera teniendo y pos apoyarla como le digo a sus estudios si eso quiere mija adelante no mas estudie porque yo siempre le digo estudie. Échele ganas. Si no estudia, que no va a llegar a ser nada va ser igual que yo va a andar limpiando baños y todo eso y Ud. no quiere eso. Entonces échale ganas a la escuela.

[And she is going to have to make the effort so that she doesn’t end up like us cleaning and everything, and she says that she wants to be a doctor, God willing, and we’ll support her as much as she needs. But I think that because of that, she puts forth the effort, look, like I tell her, look at us. We are having to work hard, and you don’t really want that do you? You need to study. And that is the way...She wants to be a doctor, and I want her to keep wanting that, and to support her, like I tell her, with her studies. If that is what you want, go for it, just study, I always tell her, study. Give it your all. If she doesn’t study, then she won’t amount to anything, and will be like me, cleaning bathrooms and all, and you don’t want that. So give it your all in school.]

Mercedes said that as parents, they help her as much as they can with homework, that they don’t really have to push her to keep up with her academics, and that she takes the time at home to do a
good job with her homework. When they encounter difficulty with something in her studies, they will use the computer to search for answers, or the meaning of a word. Mercedes wishes for her daughter that she become more confident in herself, and to not be afraid of making mistakes. Spanish is the language that is primarily spoken in their home, and when her children speak together, they will use a mixture of both Spanish and English, and will listen to music in both languages. She encourages her children to speak English when she is around, so that she can learn slowly by just listening to them use the language.

**Alberto’s mother, Sandra.** Sandra was not able to meet with me in person for an interview, but she submitted her answers to the interview questions by email, and in English. She indicated that Alberto has been in the gifted and talented program for several years now, but that she has not noticed him working on anything different from the other students, such as an extension activity. Sandra said that Alberto gets motivated when there is a lot of interaction in a project in school, and feels that he learns best when activities and lessons spark his creativity, and he can think “outside of the box.” Sandra said that Alberto likes to stay busy at home: playing video games, recording videos, board games, and in general, activities that are engaging. When Alberto needs help with his homework, Sandra said that she tries to explain things in different ways, and use different examples. When I asked her what her expectations were for him for his academic future, she said,

I want my son to be successful in everything in life and to know that it takes work and dedication to accomplish things or to move from one step to another. I want him to know that he is smart, but that he doesn't know it all and to never stop learning.
Although Sandra wrote out her answers in English to the interview questions that were supplied in both languages, she said that more Spanish than English is spoken in their home. She also said that Alberto tends to speak to his mother more in Spanish, and to his brother more in English, and that she feels that his academic language is stronger in English, now that he is in a dual language school. She did not mention anything about his Spanish academic language ability, even though a dual language school is supposed to develop both languages equally. She ended the interview questions with, “We celebrate success and failures as a family and we support each other.”

**How the theoretical framework helps inform the study.** The theoretical framework for this study helped to make sense of these sets of findings in the following way: Lev Vygotsky set forth that sociolinguistic theory explains how learning takes place in a social environment, and also helps to explain how interactions with people and culture shape a person’s mental abilities. In other words, these parents imply that they have hopes that their child will follow their example and guidance, and will eventually be able to accomplish being successful on their own. Furthermore, these parents instinctively knew that their children would benefit from after school sports and activities, just as sociocultural theory puts forth that these types of interactions influence cognitive abilities.

**Participating Teachers and Administrators: Background and Context**

Two classroom teachers (Sam Johnson and Karen Wilson, pseudonyms) participated in this study, and both were interviewed as well as observed while teaching the participating students. Both were given a teacher training questionnaire (see Appendix K) to outline their expertise and education, but only one of them returned the document. The following is background
information on these participating teachers, as well as the GT teacher, principal and music teacher, to provide context to the study.

**Karen Wilson, math and science teacher.** Karen holds a bachelor’s degree in biology and a master’s degree in education from the same state in which the study takes place. She speaks English and Spanish, and describes her Spanish speaking fluency as moderate to high. She holds a professional teacher's license in elementary education, but does not have any endorsements in ESL, foreign languages, or gifted education. When asked on the questionnaire about her knowledge of the following items listed below, Karen responded “N/A.” The questions were open-ended, and Karen’s choice of using “N/A” is not clear, but may mean that she did not receive training in the following areas because she was not endorsed as a gifted educator, and therefore this training is not applicable to her as a classroom teacher:

- If you have completed an endorsement for a gifted education specialist, please check all areas of competency that were included below:
- All characterizations of gifted and talented, including minority cultures and languages.
- Knowledge of traits and needs of all gifted and talented students from other cultures and language minorities.
- Knowledge of special populations of gifted and talented students, including the culturally and linguistically diverse.
- Knowledge about the nomination, identification, and assessment processes for culturally and linguistically diverse gifted students.
- Knowledge about the types of instructional strategies and differentiation instruction needed to meet the needs of culturally and linguistically diverse gifted students.
- Knowledge about how to monitor, assess, and evaluate ongoing instructional programs for culturally and linguistically diverse gifted students; their impact on students’ achievement and progress; how to provide on-going modification to a student’s learning plan, as indicated.
However, Karen describes her experience of working with linguistically diverse students as extensive: 20 years in the same school district, and from her years as a volunteer working in Panama. Additionally, all teachers in this school district who are qualified to teach as ELA-E or ELA-S are required to take 150 hours of ESL/language acquisition classes.

Karen describes herself as not particularly interested in gifted education, beyond recognizing that some people have the potential to learn things quickly, or learn things at an early age. In order to best serve gifted students, as an educator she thinks it is important to know where each student is at developmentally, so that they are not “bored to death” in the classroom. She also thinks teachers should know what skills students have mastered and where their interests lie, especially when working on self-guided projects. When asked what type of professional development or training is needed to teach gifted bilingual students, she wasn’t sure about the gifted piece, but she did have some ideas about the bilingual teaching portion of it.

Karen felt that the support they received in GT this year was much better than the year previous, because they were able to plan as a team, and be strategic about the kinds of exploratory activities specific to all the GT students (which were not specified in the interview). Karen describes her main strategy to help challenge her gifted bilingual students as letting them to “grapple” with a topic on their own. In other words, giving them the opportunity to try new things, and to process through a problem individually, while providing them with leveled questions to guide them through the process. Furthermore, in her math class, students start off working on problems in heterogeneous table groups, but then move into flexible, but mostly homogenous groups based on their math skills. Karen sees benefits to both: heterogeneous grouping allows for “language role models” and to have the GT students be the “idea generators” to help other students who struggle; and homogeneous groupings allow the GT students to “push
each other.” It was important to note that even though my questions were specific to the gifted bilingual students, Karen seemed to conflate the two groups (gifted students and gifted bilingual students) into one when describing her instructional strategies.

I asked Karen what challenges she has faced when attempting to differentiate instruction for her gifted bilingual students. Karen admittedly stated that she didn’t have an answer to that specifically, but said that some of the challenges that she sees in a dual-language math classroom, are associated to the language used. A student might know the math concept well, but depending on the week (Spanish is used for instruction on certain weeks, and then it switches to English), a student might find it difficult to express themselves if they are stronger in one language over the other. Even if a student is comfortable with the language of instruction, some of the vocabulary used might not be familiar to them (she gave the example of “rueda” or circle, can be used for “Ferris wheel” in English.) Furthermore, she said that students are required to speak in the language that is being used that week, and sometimes they would get frustrated and try to speak in the language that was strongest for them, in which case she would gently redirect them back to the target language. This challenge however, did not seem to be related to whether they were identified as gifted.

When I asked Karen to tell me in her opinion what a school needs in order to meet the needs of gifted bilingual students, she struggled to find an answer due to her lack of training and knowledge in that area. She said she usually likes to defer to the GT instructor, whom she sees as the expert. However, she feels that adequate time planning with that person is important, resources and technology for extension activities, connections to real world careers and people in the workforce, and allowing for a variety of extensions to avoid boredom. Furthermore, Karen
believes that it is important to have a positive partnership with parents, beginning with a phone call at the beginning of the year to establish open lines of communication.

Sam Johnson, Social Studies and Language Arts teacher. Although Sam did not return a teacher training questionnaire, from his interview he indicated that early in his career he was not interested in being a teacher, and that he received a bachelor's degree in Criminal Justice with a minor in Spanish. Although he initially was interested in criminology, he came to the realization that he strived to have a positive impact on students and felt that being a teacher would best help them not end up in the criminal justice system. His first extensive exposure to foreign language was his experience studying abroad in the Dominican Republic. This positive experience prompted him to take a methods of teaching foreign languages course, as well as an alternative licensure in teaching Spanish at a small state college in the eastern part of the United States. Sam taught for ten years as a middle school Spanish teacher, and has been in this position as a language arts and social studies teacher for only two years. Sam credits his experience working as a school administrator for his knowledge of differentiation and scaffolding in the classroom. He believes that “all students are gifted and talented in a sense” and first became interested in gifted education because of the experience he had with his own child, whom he felt displayed gifted characteristics. In his opinion, he feels that the most important things to know as a teacher in order to serve gifted students is to (a) know which area(s) the student is both gifted and deficient in, (b) to have a good understanding of the specific interests of each student, (c) and lastly to have “baseline indicators” to be certain that they are at grade level in all areas, and getting the support they need. Teaching in a dual language school, Sam also recognizes the difficulty some gifted students might experience if they are still learning English, and feels that these students will need extra support as they learn a new language. When asked what type of
professional development he thinks a teacher needs when teaching gifted bilingual students, Sam felt that learning how to differentiate and scaffold the lessons would be the most important. Additionally, he feels that it is important to know which supports may not be needed, and in fact be detrimental (such as providing sentence frames) because a student may not extend themselves if given too much support. When asked about the guidelines that are in place at this school to help guide teachers to best meet the needs of their gifted bilingual students, Sam lamented that there aren’t many. He then described a rubric that teachers use for differentiation, and that he uses the “distinguished category” from the rubric to challenge his gifted students, such as giving them extra credit for researching a historical perspective of terms and ideas from books that they read as a class. Sam has around 20 students in his classes that are identified as both gifted and who are bilingual in Spanish and English. When asked about the strategies he uses in the classroom to challenge gifted bilingual students, he said that he “celebrates” the extra effort that those students put forth in their writing, such as citing evidence, when students give more information than what is required by the assignment. Because Sam did not say whether he felt this strategy was beneficial to all students, I assumed he meant that he used this strategy specifically for challenging gifted bilingual students, as the question was asked. When asked about the challenges he faces when attempting to differentiate for his gifted bilingual students, he felt that the “excuse of boredom” was a difficult issue for him in the classroom. He finds it difficult to keep the gifted students busy if they finish their classroom work early. He uses a technique he calls “productive struggle” in the classroom he feels is beneficial to these students so that they get used to being challenged. Sam also identified another area of support that is needed for his gifted learners is the “academic social piece”:
And I think the last part with my students this year, including my gifted and talented students is adding in the social piece, the focused academic social piece. So like how can I be social and demonstrate my skills at the same time? The academic, the vocabulary I’m using is academic. I’m being free to express my ideas at a really high level but then I am doing it within a collaborative group. And not get into the middle school socialization process of, “what are you doing tomorrow?” So something that all students are struggling with but I especially notice it with my gifted and talented students.

In the interview, I asked specifically about the gifted bilingual students, however, it seems that Sam, like Karen, would often conflate the two when talking about their instructional needs: gifted bilingual students, and the general group of gifted and talented students. The one exception to this was that Sam felt that a bilingual gifted teacher would be necessary to meet the needs of gifted bilingual students. Other aspects he felt were important: a GT teacher that is able to spend time collaborating and planning with teachers, ideally more than just quarter-time employed, a specific GT curriculum in Language Arts and Math; a push for those students to think critically and to challenge their writing skills; and lastly, an understanding by the student of what it means to be gifted.

An important part of addressing the issue of underrepresentation of bilingual students in gifted education, is a teacher's’ ability to be able to recognize gifted characteristics. When I asked Sam what he looks for when recognizing giftedness in bilingual students, he said that he: looks to see if a student is strong in both languages equally, looks to see how they respond to difficulty in their lessons, and examines how they view their own giftedness. The literature in gifted education recognizes that often times teachers are not given enough training or guidelines to be able to recognize giftedness in bilingual students. Sam’s response to this question shows a
deficit in the knowledge of characteristics of gifted bilingual students. To his defense, he does not hold an endorsement in gifted and talented education, and therefore would need extra training from the school district. However, the literature in gifted education also shows that teachers are in a unique situation to be one of the first to recommend a student to the next level of the identification process. Furthermore, Sam teaches at a dual-language school with a high number of bilingual students. This positions him to have an even greater need for this type of training. Another disadvantage is that although Sam is bilingual, he is a second-language learner himself in regard to Spanish, and he has a limited knowledge of the background and culture of the students he teaches. This means that he may not be keen to all the minute gifted characteristics that a bilingual student might have. However, Sam felt that the cultural piece is important to note too:

I think there’s a cultural piece that comes into place too. The Hispanic culture, the Vietnamese culture, and making sure that when we are recognizing gifted students that we honor the culture that they are from especially when we are engaging with the parents or the students themselves. Because some of that might be a barrier also to them really achieving.

In other words, Sam feels that it is important to meet the student in the place that they are from, so that teachers can better understand the individual needs of the student.

**Sarah Anderson, Gifted and Talented teacher and coordinator.** Sarah Anderson received a Bachelor of Arts from a small, private liberal arts college in the Southeastern United States, and a Master’s degree in Curriculum and Instruction at a public research university in the Western United States. She is certified to teach in both English and Spanish in the school district, and holds an English Language Arts- Spanish (ELA-S) endorsement. She is certified in both
elementary education and as a GT coordinator. This is her first year working as a Gifted and Talented teacher and program coordinator. Much of the professional development she has participated in while working in this school district has focused on culturally and linguistically diverse learners. Sarah first became a teacher through the Teach for America program directly out of college. She has experience teaching through an internship in the Dominican Republic early on in her career. She had not considered teaching in gifted and talented education until she started working with a GT teacher at an elementary school where she had been a third-grade elementary school teacher for several years. She felt that through her experience working in a school with many students who were being served through the Response To Intervention (RTI) process, that she had a strong background in differentiating for students who were at different achievement levels. She also taught students for five years in a school, where 98% of the students were native Spanish speakers, and then for two years she taught in a school where there was a split in the student population between Spanish and English bilingual students, monolingual Spanish speakers, as well as monolingual English speakers. This required quite a bit of differentiation in her instruction, and it also helped her to develop her Spanish speaking abilities even further.

When asked what giftedness means to her, she was honest in saying that it was somewhat of an ongoing process for her to be able to explain it in a meaningful way. She was very familiar with the state definition of giftedness, and said that she would often explain to students what giftedness means. She said that she would tell them that it mostly means that a student is very strong in a certain academic or core subject area, leadership or creativity, and that a student longs to know much more about a subject than what the curriculum calls for, as well as have targeted
skill development in those areas. She found it interesting that the state definition of giftedness varies from state to state.

Sarah’s position as a GT coordinator was a new one for her, both at this school, and professionally. She was responsible for 37 sixth, seventh, and eighth grade students who are identified as gifted at Eastwood. These students were all identified as gifted in reading, and a few in math and writing. Her goals as a GT instructor were to connect the lessons and units with their classroom curriculum, and have them either examine a subject at a deeper level, or she would have them brainstorm other areas of interest related to the topic. The schedule for her support of these students changed weekly, and was dependent on the classroom schedule: she would “pull” students out of the classroom two days a week for GT support for about an hour, and every other week she would “push-in” to the classroom, also for about an hour. Sarah was very happy with this arrangement for multiple reasons: she had an opportunity to see what the students were doing in the classroom, she was able to develop a relationship not only with the students, but with the teachers as well, and she was able to provide feedback to the students on strategies that they are doing well, and areas of improvement. Sarah used both Spanish and English for instruction and support of the students. She was grateful to the openness of the teachers to allow her to be part of the classroom.

In addition to working with the gifted students, Sarah’s responsibility to the rest of the student body was to work with students that had gifted potential that were referred to her by the teachers. In this way, she began collecting a body of evidence for those students that showed potential. Furthermore, Sarah was responsible for doing the screening assessment using the Naglieri Nonverbal Ability Test (NNAT) for students in Kindergarten, second and sixth grades during the first few weeks of the school year in the fall term. The publisher supplies instructions
on how to administer this nonverbal test in English or in Spanish, and “home reports” are available in English and Spanish. However, there is not a Spanish language version of the test, it is only available in English.

The NNAT publisher describes this test as a …brief, nonverbal measure of general ability that is administered to groups of students in grades K-12… based on a method that is supported by nearly a century of research. This research has demonstrated that a person’s general ability can be measured validly and reliably without requiring the student to read, write, or speak… Each student’s ability is measured using a set of items, sometimes referred to as a figural matrix, containing pictures that form a pattern… The items are considered nonverbal because designs requiring spatial analysis are used and verbal knowledge and skills are not required. Figural matrices are used instead of questions that require factual knowledge such as vocabulary, mathematics, and reading skills so that the test is appropriate for a wide variety of students. Because all of the information needed to solve each question is presented in the item, the test scores are not influenced by a student’s verbal and quantitative knowledge. This approach not only provides a reliable and valid evaluation of any student’s ability, but also the use of figural matrices makes the test useful for culturally and linguistically diverse populations (see Appendix A for more information on the NNAT).

Students took the assessment in the computer lab at school, or on laptops in the classroom. The Kindergartners were tested in small groups of five, on laptops, over a period of a few days. Sarah also worked with one to two students from four different grade levels (K, 1, 6, 7) on independent research projects of their choice:
Teachers are typically allowing them to work on this in class when they show mastery on the objective (using the strategy of compacting) rather than having them do more of the same work that they have already mastered. Students decided on a topic of interest and I am providing them with resources like books, websites, etc. to allow them to do this research independently and at the end of the year they will present to their class.

One last way that Sarah supports students that are in the 4th and 5th grade “Challenge Groups” is that she offered an after school club for Destination Imagination (the name of this club is based on the guidelines set forth by https://www.destinationimagination.org an educational non-profit faction of the Odyssey of the Mind Organization17, which uses standards-based challenges developed by industry experts and educators). This club incorporated teamwork, leadership and creativity into student-generated, student-led solutions to different challenges. They presented their work at a tournament in the spring of 2017, with hopes of continuing this club into the following year.

I asked Sarah about her confidence in the identification plan of gifted students set forth by the district, and she said that she felt good about the plan, but since the process was new to her this year, she said she was still working on the confidence she had in herself for implementing it. To become proficient, Sarah was working on a Professional Development Unit (PDU) in which she is part of a team of 30 GT teachers working with GT district coordinators. This team is divided up into groups of 4-5 teachers and charged with identifying students per team using the new pathways set out by the district. In the past, a teacher would use a student’s assessment scores to begin the process of identification, next the student would take a paper

---

17 At the time of this report, materials such as the program guide, and “long-term problems” were being translated into Spanish. This information was from a phone call to the state volunteer office.
version of the Scales for Identifying Gifted Students (SIGS), and if everything aligned, then it was submitted to the central district team for review. From feedback given to her from other teachers, she said that the consensus is that the identification process has become more stringent, with specific benchmarks for students, and a flowchart that guides the process of identifying a student in different ways. If a teacher participates and completes this PDU, they become district certified to be gifted identifiers.

In order to place the gifted students into appropriate services at Eastwood, Sarah worked with the teachers at the beginning of the school year to build a “push-in” and “pull-out” schedule. When Sarah was interviewed for the job, the principal was particularly interested in her support in the classroom, to build relationships and collaborate with the teachers to ensure that students were getting the support they needed individually. I asked Sarah about the system that is in place to ensure that all underserved students are equitably represented in the GT program, and she felt strongly about the new collaborative method of identifying gifted students as a team, the universal screening assessment (Naglieri), the SIG, teacher and family input, as well as observational data. She credits the strong leadership in the district office that understands the population of students that attend their schools, the history of underrepresentation of certain groups in gifted education, and all the strides that teachers and administrators are taking to make the identification of gifted students more equitable. Sarah added,

One more way that [this state] is working to support the identification process and programming for underserved populations is through [the state association for gifted and talented education], specifically the [team that looks at diverse talent development]. Every year [they have] a conference and they offer a scholarship for teachers in Title I schools working with culturally and linguistically diverse students. I am hoping to apply
for the scholarship to attend the conference in May and to be paired with an additional mentor.

One of Sarah’s goals for the year was to do research on an assessment that is entirely in Spanish to use with students whose language is primarily Spanish. Another goal was to conduct informal professional development opportunities for teachers to help them understand what characteristics to look for when nominating gifted students. Due to her workload as a half-time teacher, she was only able to conduct one 30-minute presentation to the teachers during a regularly scheduled staff meeting in February. The topics covered included GT characteristics (general), the identification process, discussion of the programming that she had offered thus far at Eastwood, and discussion about the different screening methods being done at that school. Although Sarah was given opportunities to participate in district PDU’s, she was not invited to take part in the district’s strategic planning in her position.

Another goal that Sarah set out to accomplish for the year was to ensure that communication to parents about the gifted program was robust, and offered in two languages. She had already made many phone calls at the beginning of the year to introduce herself to parents of students already in the program and to parents of students that had been recommended by a teacher to the program. Sarah also sent home an introduction letter to parents, and planned on keeping parents abreast of any developments in the program. At the end of the year, she offered a “GT Night” on two separate days so that parents had an opportunity to hear about what students did for their independent projects, as well as plans for the upcoming year. None of the parents who participated in the study attended the night that I attended. She also sent home lists in both Spanish and English of characteristics that parents can watch out for as well as phone calls to ask them about the academic goals they might have for their children for the year, areas
of struggle, and any affective needs or goals for their children. Feedback that Sarah had already
gotten at the beginning of the year, was that students, parents and teachers were happy with the
increased availability of the GT teacher from the year before, but the parents interviewed for this
study had questions and were somewhat confused about the GT program details. Although Sarah
is only in a half-time position, it was an improvement from the year before, when the GT teacher
was employed only quarter-time.

**Lisa Martin, Principal of Eastwood.** Lisa has been in the field of education for thirty
years, and at Eastwood for the past sixteen years. By the end of the school year, she took a leave
of absence, and then retired. She had been a gifted and talented student herself, and when asked
what giftedness means to her, she said that she believed there are gifts in every child, and that
gifted students are able to excel very easily. She described the process to nominate and identify
students for the gifted program as largely teacher-initiated and led, along with district screening
and state standards assessment tests. Lisa started the after-school Mariachi music group almost
from the beginning of her time at Eastwood. This group includes students from grades 3 - 8 who
sing, play instruments, and perform at locations throughout the city, with the help of the music
teacher, Michelle Walker. In her position as the director of this group, she has nominated
students to the GT identification process, based on their musical giftedness. Lisa strongly
believes that teachers should have a robust knowledge of the Spanish language in order to
accurately assess whether a student should be nominated to the identification stage of the gifted
program. She believes that ideally the teacher doing the nominating should be a native Spanish
speaker themselves, and she recognizes that a student might not be strong in the English
language, but still have gifted characteristics, and be able to exhibit them in the Spanish
language. Since Lisa has been the principal at this school for many years, she feels that she has a

123
very good relationship with the parents and families of the students, and that if feels more like a
family, and a tight-knit community. The most challenging aspect of providing services to their
gifted bilingual students according to Lisa, is not having all the resources they need: Spanish
language text and materials, and highly qualified teachers who are native Spanish speakers, that
can teach their content area easily in that language. According to Lisa, the teachers that have
been hired at Eastwood for the most part are operating and teaching as second language learners
in Spanish.

Michelle Walker, music teacher and co-director of the mariachi music group.
Michelle has been teaching music at Eastwood for 13 years. She received her bachelor’s degree
in Vocal Performance from a public state college, and a Master of Arts in Education from a
public university, both in the Southwestern United States. She also holds a principal’s licensure
from a four-year private university. Like Lisa (principal), she too has been with the mariachi
program since its’ inception. When speaking about the mariachi group, she is very proud of the
students and their abilities. She believes that allowing the students this musical opportunity is
important not only to their academics, but also as a way to connect to, and honor their culture.
She believes that in order to teach gifted students successfully, a teacher must be able to
differentiate lessons, based on ability and interest. In her music classes, the strategies that she
uses to challenge students that she feels are ready for it, is by having them write longer, or
higher-level musical compositions, and to feature their musical abilities both vocally and
instrumentally in quarterly performances. In differentiating instruction for gifted students, she
says that she may allow a student to advance in content, such as that found in the next grade
level. She has also had gifted students research an interest of theirs to a deeper level, and has
allowed them to lend their expertise to other students. The strategies that she shared are ones she
uses for gifted students in general, and did not have specific strategies that she might use for students who are gifted and bilingual. She is not aware of any guidelines that are in place that help guide teachers to best meet the needs of gifted bilingual students, other than the occasional presentation by the GT teacher of the school. Lastly, she did not have specific examples for what she thinks a teacher needs in order to teach gifted bilingual students, other than having “one-on-one” time with the student, and being able to spot musical giftedness in her classes.

**How the theoretical framework helps inform the study.** The theoretical framework for this study helped to make sense of these sets of findings from the teachers in the following way: one way that sociocultural theory can help teachers provide instruction that can be tailored to a linguistically and culturally diverse student population is employing collaboration practices into the classroom instruction, as well as allowing co-construction of knowledge and fostering a learning community environment. The teachers at Eastwood implemented collaboration opportunities in their instruction as well as allowed independent study opportunities for the students in the gifted program. Both of these practices are central to sociocultural theory (McGlonn-Nelson, 2005).

Furthermore, sociocultural theory maintains that a child’s cognitive development cannot be separated their cultural and historical background, and therefore students that come from diverse backgrounds need identification methods that align with their own backgrounds (McGlonn-Nelson, 2005). I believe that the GT teacher is on this path of understanding, and has taken steps with her professional development to ensure that she is able to correctly identify students who come from diverse backgrounds for gifted education.

Teacher bias and teacher training both reflect sociocultural fundamentals that are useful in understanding how these teachers have responded to these gifted bilingual students (Michael-
Chadwell, 2010). This theoretical perspective helped to investigate how teachers participated and used cultural artifacts and social cues when decided which students they would nominate for gifted education, and how they could help meet their cognitive needs instructionally. However, the data showed that these teachers could benefit from more training to help inform their biases, and to understand how these children’s instructional needs might be different. The following is one example of how bilingual gifted children’s needs might be different from monolingual gifted children: the students in this study are all bilingual, but they also are bicultural. Other students in the school are also becoming bilingual, but come from primarily monolingual, American-culture families. This key difference makes a difference for a child who is bicultural/bilingual, and may exhibit a strong sense of pride and preference for their home language and culture. This is not to say that monolingual students are not proud of their own culture and language. However, because the English language and American culture are privileged in the classroom, it would benefit the Latino, bilingual gifted students if the teachers would allow them opportunities to show their pride in their home language and culture through classroom discussions or independent study projects that they can share with the rest of the student body.

The example of languages that are privileged and used in the classroom, despite the dual-language rules and guidelines that dictate that both Spanish and English languages should be used equally, speaks to the sociolinguistic theory from the theoretical framework that informs this study. It was evident from observations that the English language predominated classroom discussions and instruction, making it seem like the “important language” (Escamilla, 1994). This inequality of language use at Eastwood highlighted the contrasting values that are placed on both English and Spanish usage (Ernst-Slavit, 1997), which was reflected in Ana’s interview in which she revealed that she never thought she’d be considered for the gifted program because
she observed that all of the students in GT spoke mostly English, and were very good at it as well.

Bialystok, Craik and Ryan’s (2006) studies demonstrated that some people who are bilingual exhibit an advantage in the executive processes of the brain over those who are monolingual. In other words, executive function theory helped to frame this study by highlighting the potential benefits of bilingualism and how this demonstrates the need for teachers at Eastwood to critically look at the ways they are nominating gifted bilingual students for the GT program. This is not to say that all bilingual students are gifted, but instead Bialystok and colleagues measured the executive functions of bilingual children and found that they performed significantly better on a set of executive function measures over other groups of children. These scholars believe that this special population of students are able to compensate for their English skills as they learn the language, by using an alternative route called language switching.

**Emerging Themes**

This study used three main theoretical perspectives to investigate the issues in this case study: sociocultural, sociolinguistic, and executive functioning of the brain. These constructs also helped to guide the qualitative coding of the data collected. As outlined in the methodology chapter, to begin this study I used Robert E Stake’s recommendations (2006) to choose the number of participants in this case study, the type and quantity of observational data as well as the selection criteria for the student participants. For the next step in the analysis process, I used Miles and Huberman’s qualitative data analysis methods (1994), also outlined in the methodology chapter for multiple case study analysis. After compiling all the data into one document, I transferred this data into an Excel spreadsheet. Keeping the theoretical perspectives
used in this study in mind, I read through the data three times. These three “read-throughs” follow Miles and Huberman’s suggestion of “flows of activity,” with the first read-through being one of the “data reduction” portions of this qualitative analysis. This is where I used an inductive approach, reading through all the data with an open mind, teasing out preliminary themes and codes, and creating a table of the codes that arose from the data.

The second “flow” involved choosing the themes that not only corresponded to the three theoretical perspectives used in this study, but that also seemed to have the most examples in the data. I read through the data once more using the reduced table of themes.

The third “flow” is where I read through the data once more, and chose the most pertinent portions of the data to use as examples for the findings that followed the chosen emerging themes listed below.

Most importantly, I also used the research questions to guide the development of the themes. These were introduced in the Purpose Statement in Chapter One: (a) What are the nomination and identification processes that were used for each of the four focal students to determine their need for gifted education? (b) What are the experiences and perceptions that these four gifted Latino/a Spanish speaking bilingual students have in this particular public school? (c) What are the instructional practices used to serve these four gifted Latino/a Spanish speaking bilingual students? This study focuses on the academic experiences of the students in this study, how their academic needs are being met, the understanding that teachers have of how to serve these students, and what kinds of instruction are given to them.

There were six themes that emerged from the data:

- Theme One - involves the data that described the curriculum and instruction used in this dual language school, including the gifted support. For this section, I give examples of
the type of instruction that was used in the classroom and the type of support that the four
gifted bilingual students were given. This theme falls under the umbrella of Sociocultural
Theory used to guide this investigation (see section on Theoretical Framework in Chapter
One), which includes individual and independent learning, teaching methods and
instruction, and progress monitoring.

- Theme Two - involves the data that describes the training and knowledge of the teachers
  regarding instruction for gifted bilingual students. This theme also falls under the
  umbrella of Sociocultural Theory, which includes teacher bias and teacher training.

- Theme Three - involves the data regarding the parental support of the four students, and
  the type of information that these parents received regarding the gifted instruction that
  their children received. This theme also falls under the umbrella of Sociocultural Theory,
  because parental support tends to the social and emotional needs of the student.

- Theme Four - involves the data regarding the challenges that these four students
  encountered regarding the gifted instruction given to them. This theme falls under the
  umbrella of Sociolinguistic Theory (outlined in Chapter One, see section on Theoretical
  Framework) because some of the challenges that students faced were related to the
  language used and privileged in the classroom.

- Theme Five involves the data that supported the issue of giftedness and bilingualism as
  an attribute. This falls under the umbrella of Executive Function Theory (also outline in
  Chapter One in the Theoretical Framework section) because of the evidence that
  bilingualism is an attribute of giftedness.

Theme One - curriculum and instruction. Based on the information given to me by the
teachers, GT teacher, and administration as well as the classroom observations, the theme that
emerged the most from this data, is related to the kind of instruction that was given to the students in this study.

**Collaborative student groups.** Much of the observational data from this study showed that students were almost always placed in collaborative student groups. The groups ranged in size from “shoulder partners” (2 students) to small “table groups” of 4-7 students in their regular classroom. In the music classroom, the students generally worked as one large group in the classroom, seated in a circle facing each other. When students were given instructional tasks in music class, the teacher would place them in small groups of 2 - 4 students. When students were “pulled-out” for GT support, the entire group of students were small (approximately 10 students), and were allowed to work in partners for projects.

**GT Support.** The interview with Sarah Anderson, the Gifted and Talented teacher at Eastwood revealed the extensive support that she offered to the four case study students. Although the GT teacher position was new to Sarah this year, the feedback from students, teachers, parents and the principal was that her support this past year was a vast improvement to years before. This was due in part to the increased appointment that Sarah was given (.5) this school year, compared to the appointment that the previous GT teacher was given (.25). Sarah collaborated with the classroom teachers throughout the year, and planned her support based on the classroom curriculum. She did this purposefully to offer extensions to the gifted students in the areas of their interest. Sarah would also “push-in” to the classroom, giving in-class support to the gifted students while they were receiving classroom instruction. She would work with the gifted students quietly at their desks, using either English or Spanish to speak with the students, dependent on the language of instruction used that week, or if the students needed to use a specific language to express themselves more clearly. While Sarah worked in the classroom, she
was able to follow up with the teacher with feedback regarding the strategies used to support the
gifted students. Sarah would also “pull-out” the gifted students from their regular classroom
every other week, for gifted extension instruction. Sarah was asked to work with the sixth-grade
students primarily, because they had the most identified students in that grade. Additionally, the
GT teacher started an after-school club, modeled after the Destination Imagination organization,
which offered extension activities that highlighted teamwork, leadership and creativity in
student-generated and student-led solutions to different challenge projects. In accordance with
state law, all gifted students in the district are given an Gifted Service Plan (GSP), which outlines
the students’ gifted services including their strengths, yearly growth, and plan for addressing
their academic, social and emotional needs. This document is updated yearly with the help of the
students’ parents, teachers and GT representative, and I observed the GT teacher referring to
these during her pull-out sessions with the students. Sarah indicated that at the end of the year,
she assessed the extent to which their goals had been met, using her own informal data, data
given to her from their teachers, and various assessment scores. Also, when Sarah was giving GT
instruction to the students and working with them to dive deeper into their Native American
reports that they were working on in their regular classroom, she pointed out to the students that
the resources they had available to them in Spanish were scant, and not very informative. She
promised them that she would keep looking for better resources in Spanish.

Use of state standards. The interviews with the teachers as well as the classroom
observations revealed that they would use the state standards to structure their instruction and
feedback to the students in a transparent and explicit way, giving the students the guidelines
either on the board, or in writing (these were not standards for GT instruction.) For example,
Karen (math and science teacher) would show the students which standards they were
connecting to for certain math problems, and also when students were in “computation stations,” they would be given the standards on the board as a guide to their learning goals. Another example I observed is when the math teacher gave the students a standard, and asked the students to find an example of this standard in their math problems.

**Differentiation for gifted bilingual students.** It was not clear during the observations how instruction was differentiated for the gifted bilingual students in their regular classroom. Most of the instruction that was observed was directed to the classroom as a whole. The dual language curriculum was more evident in that instruction was given either in English only for a few weeks, or Spanish only for a few weeks. Classroom materials including books, vocabulary word walls, handouts, charts, posters, homework and student projects were in both languages, and seemed to be equally represented. An example of an opportunity missed to provide scaffolds for gifted bilingual students occurred during the 2nd day of observations in the Language Arts classroom: the teacher gave instructions to the class as a whole on thematic statements, and how to find pieces of evidence from different parts of the book they were reading. This activity was done individually and silently. I checked the work of the students in this study, and did not find any evidence of differentiation targeting the gifted students specifically. Differentiation in language arts for gifted students can include acceleration, asking the gifted students to dive deeper into the text, making the task more complex, challenging the students to something they haven’t quite mastered yet, or allowing them to be creative in their work (Van Tassel-Baska, 2003). To address the needs of a bilingual gifted learner, the teacher might allow a student to choose a book that is different and of interest to the student, or more closely related to the students’ own culture, and/or allow access to multi-media information in order to build background knowledge (Tobin, 2005). The details on gifted instruction at Eastwood were made
more clear by the GT specialist (outlined in the previous section) and included giving gifted students independent projects that they could work on, and targeted differentiation during the “pull-out” sessions with the GT teacher, as well as “push-in” classroom support.

**Theme Two - Teacher’s knowledge of instruction for gifted bilingual students.** As outlined in the literature review, there is scant research on instruction for gifted bilingual students. Therefore, it is not surprising that teachers in general are not getting the type of training that is necessary for them to effectively support gifted bilingual students in the classroom. Some of the interview questions asked of the teacher participants, as well as the teacher training questionnaire were designed to review how much the teachers knew about instruction for gifted bilingual students. Both Sam and Karen, the classroom teachers in this study, revealed that there were not many guidelines in place, if any, that help guide teachers to best meet the needs of their gifted bilingual students at their school. To differentiate, Sam uses a rubric for instruction that is specific for differentiation. He uses the “distinguished category” of the rubric as a guide to instruct his gifted students, and looks to see if these students “take charge of their own learning goals” and encourages students to ask deeper questions in class. Sam gave the example of allowing students “extra credit” if they were interested in writing up a historical perspective of the book they were reading in class, “Bud, Not Buddy,” a fiction book set in the Depression era of a young African American motherless boy. He said that a couple of students took him up on that offer, but did not indicate if they were the gifted students in his class. When asked what strategies these teachers use in the classroom to challenge their gifted bilingual students, both Sam and Karen said that this was an area that they felt they could use more help with. Karen said that she has tried to put her gifted bilingual students in homogeneous groups so that they might challenge each other. Sam also added that he would like to have the students more evenly
proficient in both languages, and therefore work on language deficiencies first, before trying strategies to challenge them. He also felt that it is important to acknowledge and “celebrate” students’ work that goes above and beyond what is expected by saying for example, “this is excellent work!” Karen also uses a strategy that both teachers like to use in the classroom, of “productive struggle,” where a student is encouraged to “grapple” with something on their own, before getting assistance from the teacher.

Sam did not return a teacher training questionnaire, but from the interview I learned that he did not have any specific training, formal or informal, on gifted instruction. Karen’s teacher training questionnaire, mentioned earlier, also revealed the same lack of training specific to gifted students. When I asked the principal, Lisa Martin, about the kind of training a teacher needs to have in order to effectively teach gifted bilingual students, she answered that a teacher needs to be able to speak both languages well, to know the content well, and to have a good understanding of the “development of language.”

The strategies that both classroom teachers mentioned for using with their gifted bilingual students seemed to lack in breadth and complexity, and during the observations, they seemed to generally give the same instruction for all the students in the class. The differentiation that I observed was given during GT support, either in or out of class. Therefore, it was evident to me that the classroom teachers, as well as the administration, could benefit from more professional development geared to understanding the issues and importance of knowing how to best meet the needs of gifted bilingual students.

Theme three - parental support of the gifted bilingual students in this study.

All of the parents interviewed for this study had concerns in common regarding the academics of their children. All the parents felt confused about the goals of the gifted program,
and thought that by participating in this study, that they would learn more about what their children were receiving instructionally. All four students had been identified in the same year (three years prior), and up to this point, all of the parents had not received much information about the gifted program. The new GT teacher, Sarah, worked hard at sending letters home to parents (in both languages) explaining the updated GSPs, the activities that their students would be participating in regarding GT, both in and out of class, and the opportunities available after school. Sarah also conducted a “GT Information Night” towards the end of the year, inviting parents to hear a short presentation about her role, and details about the GT program.

All three parents who were interviewed felt very strongly about their child’s education, and described the structures at home that encouraged and supported the students’ academics. They all described in their interviews, a need for their children to succeed in school long-term, and to secure a successful career and future that was better than the ones that they themselves had.

The classroom teachers felt that a positive relationship was important to build with the parents of their students, beginning as early as possible with at least a phone call. The parents I interviewed were very appreciative of the phone calls, because it confirmed to them that their students were having success in school, and they described to me the great pride in the excellent grades and positive feedback they were receiving. The principal, Lisa, also acknowledged the immense and overwhelming parent support and positive relationships they have at Eastwood. She describes Eastwood as a very tight, family-like community.

**Theme four - challenges regarding gifted instruction.** From both the student interviews and the classroom observations, one of the challenges that students faced was that they felt bored much of the time in their classrooms. When asked to speak about their teachers,
they all spoke positively about their classroom teachers, but admitted that much of the time they did not feel challenged in class. Rosa said in her interview, “Because like, in math it’s kind of more fun to learn, and then with language arts or social studies you mostly just sit there and then we get distracted, so…” when I asked her about the level of engagement in her regular classes. Still speaking about their engagement level in their regular classrooms, Rosa went on to say, “Some are nice but like some are strict. Like we think they’re mean. For example, Mrs. Wilson [math teacher], she’s like our friend sometimes, but sometimes we have to sit there all day. Or with Mr. Johnson [language arts teacher] we have to sit there all day. And sometimes we just stand up, and we talk with our table groups.” I asked Ana to speak to me about her classes:

I like it [math and science class] because we learn more things. Because every day we have different lessons and not the same thing all the time. And with her, we have math and science, and those are the only classes we have with Mrs. Wilson. and I like it a lot because we have the opportunity to go around the class to investigate every rock. She lets us talk in partners and everything. And Mr. Johnson is good. And caring. I will be honest though, a little boring but we still learn from him. So, he makes us learn a lot but we are always doing the same thing in language arts and sometimes I ask him if we can do something a little different. But he is more focused on what he wants us to learn.

I asked Sam (language arts teacher) what challenges he’s had in attempting to differentiate instruction for his gifted bilingual students,

I think, well, I think the excuse of boredom. Sometimes they’ll say, you know I’m bored or this is too easy, or I’m finished. And then even saying, “well ok read your independent reading book,” and this year we have a sheet where they can record some of their academic vocabulary and so, continuing to keep them pushing themselves.
In general, the four case study students all felt bored in their regular classroom during certain subjects, and the teachers seemed to acknowledge it, but did not seem to know any strategies that were feasible to address it.

**Theme five - giftedness and bilingualism as an attribute.**

The studies conducted by Ellen Bialystok and colleagues (2006), as well as Carlson & Meltzoff (2008) outlined in the Theoretical Framework section in Chapter One demonstrate another perspective on bilingualism that is beneficial to this investigation. They showed that some people who are bilingual exhibit an advantage in the executive processes of the brain over those who are monolingual, and this theme was evident in the data collected for this study.

Although I did not discuss the findings of the studies on executive function advantages that bilingual children might have over monolingual students, the parents of the students interviewed for this study all seemed to be aware of the advantage that their bilingual children might have over a child who is monolingual. These parents described their children’s ability to seamlessly switch from one language to the other, their acceptance into and success in the gifted program, their high motivation in their academic work, and their participation in after school clubs, sports, and the Mariachi music group. Rosa’s mother, Alejandra, stressed in her interview that as parents, they insist that their children maintain their studies in both English and Spanish throughout school, and are aware and pleased of the benefits of the dual-language school setting that will allow that to happen. Furthermore, Alejandra said in her interview that she tells her daughter Rosa to be especially helpful to the students who arrive at the school knowing only Spanish, and to put themselves in their shoes to remind them that they should not “push those students aside” and use their bilingual skills to help their peers in school.
Similarly, Ana’s mother, Mercedes, insists that her daughter persist in her studies and continue to give it her best effort. Mercedes is aware that Ana has felt uncomfortable making mistakes while learning English in school, because the rest of the students “make fun” of her. She tells her daughter that the only way to improve is to be willing to make mistakes and learn from them. Furthermore, Mercedes tells her daughter that if she is going to succeed in her goal of being a doctor someday, she will need to continue to work on her bilingual skills and all of her academic work so that she can achieve her goals.

**Student Insights.** Of particular importance to this study are the perspectives of the case study students. For the student interviews, I used Seidman’s (2013) “three-interview series” in order to gain a rich understanding of their experiences in the gifted program. This allowed me three opportunities to talk to the students, as a way to establish the context within the first interview, to reconstruct details of their experiences for the second interview, and then allow for reflection for the third interview. By the third interview, the students seemed more comfortable talking to me, especially since they had seen me observing in their classrooms as well.

**Martha.** Martha has been bilingual her whole life, and speaks Spanish primarily in her home. Monday’s are hard for her because she has soccer practice after school, and homework. Social studies is hardest for her because, “sometimes it’s mixed in with our language arts. And we have to do more than one project.” She enjoys math the best at school because, “I just really like finding out new ways of adding numbers and... new ways to do problems.” She also finds playing the violin in the Mariachi band fulfilling, because she has advanced to the highest level since she started in the third grade. At the time of the interview she was on the soccer team, and was also trying out for the basketball team. Her older sister is a student at the community college, and often helps Martha with her schoolwork. She believes the biggest benefit to the GT
program is having the opportunity to do things they don’t often get to do in the regular classroom such as working on algorithms, or work on extended projects like the report she is doing on the Iroquois Indians. She likes all her teachers at Eastwood because they “understand” her and are compassionate, such as the time that she had to leave school early because she was sick, and they allowed her more time to turn in her homework. Being in the gifted program is important to Martha because she likes that her mother is proud of her for her success in her academic work. She is happy that she is bilingual, because it means that she can communicate with a wider group of individuals, make more friends, and be able to help more people. She is proud of her heritage, and feels that she has many traditions in her family that she does not want to “leave behind.” She feels more “valued” because of her ability to speak two languages, and “being bilingual helps me if there is a word that I don’t understand in Spanish, I can remember what it means in English...being bilingual helps me help my parents in their jobs. I can help them out when they need something.”

**Alberto.** When asked to describe the languages he speaks, Alberto said he has been bilingual his entire life, speaks English primarily at school, Spanish in his home and around extended family, and is most comfortable speaking the latter. He told me that his friends all “speak bilingual” as does most of the students at his school. He did not remember how long he had been in GT, or how he was identified to be in the program. His favorite after school activities are volleyball and homework club. One of the benefits that he enjoyed from being in the GT program was the opportunity to take 8th grade Algebra in the 4th grade, since he enjoys the math and science subjects the most. He told me that he enjoys all his classes, but especially when his teachers will play a game or a song in class. A typical day for him during the week, is getting ready for school in the morning, dropping siblings off at different schools for the day, after-
school homework club, playing with his dog outside or some soccer, homework, and if there is time, playing a bit of video games before going to bed. When I asked him if he had any questions for me, he wanted to know why I picked his school to do my study, and also asked me what my regular job was. For the third and last interview, I asked him what it meant to him to be gifted, and he said he didn’t know, because he had never been asked that, and had not given it much thought. After giving him a moment to think, he said the he felt different than the rest, like he had accomplished something. That because of his hard work, he was “lucky to be picked” because not everyone had that opportunity. I asked him how he felt being bilingual, and he said that he felt special, and that he will have more opportunities for a good job in the future, will be able to communicate with more people, and be able to travel more as well. He said being in the gifted program made him feel better about himself, and was a motivator for him to keep working hard in his studies.

Ana. I asked her which language she preferred to do the interview, and Ana chose Spanish. She said that she has been bilingual since she started attending this school, and that she is most comfortable speaking in Spanish, the language that is spoken in her home. Her friends all speak together in Spanish when they get together, and has had the same friends for several years, except for one, because they had a discussion and fought. I asked her how long she had been in the GT program, and she couldn’t remember, but she said it was at least five weeks (she had been identified in the fourth grade). She described her most difficult subject at school as Language Arts, because they were reading books, trying to determine the main idea, and then writing a five-paragraph essay on it. She preferred math, because she found it easier than trying to craft essays. She participates in Ballet Folklorico and volleyball after school, and enjoys them both. She remembered liking volleyball since she was very young, because her family set up a
game by a river one time, and she felt that she picked up on it right away and was good at it. In Ballet Folklorico, her favorite aspect is getting to wear the long and flowing skirts. Ana’s parents help her with homework assignments, and her father helps her with her math. If she has difficulty in class on an assignment, she said, “Y en la escuela pos a los maestros tengo para que me ayuden como dicen ‘three before me,’” ah ha. Tres personas antes que el maestro si entonces vamos con tres personas y damos ayuda y si no tienen la respuesta que necesitamos vamos al maestro ahora así.” [In school, well the teachers are the ones who help me, but they say, ‘three before me.’ You are supposed to ask three people before you ask the teacher, so we will ask three people and help others and if they don’t have the answer we need then we’ll go ask the teacher.] She said that she sometimes gets in trouble for talking in class, “Como algunas veces cuando él piensa que estamos hablando así no más de ‘chatty chatty’ y nos regaña pero cuando nosotros les explicamos bien que estamos haciendo ‘three before me,’” él ya entiende. Ah ha. [Sometimes he thinks that when we are talking we are just ‘chatty chatty’ and he scolds us, but then we explain to him that we are doing ‘three before me’ then he understands.] I asked Ana in what way the gifted program was benefitting her,

Lo que me ayuda es repasar mis estudios porque la maestra...Ms Anderson, nos pregunta qué son algunas cosas que ustedes aprendieron, y nosotros les decimos. Pero lo que hacemos, es que lo volvemos a aprender para que no se nos olvide. Y es lo único que me ayuda porque no se nos olvida las cosas como ahorita estamos estudiando de los pueblos y yo estoy estudiando de zuni. Y yo ya sé de Zuni. Porque ya lo habíamos estudiado con Señor Johnson. y ahora los estamos estudiando otra vez.

[What helps me is to go over my studies, because the teacher...Ms. Anderson (gifted teacher), will ask us what things we are learning, and we’ll tell her. But what we do is we
learn it again so that we don’t forget it. And that’s the only thing that helps me because then we don’t forget things like right now we are studying the Pueblos and I am studying the Zuni. And now I know about the Zuni. Because we had already studied it with Mr. Johnson. and now we are studying it again.]

She described her GT instruction as having more resources to do the research she needs for her report on the Zuni, such as computers. She described the instruction in her GT pull-out session as having more opportunities to contribute,

Porque podemos hablar de...tenemos más opciones para hablar y hablar y hablar, como algunas veces cuando gente quiere decírlas las respuestas mucho…mucho más como cuando ya si las saben no se las pueden decir porque tocan turnos y turnos con los estudiantes en las clases, pero con Ms. Anderson podemos decir y decir. [We have more opportunities to talk and talk and talk, and sometimes people want to say the answers much more because now they know it, but they can’t because they have to take turns with the other students in [the regular] class, but in Ms. Anderson’s (GT pull-out) class, we can talk and talk.]

I asked Ana to describe a typical day for me,

Oh ok, ok, ok, entonces me levanto, hago del baño, me lavo la cara y luego después me voy a cambiar, después me pongo los zapatos voy a…a peinarme y luego después me voy a lavar los dientes y al último cuando ya nos vamos, agarro una barrita o un cereal o lo que sea y me lo voy comiendo en el carro a la escuela. Agarro mis cosas para las lecciones que tenemos que aprender. Vamos a [las clases de aprender Inglés] es el primero que es. Pos hacemos… nos vamos para math con Mrs. Wilson y luego después ya cuando termina math nos vamos para language arts con Mr. Johnson y luego después
ya de Mr. Johnson nos vamos para recreo. Y luego después a lonche y luego después cuando nos regresamos otra vez con Mr. Johnson y hacemos un poco de language arts y luego después nos vamos a social studies. Algunas veces cuando se pasa a Mr. Johnson muy rápido el tiempo nos quedamos en language arts toda la tarde. Y ya al último nos pasamos para science. Pero algunas veces no hacemos science y hacemos nuestra tarea um...hacemos cosas que nosotras de las demás clases y ya me voy. Pero agarro mis cosas, agarro mi mochila y vamos para la casa. Y como ya mi mama, yo le ayudo hacer de comer y todo y a las cuatro normalmente todos los días a las cuatro ya estamos comiendo y ya como depende a las ocho o nueve con papa y cenamos algo y ya. Nos podemos a dormir. Veamos un poco la tele. [Oh ok, ok, ok, well then I get up, go to the bathroom, wash my face and then I go change clothes and after that I put on my shoes and go comb my hair and then afterwards I brush my teeth and then right before we leave I grab a little oatmeal bar or some cereal or whatever. And then I eat it on the way to school in the car. At school, I grab my stuff for class that we need to learn for ELD, which is the first class. And then we go to math with Mrs. Wilson and then afterwards when math is over we go to language arts with Mr. Johnson and then we go to recess. After that is lunch and then we go back with Mr. Johnson and we do a little more language arts and then we go to social studies and sometimes if Mr. Johnson isn’t watching the time then we stay in language arts all afternoon. And then at the end of the day we go to science. But sometimes we don’t have science so we do our homework...or we do things from other classes and then I go to grab my stuff like my backpack and we head home and then I help my mom to make something to eat and everything and normally at four every day
we eat and then it depends, but at eight or nine we eat a little with dad. And then we go to sleep. We might watch a little tv.

Being gifted to Ana means that she is “special” and “learns a lot of things.” She said she feels lucky to be in the GT program, because she never thought she would be able to be in it, because only the students that knew English well were allowed. She said,

Me siento triste, porque, algunas veces algunos de ellos me dicen a mí que yo no sé Ingles, y que yo necesito aprender más, y que mi Ingles está...a veces este...I don’t know how to say it in Spanish, “it sucks” y...o sea algunas veces me siento mal, pero a veces me siento orgullosa de yo misma porque, pos voy aprendiendo cosas en Ingles.

[I feel sad, because, sometimes some of them will tell me that I don’t know English, and that I need to learn more, and that my English is...I don’t know how to say it in Spanish, ‘it sucks’ and sometimes I feel bad, but sometimes I feel proud of myself because I am learning things in English.]

Ana is grateful to know two languages, because sometimes she has to translate or interpret for her mother, and help her sisters with their homework.

**Rosa.** I asked Rosa about the languages that she speaks, and she said that she has been bilingual almost her entire life, with English being her second language. She speaks more English at school, and primarily Spanish in her home, and when she talks to her friends. I gave her the choice of English or Spanish for the interview, and she chose English. She enjoys math the most at her school, and feels like she struggles in Social Studies and Language Arts because she doesn’t always understand it when it is taught in English. She also feels like math is more engaging to her, and that she, “just sits there” in her other classes, and feels distracted a lot. After school, Rosa does Ballet Folklorico, volleyball and plays in the Mariachi band. She gets help
from her mother sometimes with homework, or from her brothers. She could not remember how long she had been in GT, nor how she was identified to be in the gifted program. Rosa feels that she benefits from the gifted programming because she learns more than what she can learn in class. For example, she said she had the opportunity to learn Algebra in the 4th grade, while everyone else had to wait until the 8th grade. She also enjoys the “life skills” she has learned from being in GT, such as socializing with other people. A typical day for her will be to help her siblings get ready for school in the morning, go to school, after school activities, eating dinner with her family before working on homework and then going to bed. I asked her if she had any questions for me, and she wanted to know how I got the idea to do this study. I briefly explained my rationale while she listened intently. I told her of my plans of receiving a PhD degree someday, and asked her if she knew what that meant. She said, “Yes, you get like, better checks? And better pay?” I asked Rosa what it meant to her to be gifted, she said it was something that she developed herself, and that she is one of the “highest students in the class.” Below is an excerpt from the last interview:

Nice ok, what does it mean to you to be bilingual?

Rosa: Bilingual to me means, um... that by being bilingual I could have more chances. By speaking English and Spanish.

How does that make you feel?

Rosa: It makes me feel proud of myself. For trying to learn two languages at the same time.

Very nice. Ok, tell me what it means to you to be a Latina?

Rosa: To me being Latina means that I am a... that I am just like how my parents are. Um, that I am Mexican and that I am... that I can have opportunities... that I can show,
um for like example, Donald Trump, that Mexicans DO know how to go to school and are smart.

Tell me more about that? How does it make you feel when you hear stuff about the election?

Rosa: Um, well when I knew that Donald Trump won, I felt sad, but at the same time I made a goal to focus more in school so I could show people like him, that Mexicans ARE something.

Very nice, and how does that make you feel inside, to know that you are a Latina, and can get things done?

Rosa: it makes me feel proud and happy.

Very nice, ok. What does it mean to you, to be able to be in a gifted class, and to be able to speak two languages? How does it feel inside?

Rosa: Um, it feels nice because I’m doing, because by being bilingual, I am also in gifted and talented, that’s like, goals that I have reached.

Other goals that she described to me was to make Mexico a better place for people to live, that she might be able to donate to poor towns in Mexico to make them better places to live for people.

Whenever I would visit Eastwood, these four students were always eager to say hi to me in the hallways, and seemed to be comfortable around their peers, their teachers and myself. By the third and last interview, they seemed more at ease, and introspective in their responses. They all seemed to have high self-worth, and high motivation to do well in their studies and their activities. They were very interested in who I was, why I was doing this study, my computer I used to take notes, and my own cultural background. After getting to know these students better, I felt even more compelled and grateful to study their trajectories and experiences in the gifted
program. It allowed me to put a “face” to the statistics of the issues surrounding the under-representation of Latina/o bilingual students in gifted programs. It was difficult to acknowledge as a researcher that that many more students like Alberto, Rosa, Martha and Ana are not receiving the gifted services they need and deserve.

**Research Questions Answered**

This study looked to answer these primary research questions: (a) What are the nomination and identification processes that were used for each of the four focal students to determine their need for gifted education? (b) What are the experiences and perceptions that these four gifted Latino/a Spanish speaking bilingual students have in this dual-language public school? (c) What are the instructional practices used to serve these four gifted Latino/a Spanish speaking bilingual students?

Each of the students were roughly identified in the same year, and the criteria that was used for each student differed (see “Participating Student Profiles” in Chapter 4), but all of them had at least one criteria that included a Spanish-language assessment as one method of identification. Each student was given an Gifted Service Plan (GSP) to which the GT teacher attended to, and monitored throughout the school year. Due to lack of time to attend to this by the GT teacher, the lofty goal of having each student self-evaluate their affective goals once monthly happened only once during the school year.

The second research question was answered by the three interviews that I conducted of the students during the data collection period. They were able to express to me the perceptions they had about being gifted, Latina/o and bilingual at Eastwood. These students were all satisfied with the gifted programming that they received, and all had a sense that their ability to speak in two languages was an attribute, and benefitted them now, and in the future. The parents of these
students were happy that they were receiving gifted services, but they were also somewhat
confused, or not sure of what it meant to be in the gifted program.

The last research question answered was regarding the instructional practices used to
serves the four case study students. Speaking in general terms, these students received instruction
that served their needs well when they were “pulled-out” of their regular classrooms to receive
gifted services, but unfortunately, they did not receive the level of challenging material they
needed and deserved on a daily basis, and felt bored and distracted much of the time. Gifted
learners need to feel challenged academically. If they are not challenged, studies have shown that
children are at risk of underachievement, frustration, and at risk of dropping out (Zabloski &
Milacci, 2012).
Chapter 5: Discussion and Implications

Discussion of the Findings

The special characteristics that distinguish a student who is both bilingual and gifted are not being recognized, especially in terms of meeting their programming needs. When I first began the search for a research site for this study, the gifted magnet school in this school district gave me permission to conduct my research there, but I was not able to proceed because there were no gifted students that were also bilingual, despite having a large proportion of ELL students. Many of the gifted students in this country are in regular classrooms for the majority of the time, receiving instruction by teachers who have not been adequately trained to teach students who are gifted. This means that for those students, most of their time in school is not being used to achieve their full potential: the material they are presented is mastered quickly, and often times students are not allowed to work ahead or given opportunities for other forms of curriculum compacting. This seemed to be somewhat true of the four case study students at Eastwood. Up to this school year, the students and their parents were not fully aware of all the reasons why they were placed in gifted programming, and how their instruction might look different than students not in GT. This study addressed what is missing in the literature, which is a way to illustrate how this is manifesting in a school that has a dual language program.

This discussion will address several areas: the GT support at Eastwood, teacher professional development, instructional strategies for gifted bilingual students, teacher perceptions, parental support, languages used at Eastwood, gifted identification guidelines, gifted service plans, musical giftedness at Eastwood, and ACCESS scores.

**GT Support at Eastwood**
When I began this study, Eastwood had just employed a new GT teacher, Sarah Anderson. She made great strides in improving the program during her first year, but had limited time to do so because her appointment was only half-time as an employee. Nevertheless, Sarah was able to use classroom practices that have been shown to be effective by the studies of Robinson, Shore and Enerson (2006) including encouraging creativity, acknowledging and developing multiple intelligences, encouraging and fostering higher level thinking, inquiry-based learning and teaching, compacting the curriculum, using flexible grouping, and taking advantage of instructional technology. Furthermore, these studies by Robinson and colleagues showed that some of the school-wide practices that were promising for gifted students were in place at Eastwood, including courses available to learn in multiple languages, school programs for different interests, having mathematics and arts in the curriculum, using multiple criteria for identification, and an aim to develop talents in culturally diverse learners and those from low-income backgrounds.

Because this position as a GT teacher was new to Sarah, she had just begun to undergo training and professional development in this area. She had been a classroom teacher before this appointment, and had experience working with both elementary school students as well as students who were ELLs. She is bilingual, with English as her first language. Being bilingual was a benefit, and also a requirement for her position, but Sarah felt she could still use more practice and development in her Spanish language skills.

All of the participants in this study, including the teachers, the principal, the music teacher and parents, felt that the GT support had dramatically improved from years before, because Sarah was able to support the school more often (even at half-time employment), she was very motivated and enthusiastic in her new position, and she was part of a gifted
identification team for the district which allowed her more training in understanding how to identify and serve gifted students. However, even at half-time, Sarah felt that she did not have enough time to fully serve the gifted students adequately. For example, the gifted students were supposed to self-assess their social and emotional goals once a month, according to their GSPs, and were only able to do this once the entire year. Additionally, the district guidelines state that the GSPs are supposed to be created in collaboration with the parents of the students, but due to time constraints, Sarah was not able to involve the parents when creating them. Lastly, Sarah has many responsibilities as the GT teacher, that includes administering assessments at the beginning of the year, teaching the gifted students once or twice a week, keeping track of the students that show potential for the gifted program but have not yet been identified as gifted, providing professional development for the teachers, meeting with and collaborating with the classroom teachers, running an after-school program, and meeting with parents. Achieving all of these duties is difficult to do on a full-time appointment, let alone within the constraints of a half-time appointment in which she was employed. This meant that there was less of a chance of the gifted bilingual students getting served to the full potential that they need and deserve.

Thus, the students in this study, and other gifted students at the school, had very limited time with the GT specialist during the week. Rogers (2007) synthesis of the literature revealed that gifted students need to be challenged on a daily basis in their specific area of talent. Classroom observations for this study showed that GT support at Eastwood was not done on a daily basis, because the classroom teachers were not differentiating their instruction specifically for gifted students, and less so for gifted bilingual students, and the GT teacher provided support to the students only once or twice a week. Rogers (2007) also suggested that students be regrouped in like-ability groups and provided with cooperative tasks. If grouping is not possible,
then structured independent learning in advanced studies should be offered, which was achieved with some of the independent studies that the GT teacher provided to the students. However, the classroom teachers in this study did not purposefully group the gifted students into like-ability groups. Also, Rogers (2007) suggests that teachers provide different forms of subject- and grade-based acceleration as needed, or accelerate the pace at which gifted students are presented material, something that was not being actively pursued by the classroom teachers at Eastwood as a way to serve the gifted students.

**Teacher Professional Development**

The findings from this study confirm other studies that examine teachers’ underlying assumptions and professional practical knowledge, recommending that further training is needed to prepare them for teaching the gifted (Berman, Schultz, & Weber, 2012; Coleman, 2014). This case study investigated how teachers decide which students they will nominate for gifted education, including instructional strategies used to meet their cognitive needs. Teacher bias and training are both important to understand in their response to gifted bilingual students (Michael-Chadwell, 2010). The classroom teachers at Eastwood had the lion’s share of time with the case study students, and it was imperative that they were knowledgeable and understood how the two sets of characteristics between monolingual and bilingual gifted students might be the same, and in other cases, might be contradictory (Esquierdo & Arreguin-Anderson, 2012) and yet they did not have the training and background needed in this area. Teacher training is important for them to understand what gifted students who come from underserved areas need (Swanson, 2006), especially gifted students who are bilingual (Lara-Alecio, Irby & Walker, 2008; National Center for Research on Gifted Education, 2016).
I asked the teachers in this study to complete a questionnaire that outlined their educational background and training in both bilingual education and gifted education. Of the two teachers, only one of them returned the survey. Her responses showed that while she was very qualified to teach in her content area, she did not have enough training to be able to nominate and teach gifted bilingual students, and it is imperative that teachers have a basic understanding of the ways that they should nominate and instruct gifted bilingual students.

Valencia (1985) also recommends that dual-language programs include teacher professional development in gifted education, specifically in the area of identifying and serving gifted ELLs. Unfortunately, the teacher participants in this study (with the exception of the GT teacher) received very little, if any training or development opportunities in identifying and serving gifted students.

**Instructional Strategies for Gifted Bilingual Students**

Eastwood teachers used collaborative instructional methods that had a positive impact on students that are bilingual and gifted. This allowed students to explore their academic potential by working collaboratively with others as well as through independent study opportunities, both of which are central to sociocultural theory (McGlonn-Nelson, 2005).

When I asked the two classroom teachers about the strategies they used to meet the needs of their gifted bilingual students, very often their answers showed that they would conflate the two groups: students that are gifted in “general” and students that were in this special population of students, gifted and bilingual. This is proof that these teachers need more tools to be able to support these students. An example that one of the teachers gave as a strategy to support the gifted bilingual students in the classroom, was to “celebrate” the students’ extra effort, which seems to be a strategy that can be used for any student, regardless of language or ability. This
teacher also lamented that it was hard to keep gifted students “busy” which points to an underlying deficit perspective by the teacher.

Also, when I asked the teachers about the challenges they faced in serving gifted students in a dual language program, the issues they described did not relate to them being gifted. For example, the math and science teacher in this study said that sometimes students would get frustrated because they were required to speak in one language for a specific unit, and had difficulty describing a concept in the language they weren’t strong in, and would try to use their first language to communicate in class. This teacher said that she would gently redirect them back to the target language, but this strategy was not related to the student being gifted.

Barkan and Bernal (1991) view bilingual instruction as an inclusive and beneficial way to support a strengths-based instructional model, as well as an important way to meet the needs of gifted bilingual students. In this respect, the students at Eastwood have the advantage of having the opportunity of developing both languages equally, something that is not available at most schools.

Reis and Renzulli’s (2010) examination of thirty-three studies highlighted the need for teachers to be trained in gifted pedagogy, and that gifted students often lack the differentiation and challenges they need to be successful academically. Nearly all the teachers in this study, including the GT teacher, admitted that they could use more training and professional development to help them learn how to best serve both their gifted monolingual students and their gifted bilingual students. In fact, in many of the conversations that I had with them, when asked specifically about the gifted bilingual students, the teachers would revert to speaking about the gifted students in general, more evidence that they could indeed use more training to help them understand the unique characteristics and academic needs of gifted bilingual students, and
begin to have a shift in perspective that would recognize the important differences between bilingual and monolingual gifted student needs.

**Teacher Perceptions**

A recent research synthesis by the National Center for Research on Gifted Education (http://ncrge.uconn.edu) reviewed the practices used to identify and teach gifted English Language Learners in 2015, and found evidence that teachers’ perceptions about GT education and GT students might negatively affect their recommendations of certain students into gifted programs. They also found that teachers might overlook the gifted potential of some students if they were not fluent in English, as well as a strong bias towards the monolingual, English-speaking culture, and the characteristics that are valued in that culture, such as individuality and oral capabilities. Teachers at Eastwood seemed to be consumed by their classroom teaching duties in their specific content area and lacked time needed for professional development in understanding the needs of gifted students. This seemed to affect their perceptions of what is needed by gifted bilingual students in order to succeed academically.

The study by Bonner, Lewis, Bowman-Perrot, and Hill-Jackson (2009) revealed that teachers become “gatekeepers” for gifted education because they are usually the ones that spend the most time with the students, and are in the position to nominate them for special programming, but oftentimes their underlying assumptions and attitudes about the qualifications needed for gifted education keep certain students out. The teachers at Eastwood similarly spend the most time with the students in the classroom, and would be the first to be able to recognize the special characteristics of gifted bilingual students. It is imperative that the school or district administrators know and understand any underlying assumptions or attitudes that the teachers might have about gifted education: employing teachers that are bilingual is not enough.
Also related to teacher perceptions is the issue of bilingualism as an advantage. Guadalupe Valdés’ (2003) research provides evidence that being bilingual is an asset that benefits individuals, and is quite often overlooked, even with gifted students. Valdés’ research on gifted bilingual students showed how young immigrant children take on the complex task of interpreting and translating for their families, and the challenging cognitive processes that this entails. Valdés argues for an expansion in the definitions of giftedness to include the complicated cognitive process of navigating two languages, and acknowledges the challenge that teachers face when understanding the gifts and talents of gifted bilingual children.

Similarly, Bialystok, Craig, and Ryan’s (2006) study demonstrated that some people who are bilingual exhibit an advantage in the executive processes of the brain, over those who are monolingual. Bialystok and colleagues found evidence that bilingual children performed significantly better on a battery of executive function measures over other groups of children, are able to better manage different demands on their attention, and are capable of compensating when needed in communicating by language switching.

The evidence from this case study is a good example of how teachers should be highlighting the abilities of this special population of students, which could help them understand how to best serve them instructionally. Furthermore, it was evident from the interviews and observations that these students navigated both languages effectively, hence leading them to be identified as gifted at Eastwood. Both the classroom teachers cited the problem or “excuse” of boredom amongst their gifted students, which could be a crucial misunderstanding by these teachers of gifted and talented students. These teachers were aware of the issue that their students could be bored in class, but are in a sense labeling it as an “excuse” and not a fundamental issue that gifted students need more supports academically to excel. It was not clear what the teachers
meant by “boredom as an excuse,” but it seems that they felt that these students were not really bored, but rather unmotivated, and that it was their own fault for being unmotivated.

**Parental Support of Gifted Students**

Interviews with the parents of these four gifted students showed strong support for their academics by actively seeking involvement with their child in their home and school life, exhibited excitement about how the gifted program might benefit their child, provided social-emotional support in the home, and allowed them to participate in group activities with friends and peers. This is supported by the research conducted by Robinson, Shore and Enerson (2006), who described 29 practices from extensive research-based inquiries that are beneficial in the classroom and at home such as active parental involvement, appropriate social-emotional adjustment, good peer relations, developing specific talents, and more.

The GT teacher offered a “GT” night, but only parents who were new to GT attended. It is unclear to me why none of the case study students’ parents did not attend this informational meeting. It was advertised by a note sent home to all students, but only a very small group of parents attended. The meeting time was directly after school, so perhaps this was not a convenient time for most parents to attend the meeting.

Due to time constraints, parents were not involved when the GSP for each of the case study students were developed. The GSP is an important document that helps to guide the programming for each of these students, including parental supports that help the overall academic, social and emotional success of the student. Other studies, such as VanTassle-Baska’s (1989) show the advantages of family support in the academic success of gifted students from low-socioeconomic backgrounds. Similarly, Tomlinson, Callahan and Lelli’s (1997) study showed that parental involvement helped students from underserved areas succeed academically.
It is disadvantageous to the students in this study that due to time constraints, parents were not involved in the decision making of their child's gifted programming plans. It was evident from the parent interviews that they were highly motivated to help their students succeed in school, and it seemed like an opportunity missed by the teachers and administrators at Eastwood to prioritize this important collaboration opportunity.

**Languages Used at Eastwood**

The website for Eastwood describes the school as a dual-language institution, meaning that instruction is conducted in one language exclusively for a set period of time, switching between Spanish and English, or in other words, a “pure environment.” The website states that the material covered is not merely repeated in another language, and students are not re-taught what they learned in both languages. The school website also states that the intent is for students to be able to transfer knowledge from one language to the other. Eastwood is set up so that there are two classes per grade, each class is taught in a different language but mirroring each other, switching the language used every three to six weeks.

Most of the lessons that I observed at Eastwood were conducted in English, and I found that there were no strict guidelines for the teachers to follow to help them remember which language was needing to be used for instruction. The interviews with parents and students revealed that more English was spoken in the upper grades. All of the GT instruction that I observed was also conducted in English. In a follow-up phone call with the GT teacher, she said that she was helping to support the teachers more in the year following this study, in a concerted effort to follow a 50-50 model, where each language is used equally. All of the teachers and administrators in this study are bilingual, but English is their first language. This might an
underlying reason why instruction seemed to revert to the stronger language in which teachers were more comfortable.

Another important issue is that bilingualism as an advantage is often overlooked, even with gifted students (Valdés, 2003). The students in this study, as well as many of the students at Eastwood, are English language learners, navigating immensely complex conversations, at home, in the community and at school. Valdés and other scholars in gifted education argue for an expansion of current definitions of giftedness, and acknowledge the challenges that educators face when understanding the gifts and talents of bilingual children. This also includes a shift in the importance placed on the “unidimensional” English language to a more inclusive “multidimensional” framework that validates bilingualism (Valdés, 2003), which includes their perceptions of who qualifies for gifted education based on language, and the priority this is placed on the language used in the classroom.

The evidence from this study revealed that despite the fact that Eastwood is a dual-language school, the English language was privileged and used more than 50% of the time, therefore making it the “important language” (Escamilla, 1994) which could lead to the perpetuation of the underrepresentation of bilingual students in gifted education.

**Gifted Nomination and Identification Guidelines and Assessment**

Gifted students from culturally and linguistically diverse backgrounds need an identification method that aligns with their own cultural and historical backgrounds (McGlonn-Nelson, 2005). Also, Gray, McCallum, and Bain (2009) recommend that culturally, linguistically and ethnically diverse students should have screening methods that are better for testing students who primarily speak another language besides English, like many of the students at Eastwood. The screening methods used for the students in this study have been known to be language and
culture sensitive, which is an advantage for the students at Eastwood, and will help with the issue of underrepresentation of gifted bilingual students in the gifted program.

However, I found that the guidelines that were used when the case study students were first identified, are no longer in use. This could potentially be a problem, if guidelines are constantly changing, and caused some confusion when communicating with the GT teacher. She was not employed at the school when the case study students were identified, and the guidelines she was currently using were different than the ones used for the four students.

I talked to the gifted education director of the state, and she said that at the state level, they only provide guidelines, and do not require the schools to follow them. The laws in place at the state level are broad, and require schools to identify and serve gifted students “from all backgrounds.” That means that at the district and school level, the onus is on them to determine how to best identify all students from diverse backgrounds. The state gifted and talented director recommended that those who are in the position to nominate students for gifted programming, should do so by looking at a number of criteria, and not just one method, such as testing.

One of the students, Alberto, only had two criteria listed in the documentation that listed how he was identified, when the guidelines for the district specified that they should have three. The GT teacher called and emailed the district gifted education administrator to ask about that, and never received an answer. This shows that perhaps this school and perhaps the district is understaffed when it comes to identifying gifted students.

The GT teacher sent home list of characteristics of giftedness in both English and Spanish. Unfortunately, many of the lists that are available for identifying characteristics of gifted students, do not include the special traits that gifted bilingual students possess (Esquierdo and Arreguin-Anderson, 2012; Castellano, 1998; Lara-Alecio, Irby and Walker, 2008). And
while it is important that Spanish speaking parents receive information in Spanish, many lists that are available on the internet, for example, are not accurate and do not reflect this special population of students. Furthermore, because many teachers, like the two classroom teachers in this study, are not familiar with the specific characteristics of gifted bilingual students (Brice, et al., 2008), this tends to perpetuate the problem of underrepresentation of those students (Brice & Brice, 2004).

**GSPs**

The GSP documents for the four case study students, did not specify in which language the student was identified in. This information was found in the database, but not included in the GSP. The GSP is the document that guides the programming for each student. The students’ language abilities and needs were largely absent from the GSP document, as were the specific instructional strategies that would help to serve the student who is bilingual, and specifically, Spanish-speaking primarily. This is a missed opportunity by the school system to ensure that their gifted bilingual students are adequately served, and they should not assume that these needs will be met, just because the curriculum at this school is based on a dual-language program.

According to the GSP, students are supposed to assess themselves periodically (monthly in most cases) to see if they were meeting their social and emotional goals, and to readjust if needed. When I asked the GT teacher about this, she admitted she only had had enough time to help the students self-assess their goals one time during that year, due to time constraints being employed only half-time. The affective goals for students that were included in their GSPs were somewhat nebulous, and did not clearly show the connection of how this would help the student succeed in their academics. The students themselves were supposed to self-assess these goals (with the guidance of the GT teacher) and were only given the opportunity to do this one time
during the year. Reis and Renzulli (2004) outline the importance of attending to the social and emotional needs of gifted students, and suggest strategies to ensure this need is met: direct counseling of the students, teachers can model high standards for positive behavior, provide positive feedback for appropriate behavior, and teachers can provide opportunities for students to learn problem solving and mediate conflict. There are many resources in the gifted literature in how to best meet the social and emotional needs of gifted students in “general” such as Webb’s (1994) guide to “Nurturing social emotional development of gifted children.” What often is missing are guidelines that help an educator understand the special social and emotional needs of students that come from diverse cultural and linguistic backgrounds. Furthermore, I could not find a study or academic source that would provide evidence that self-assessment of gifted students in the areas of social and emotional needs to be effective. However, the study by Ross (2006), “The reliability, validity, and utility of self-assessment” investigated this issue, and the findings showed that although self-assessment can be useful, the strengths of this method is enhanced by training students in how to best accomplish assessment of themselves. The students only self-assessed their social-emotional goals once, which did not allow them the opportunity to monitor their growth in this area, an opportunity that was missed by the GT program at Eastwood.

As outlined earlier, the GSP guidelines state that parents should be a part of this process, but according to the GT teacher, this was not done due to time constraints. Every gifted student is supposed to have a new, updated GSP in place within 30-45 days of the beginning of the school year. This put a strain on the GT teacher to accomplish this goal, especially since she was not employed full-time. A recommendation for Eastwood would be to allow another gifted
educator from the district to “float” to schools that need extra help that employ a GT support person only part-time, especially during the critical time period at the beginning of the year.

The GSPs do not nurture bilingualism, and do not specify language needs in the documentation, other than in general terms. Castellano (1998) maintains that gifted programs should provide for the needs of the students that it serves. In this case study, that would include special considerations for English language learners in the gifted program. This school employs a dual-language curriculum, that should require more support for students who are English language learners, as well as more professional development for the teachers to be able to best support the bilingual mission of the school.

**Musical Giftedness at Eastwood**

Many of the students at Eastwood were involved in the after-school mariachi band. This is an important part of understanding the culture, and experience for culturally and linguistically diverse students. The classroom teachers did not mention musical giftedness in their interviews, but the principal and music teacher did, because they were the ones who started the music program. The study by Dai and Shader (2010) examined parents’ motivation for supporting their child’s participation in music training, which was mirrored in the attitudes by all of the parents in this study, who seemed to recognize the benefits that being involved musically as a way to help their child succeed academically. These parents are aware of the intrinsic rewards that music training has for their children, and made efforts and sacrifices to allow them to participate in the mariachi after-school band.

**ACCESS Scores**

I had hoped to compare the ACCESS scores that the case study students received when they were first identified as gifted to see how much they had progressed in their language
proficiency. However, due to changes in the way that the raw scores were converted to a proficiency scale, this was not possible. This change took place after the case study students had first been tested, which means that a score of “3” on the ACCESS score when the student was first identified, does not match up to a “3” once the scoring structure was changed. The agency who owns the ACCESS testing, said that the “score look up calculator” found online was not a reliable way to compare the scores from before the scoring changes to after.

When I pointed out the inconsistencies of the ACCESS scores to the GT teacher, she admitted that she had not compared them side by side, and was not aware of the change in scoring. It would seem imperative that a GT teacher or coordinator understand the psychometric properties of any test used at the school, and how this might impact the students with which it was used.

**Limitations and Recommendations for Eastwood**

This study was subject to several limitations. By including more than four student participants in this multi-case study, the findings and conclusions drawn from this investigation might have been more conclusive with more data points. This study was limited to the four student participants, because they were the only four students that returned a consent/assent form. A longer observation period might have tracked the longitudinal patterns over time, ensure validity, and provide more accuracy in any changes that might have occurred within the overall investigation. Furthermore, the limitations inherent in qualitative research involve the accuracy of the description of the participants and their experiences, as well as the biases of the researcher in the way that the data was analyzed and presented.

Eastwood could benefit by making some of the following changes in order to fill the gap in serving gifted bilingual students the most effectively: with more resources, gifted instruction
could be improved by having self-contained classrooms in order to promote and enrich the students’ higher order and critical thinking skills; staffing full time GT teachers or specialists, especially given that the school district in which Eastwood is located has a large number of ELLs who qualify for GT instruction; compacting the curriculum, which is usually done by districts that do not have gifted programs, so that gifted ELLs can progress quickly through a traditional academic curriculum, while allowing time for enrichment opportunities (Castellano & Díaz, 2002).

Areas for improvement at Eastwood include the need for more overall acceleration in subjects, and more appropriate professional development for teachers, according to the findings of the research conducted by Robinson, Shore and Enerson on practices that have been proven beneficial to gifted students (2006).

Westberg, Archambault, Dobyns and Salvin’s (1993) study recommends that preservice and professional teacher development as a way to improve the awareness of the need for strategies to meet the needs of high ability students, and would benefit the teachers at Eastwood to help increase their knowledge in this area, and subsequently improve the identification and service for gifted bilingual students.

**Implications**

The research on gifted programs reviewed by Reis and Renzulli (2010) showed the longitudinal benefits of gifted programs for gifted and talented students. These studies showed that gifted education programs have helped students’ college aspirations, postsecondary and career planning, and had long-term positive impacts on cognitive, affective, and social development of students who participated. This recent research also has implications that affect gifted and talented bilingual students in monolingual classroom settings, enrichment experiences,
and accelerated programs, which can affect dropout rates and underachievement among gifted individuals (Reis & Renzulli, 2010). The purpose of this study was to address the lack of research that is currently available on the trajectory and experiences of gifted, Latino/a Spanish speaking bilingual students in a gifted program at Eastwood. The implications from the findings of this study will add to what is known about the nomination and identification practices used with gifted bilingual students, to understand the challenges and successes of gifted bilingual students in an academic setting, and the instructional practices used with gifted bilingual students in a dual language school setting. Important implications from this study stem from the findings on how nomination and identification practices might add to the problem of the underrepresentation of gifted bilingual students in GT programs, and that instructional practices used may not meet the needs of this special population of students.

Conclusions

The issue of underrepresentation of gifted bilingual students in gifted programming is as diverse as the definitions used to identify these same children. This case study of four gifted, Latina/o, bilingual students in a public K-8 school sought to understand the nomination and identification processes that were used for each of these students, the instructional practices used to serve them, and most importantly, the experiences and perceptions that these students had about their academics while at Eastwood. Past research has shown that bilingual students face many obstacles when being identified as gifted, which was evident in this case study as well. This study will add to what is known about meeting the needs of gifted bilingual students by highlighting the nomination and identification practices of these students in a dual language school setting, while other studies have focused on monolingual school settings. This is a unique setting that focused on the experience of students that were enrolled in a school whose curricula
was set up to meet the needs of students in two languages. Many students in the US who are bilingual do not have the option of attending a dual-language school, and often do not get the second-language support they need, in addition to their gifted programming needs.

Further research might include a longer time frame, to longitudinally follow these students and study their trajectory into a college or career, as well as a larger group of students to be able to quantitatively map out their achievement scores.
References


National Center for Research on Gifted Education. (2016). Effective practices for identifying and serving English Learners in gifted education: A systematic review of the literature.


Appendix A: Tests used for assessing giftedness

The National Association for Gifted Children

Achievement tests:
• These may be academic specific such as Math or Language Arts, or standardized tests (SAT, ITBS, SRA, MAT).
• Tests specifically for gifted:
  o Test of Mathematical Abilities for Gifted Students
  o Screening Assessment for Gifted Elementary Students (SAGES).

Ability Tests:
• Intelligence quotient (IQ) or cognitive abilities tests
• Individual tests:
  o Stanford Binet (L-M)
  o Wescher Intelligence Scale for Children, 4th Edition
  o Woodcock Johnson
• Nonverbal (most effective for students from culturally and linguistically different or low income backgrounds):
  o Naglieri Nonverbal Ability Test (NNAT) (see below for more information)
  o Test of Nonverbal Intelligence
• Group Tests:
  o CogAT
  o Otis-Lennon
  o Hemmon-Nelson
  o Ravens Progressive Matrices
    • Oldest non-verbal test of cognitive ability – 1936 (National Center for Research on Gifted Education – October 2015).
  o Matrix Analogies Test

Source: http://www.nagc.org/resources-publications/gifted-education-practices/identification/tests-assessments

Naglieri Nonverbal Ability Test (NNAT)

Website for Pearson Assessment:
http://www.pearsonassessments.com/services/solr/search/.api?requestFrom=quickSearch&siteContext=ped ani.us.pa&searchText=NNAT&searchSubmit.x=0&searchSubmit.y=0&searchSubmit=submit

As of July 26, 2017, the website lists the following information for this assessment:
Naglieri Nonverbal Ability Test® Online - Second Edition (NNAT®-2 Online)
- Naglieri Nonverbal Ability Test - Second edition Online (NNAT2) uses progressive matrices to allow for a culturally neutral evaluation of students’ nonverbal reasoning and general problem-solving ability, regardless of the individual student’s primary language, education, culture or socioeconomic background.
- **Accreditation:** Sold only to accredited/approved schools & school districts
- **Age Range:** Age 4 through 18 Grades PreK through 12
- **Administration:** 30 minutes; Online or paper-and-pencil; group-administered
- **Forms:** One form with seven levels
- **Norms:** Naglieri Ability Index (NAI), percentile ranks, stanines, scaled scores, and normal curve equivalents (NCEs) by age

Features & Benefits
- An option to be part of the Pearson English Learning System, a complete assessment, curricular, instructional, and professional development solution.
- Only 30 minutes to administer.
- Available in paper and pencil or online.
- Features a higher ceiling with 48 new items.
- Provides 2011 norms, making the NNAT-2 the most recently normed ability test available.
- Features pictorial direction, helping expedite testing administration and instruction.
- Requires no spoken or written language, making it useful for English language learners.

Use NNAT2 to evaluate:
- General ability in the entire student population
- Students of limited English skills from diverse cultural backgrounds
- Gifted and talented students
- Non-English speakers, intermediate English speakers, and students learning the English language for the first time
- Students with limited motor skills, hearing impairment, and minimal color-vision impairment
- Students whose economic or social circumstances have limited their acquisition of knowledge and verbal skills

Naglieri Nonverbal Ability Test®-Second Edition (NNAT®-2)
- Naglieri Nonverbal Ability Test (second edition)—NNAT2 uses progressive matrices to allow for a culturally neutral evaluation of students’ nonverbal reasoning and general problem-solving ability, regardless of the individual student’s primary language, education, culture or socioeconomic background.
- **Accreditation:** Sold only to accredited/approved schools & school districts
- **Age Range:** Ages 4 through 18, Grades PreK through 12
- **Administration:** 30 minutes; Online or paper-and-pencil; group-administered
- **Forms:** One form with seven levels
- **Norms:** Naglieri Ability Index (NAI), percentile ranks, stanines, scaled scores, and normal curve equivalents (NCEs) by age
- The NNAT2 provides a nonverbal, culturally neutral assessment of general ability that is ideal for use with a diverse student population. With the use of progressive matrices for
seven grade-based levels, this versatile test is well-suited for identifying gifted and talented students.

Features & Benefits

- An option to be part of the Pearson English Learning System, a complete assessment, curricular, instructional, and professional development solution.
- Only 30 minutes to administer.
- Available in paper and pencil or online.
- Features a higher ceiling with 48 new items.
- Provides 2011 norms, making the NNAT-2 the most recently normed ability test available.
- Features pictorial direction, helping expedite testing administration and instruction.
- Requires no spoken or written language, making it useful for English language learners.

Use NNAT2 to evaluate:

- General ability in the entire student population
- Students of limited English skills from diverse cultural backgrounds
- Gifted and talented students
- Non-English speakers, intermediate English speakers, and students learning the English language for the first time
- Students with limited motor skills, hearing impairment, and minimal color-vision impairment
- Students whose economic or social circumstances have limited their acquisition of knowledge and verbal skills

Naglieri Nonverbal Ability Test®-Third Edition (NNAT3)

- **News Release:** Pearson Announces New Edition of Nonverbal Assessment at 2015 National Association for Gifted Children Conference [Nov. 12, 2015]
- NNAT3 improves on the most trusted name in general ability testing with new content and normative data, tablet administration options, and a new online interface.
- **Overview:** The standard in the nonverbal assessment of ability
- **Accreditation:** Sold only to accredited/approved schools & school districts
- **Age Range:** Grades K-12
- **Administration:** 30 minutes, Tablet, Online or Paper-Pencil, Group-Administered
- **Forms:** 2 forms with four levels
- **Norms:** Naglieri Ability Index (NAI), percentile ranks, stanines, scaled scores, and normal curve equivalents (NCEs) by age
- NNAT3 improves on the most trusted name in general ability testing with new content and normative data, tablet administration options, and a new online interface.

The NNAT3 is a nonverbal measure of general ability for students in kindergarten through grade 12, ideal for use with a diverse student population. NNAT3 is specifically developed for use by a variety of education professionals, including, but not limited to, bilingual educators, testing coordinators, gifted and talented teachers, special education teachers, functional life skills facilitators, counselors, and school psychologists.

- What's New in NNAT3?
- Newly developed items and normative data
- Increased security with two unique forms per level
• Tablet administration options
• New and user-friendly online interface
• **NNAT3** has the same great features that you've come to know, such as a 30 minute administration time, 48 multiple-choice items per form, paper/pencil and online options, and group administration. Manual score entry and scoring service options are also still available.


**NNAT3 FAQs**

**What does NNAT stand for?**
Naglieri Nonverbal Ability Test®

**What is the NNAT test?**
The NNAT test is a nonverbal measure of general ability that yields a norm-based score, helpful in identifying students in K–12 with the potential for advanced scholastic achievement.
The NNAT test offers a total assessment solution with multiple-choice items, options for paper/pencil or online administration as well as choices for scoring and reporting to meet the needs of schools and districts. NNAT3 was developed for use by all educational professionals and support staff.

**What sets NNAT apart from other ability tests?**
NNAT provides a nonverbal, culturally neutral assessment of general ability that is ideal for use with a diverse student population. With the use of progressive matrices across grade levels, this versatile test is well-suited for identifying gifted and talented students. The test features pictorial direction and requires no spoken or written language, making it particularly useful for assessing minority students and those who might be English language learners or who may have limited academic skills.

**What is the latest edition of NNAT?**

**What is new in NNAT3?**
• New items (grades K-4) and normative data (grades K-12)
• Tablet administration options
• New online interface
• Two unique forms per level for increased security (grades K-4)

**How is NNAT3 administered?**
NNAT3 is administered via two media platforms: • Traditional pencil-and-paper testing
• Online via a computer or tablet device

**When is NNAT3 typically administered?**
NNAT3 is delivered once or twice in a calendar school year, typically in the Fall and early Spring.

**How long does it take to administer NNAT3?**
NNAT3 takes only 30 minutes to administer.

**What kind of scoring and reporting options are available with NNAT3?**
NNAT3 yields multiple scores including; Scaled Scores, Naglieri Ability Index (NAI), Percentile Ranks, Stanines, and Normal Curve Equivalents (NCEs). NNAT3 Online provides customers with quick access to reports—available within minutes once testing is completed. For customers that choose paper administration, a few scoring options are available—including hand scoring, manual score entry, and Pearson’s scoring and reporting services. Home reports are available in English and Spanish.

**What are the grade levels for NNAT3?**

NNAT3 is for grades K–12.

**Can NNAT3 be used with pre-K students?**

While NNAT3 norms go down to age 4:0 and can be administered to high-ability four-year-olds, it is not recommended to test at this age level as the test is generally too difficult for pre-K students.

**How can NNAT3 be purchased?**

To order NNAT3 or meet with your Pearson Specialist, please dial 866-842-7428 or learningassessments@pearson.com.

**What type of funding is available for NNAT?**

NNAT3 is eligible for a wide variety of education funding sources. School districts commonly use one or more of the following funding sources to purchase NNAT3:

* **Formula funds:**
  - State and local assessment funds
  - State funds for Gifted Education
  - State funds for English language learners
  - State Trust Land Grants
  - IDEA – Special Education
  - Title I, Part A
  - Title III – Migrant Education
  - Title III – intervention for English language learners
  - Title VI, Part B – Rural Education

* **Competitive grants:**
  - Title I, Section 1003 (a) and (g) – School Improvement funds
  - Jacob K. Javits Gifted and Talented Students Education Program
  - Investing in Innovation
  - 4 State-specific grants

* **Additional funding ideas:**
  - Response to Intervention funding
  - Community partnerships
  - Foundation funding or donations
  - PTA funds
  - Impact Aid

To order NNAT3 or meet with your Pearson Specialist, please dial 866-842-7428 or learningassessments@pearson.com.

pearsonassessments.com/nnat3
Appendix B: Characteristics of Students Who are Gifted

“Recurrent Characteristics of Students Who are Gifted”  
(Davis, Rimm, and Siegle, 2011)

<table>
<thead>
<tr>
<th>Positive Characteristics</th>
<th>Negative Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unusual alertness in infancy and later</td>
<td>Uneven mental development</td>
</tr>
<tr>
<td>Early and rapid learning</td>
<td>Interpersonal difficulties, due often to intellectual differences</td>
</tr>
<tr>
<td>Rapid language development as a child</td>
<td>Underachievement, especially in uninteresting areas</td>
</tr>
<tr>
<td>Superior language ability – verbally fluent, large vocabulary, complex grammar</td>
<td>Nonconformity, sometimes in disturbing directions</td>
</tr>
<tr>
<td>Enjoyment of learning</td>
<td>Perfectionism, which can be extreme</td>
</tr>
<tr>
<td>Academic superiority, large knowledge base, sought out as a resource</td>
<td>Excessive self-criticism</td>
</tr>
<tr>
<td>Superior analytic ability</td>
<td>Self-doubt, poor self-image</td>
</tr>
<tr>
<td>Keen observation</td>
<td>Variable frustration and anger</td>
</tr>
<tr>
<td>Efficient, high-capacity memory</td>
<td>Depression</td>
</tr>
<tr>
<td>Superior reasoning, problem-solving</td>
<td>Opinionated (sometimes too much so)</td>
</tr>
<tr>
<td>Thinking that is abstract, complex, logical, and insightful</td>
<td>Extreme feelings of being different</td>
</tr>
<tr>
<td>Insightful, sees “big picture,” recognizes patterns, connects topics</td>
<td></td>
</tr>
<tr>
<td>Manipulates symbol systems</td>
<td></td>
</tr>
<tr>
<td>Uses high level thinking skills, efficient strategies</td>
<td></td>
</tr>
<tr>
<td>Extrapolates knowledge to new situations, goes beyond what is taught</td>
<td></td>
</tr>
<tr>
<td>Expanded awareness, greater self awareness</td>
<td></td>
</tr>
<tr>
<td>Greater metacognition (understanding one’s own thinking)</td>
<td></td>
</tr>
<tr>
<td>Advanced interests</td>
<td></td>
</tr>
<tr>
<td>Needs for logic and accuracy</td>
<td></td>
</tr>
<tr>
<td>Wide interests, interested in new topics</td>
<td></td>
</tr>
<tr>
<td>High curiosity, explores how and why</td>
<td></td>
</tr>
<tr>
<td>Multiple capabilities (multipotentiality)</td>
<td></td>
</tr>
<tr>
<td>High career ambitions</td>
<td></td>
</tr>
<tr>
<td>Overexcitability</td>
<td></td>
</tr>
<tr>
<td>Emotional intensity and sensitivity</td>
<td></td>
</tr>
<tr>
<td>High alertness and attention</td>
<td></td>
</tr>
<tr>
<td>High intellectual and physical activity level</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>High motivation – concentrates, perseveres, persists, is task oriented</td>
<td></td>
</tr>
<tr>
<td>Active – shares information, directs, leads, offers help, is eager to be involved</td>
<td></td>
</tr>
<tr>
<td>Strong empathy, moral thinking, sense of justice, honesty, intellectual honesty</td>
<td></td>
</tr>
<tr>
<td>Aware of social issues</td>
<td></td>
</tr>
<tr>
<td>High concentration, long attention span</td>
<td></td>
</tr>
<tr>
<td>Strong internal control</td>
<td></td>
</tr>
<tr>
<td>Independent, self-directed, works alone</td>
<td></td>
</tr>
<tr>
<td>Inquisitive, asks questions</td>
<td></td>
</tr>
<tr>
<td>Excellent sense of humor</td>
<td></td>
</tr>
<tr>
<td>Imaginative, creative, solves problems</td>
<td></td>
</tr>
<tr>
<td>Preference for novelty</td>
<td></td>
</tr>
<tr>
<td>Reflectiveness</td>
<td></td>
</tr>
<tr>
<td>Good self-concept – usually</td>
<td></td>
</tr>
<tr>
<td>Searches for complexity and connection</td>
<td></td>
</tr>
<tr>
<td>Originality</td>
<td></td>
</tr>
<tr>
<td>Specific talent areas (music, art, math, etc.)</td>
<td></td>
</tr>
<tr>
<td>High expectations of self</td>
<td></td>
</tr>
<tr>
<td>Interest in adult topics</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C: Characteristics of the Bilingual Gifted Student


1. Motivation for learning: exhibit a desire for learning, is persistent, and has good school attendance
2. Keen social and academic language: use of expressive, elaborate, and fluent verbal and written behaviors both in English and Spanish
3. Cultural sensitivity: pride in their language and culture, plus child values oral and written tradition
4. Strong familial connections: child has strong interpersonal relationships among family members and can often take over interpretative caretaker roles between the home, school and/or community
5. Preference for collaboration: child has abilities to lead and work with others cooperatively and has good social adjustment
6. Elaborate imagination: exhibit oral and written language rich imagery and is imaginative in storytelling
7. High academic achievement: ability to generalize learning, use stored knowledge to solve problems and talents are exhibited through assorted projects and interests at home, school and/or community
8. Creative performance: have attributes that deal with creative productivity in the arts and display originality in movement, dance, and other physical activities
9. Support: child effectively uses environmental academic support to further develop language and performs better with alternative assessments
10. Ability to problem solve: global learners, complete tasks in a patient, non-hurried manner and tend to be better at spatial fluency tasks
11. Internal locus of control: believe that events in their lives are the result of his/her own doing and expresses positive self-concept and self-confidence
12. The ability to acquire social English language skills readiness
13. A tendency to prefer older playmates
14. Adhering to traditional family responsibilities
15. Demonstrating “street smarts”
16. They rapidly acquire English language skills once exposed to the language and given an opportunity to use it expressively
17. They exhibit leadership ability, although often in an open or unobtrusive manner, with strong interpersonal skills
18. They tend to have older playmates and easily engage adults in lively conversation
19. They enjoy intelligent and (or effective) risk-taking behavior, often accompanied by a sense of drama
20. They can keep busy and entertained, especially by imaginative games and ingenious applications, such as getting the most out of a few simple toys and objects
21. They accept responsibilities at home normally reserved for older children, such as the supervision of younger siblings or helping others to do their homework
22. They are “street wise” and are recognized by others as youngsters who have the ability to “make it” in the Anglo-dominated society.
23. Observant educators who notice these traits in particular students may consider referring them for further assessment.
24. Motivation for learning, value for education through good school attendance.
25. They exhibit a desire for learning, are persistent, and have a sustained motivation to succeed in school.
26. They not only like to read, speak, listen, and write in their native language, but they also achieve well in those areas.
27. They have a propensity toward superior verbal behaviors that are expressive, elaborate, and fluent.
28. They are rated by their teachers as being good listeners and good writers in their native language.
29. Cultural sensitivity, suggesting an expressed and observable appreciation for their culture.
30. Pride in their language and/or culture, respect for traditional cultural and linguistic patterns, and a value for oral tradition and history of the native culture.
31. An openness toward those who embrace their culture and the language no matter what nationality.
32. Familial, strong maternal and paternal role models.
33. Students exhibit a “caretaker” personality within the family.
34. Often take over interpretive caretaker roles between the home and school or community.
35. Respect for authority figures.
36. Collaboration: students are able to lead and work with others in a cooperative nature.
37. Good at setting goals.
38. Keen sense of justice, quickly perceives injustice, and is able to categorize or judge events and people.
39. Good social adjustment, possesses leadership qualities in relation to working in the peer group.
40. Participates in school activities and class discussions.
41. Interacts with peers from other ethnic groups.
42. Indirect at giving criticism.
43. Avoids conflict – likes to please and is sensitive to the opinions of others.
44. Responds favorably to typical classroom motivators and rewards or awards.
45. Patient, good at giving advice and judgments in disputes and in planning strategies.
46. Tend to exhibit language (spoken and written) rich in imagery and appeared to be imaginative in storytelling.
47. Uses stored knowledge to solve problems.
48. Ability to generalize learning to other areas and to show relationships among apparently unrelated ideas.
49. Performs at or above grade level in math.
50. Talents are demonstrated through various projects and interests at home or in the community.
51. Self-directed in activities.
52. Tends to prefer novelty, personal freedom and distinctiveness.
53. Creative performances: adept in visual/performing arts, music, art or drama.
54. Vocabulary perceived to be better developed in the native language, therefore need continued support in the acquisition of the second language.
55. Adept at problem solving.
56. Have an internal locus of control.
Appendix D: Student Interview Protocols

Student – First Interview
ID for Student:
Grade:
Date:
Time:
Researcher: Hello, my name is Clara Smith. I am trying to learn some things about you and your experiences in school. Over the course of the next three weeks or so, I will have a chance to talk to you three times. This first time, I would like to learn more about things that have happened already. The next time we meet, I would like to learn about things that are going on in your life currently, and the last time we talk, I would like to talk to you about what all of your experiences mean to you.

Hola, mi nombre es Clara Smith. Estoy tratando de aprender algunas cosas sobre usted y sus experiencias en la escuela. En el transcurso de las próximas tres semanas, más o menos, voy a tener la oportunidad de hablar con usted tres veces. Esta primera vez, me gustaría aprender más sobre las cosas que ya han sucedido. La próxima vez que nos veamos, me gustaría aprender sobre las cosas que están sucediendo en su vida en la actualidad, y la última vez que hablamos, me gustaría hablar con usted acerca de lo que todas sus experiencias significa para usted.

1. Tell me about the languages that you speak.
   a. Do you know how long you have been bilingual?

Hábleme de las lenguas que usted habla. ¿Sabes cuánto tiempo usted ha estado bilingüe?

2. Which language do you speak primarily at school?
   a. At home?
   b. Which language is easiest for you to speak?

¿Qué idioma habla principalmente en la escuela? ¿En casa? ¿Qué idioma es más fácil para que usted habla?

3. Tell me about your family, where are they from?
   a. How long have they lived here?

Hábleme de su familia, donde son? ¿Cuánto tiempo han vivido aquí?

4. Tell me about your friends that you have had in the past, did any of them speak two languages like yourself?
   a. In other words, think about any of your friends you used to have. Were they able to speak another language like how you can?

188
5. Tell me about your school experiences in the past, how long have you been at this school?
   a. What school did you go to before you were here?
   b. Can you tell me a little about that school?

6. Can you tell me about how long you have been in GT, or gifted and talented?

¿Puedes decirme acerca de cuánto tiempo has estado en “GT” o sea, dotados y talentosos?
Student – Second Interview
ID for Student:
Date:
Time:

Researcher: Hello again! It is nice to see you once more. Today we are going to talk a little bit about what is happening right now for you. Last time we talked about things that had happened in the past.

¡Hola! Mucho gusto de verte otra vez. Hoy vamos a hablar un poco acerca de lo que está sucediendo en este momento para ti. La última vez que nos vimos, hablamos de las cosas que habían sucedido en el pasado.

1. What part of your school day seems to be the most challenging to you right now? 
   a. In other words, what is the hardest thing at school right now?

¿Qué parte de tu día en la escuela parece ser la más difícil para ti en este momento? O sea, ¿qué es lo más difícil en la escuela en este momento?

2. Which part of school comes easiest to you right now?
   a. In other words, what comes easy to you when you are at school?

¿Qué parte de la escuela viene más fácil para usted en este momento?

3. What are your favorite activities that you do in school?
   a. Tell me more about ____________.

¿Cuáles son sus actividades favoritas que haces en la escuela? Cuéntame más de ________.

4. Do you have any favorite activities that you do outside of school?
   a. Tell me more about ______________.

¿Tienes algunas actividades favoritas que haces fuera de la escuela? Cuéntame más de ________.

5. Do you have anyone special that helps you with your schoolwork, either at school or at home?

¿Tienes a alguien especial que te ayuda con tu trabajo escolar, ya sea en la escuela o en casa? Cuéntame más de ________.

6. You are in a gifted and talented (or GT) program at your school. How are you benefitting from this?
   a. In other words, how is the GT program helping you at school?
Tú estás en un programa de dotados y talentosos (o GT) en tu escuela. ¿Cómo te beneficia este programa?

7. Tell me about your teachers here at your school.

Hábleme de tus maestros aquí en tu escuela.

8. Tell me about your principal or any other administrator here at your school.

Hábleme de tu director o cualquier otro administrador que está aquí en tu escuela.

9. Describe to me a typical day for you from the moment you wake up until you go to sleep at night.

Describe un día típico para ti desde el momento en que te levantas hasta que te vas a dormir por la noche.
Student – Third Interview
ID for Student: 
Date: 
Time: 
Researcher: Hello! So good to see you again. We have had a chance to talk together a couple of times now, and today I was hoping to learn a little bit more about your school, things you do at home, and what it all means to you.

¡Hola! Mucho gusto de verte otra vez. Hemos tenido la oportunidad de hablar juntos un par de veces, y hoy me gustara aprender un poco más sobre tu escuela, y cosas que haces en casa, y lo significa para ti.

1. What does being gifted mean to you?
   a. In other words, when someone says to you, “you are in GT” or “you are gifted,” what does that mean to you when you hear that?

¿Qué significa ser dotado para ti? O sea, cuando alguien te dice: “tu estás en GT" o "tu eres talentoso," ¿qué significa esto para ti?

2. What does being bilingual mean to you?
   a. In other words, when you think about being able to speak two languages, what does that mean to you, or how does that make you feel inside?

¿Qué significa ser bilingüe para usted? O sea, cuando tu piensas acerca de ser capaz de hablar dos idiomas, ¿qué significa eso para ti, o cómo te hace sentir?

3. Tell me what it means to you to be a Latino/a.
   a. In other words, when your family, friends, or teachers say that you are Latino/a, what does that mean to you, or how does that make you feel inside?

Dime lo que significa para usted ser un Latino/a. O sea, cuando tus familiares, amigos o maestros te dicen que tu eres Latino/a, ¿qué significa eso para ti, o cómo te hace sentir?

4. Given what you have said about your school experiences before this year, and a typical day for you now, what does it mean for you to be in gifted classes and being able to speak two languages?
   a. In other words, think about all the things that you do in school on any given day, and think about all the things you have done so far in your school, how does it make you feel that you are in gifted classes, and you are able to speak two languages?

Dando en cuenta lo que has dicho acerca de tus experiencias en la escuela antes de este año, y un día típico para ti ahora, ¿qué significa para ti estar en clases dotados y ser capaz de hablar dos idiomas?
5. What does it mean to you when you learn something in class that seems very interesting to you? Can you recall a time that was particularly exciting at your school, and tell me a little more about it, and what it meant to you?
   a. In other words, when you think of something that is really important and exciting to you, how does it make you feel?

¿Qué significa para ti cuando aprendes algo en clase que parece muy interesante para usted? ¿Puedes recordar un momento en que era particularmente emocionante en tu escuela, y me dicen un poco más sobre él, y lo que significa para usted?

6. Similarly, tell me about something that seemed particularly hard for you, either in school or elsewhere: what happened and what did it mean to you to experience this?
   a. In other words, can you tell me about a time that was really hard for you, and what it made you feel inside?

Del mismo modo, dime algo que te parecía particularmente difícil, ya sea en la escuela o en otro lugar. ¿Qué pasó y qué significa esto para ti, experienciar algo muy difícil?

7. Do you have any ideas about what you would like to do in the future when you are an adult?

¿Tienes alguna idea acerca de lo que te gustaría hacer en el futuro, cuando tu eres un adulto?

This has been very nice getting to know you better!

Esto ha sido muy agradable llegar a conocerte mejor, gracias.
Appendix E: Teacher Interview Protocol

Teacher Participant ID #: 
Date: 
Number of students: 

BACKGROUND

1. Tell me a little bit about yourself, and your teaching and educational background.
2. Where are you from originally, and how did you come to live in this area?
3. Tell me how you became interested in teaching gifted and talented students?
4. In your opinion, what is the most important thing (or things) that you need to know as a teacher in order to teach gifted students?
5. In your opinion, what type of professional development or training do you think is needed to teach gifted, bilingual students?
6. What kinds of guidelines are in place at your school that helps guide teachers to best meet the needs of their gifted, bilingual students?

CLASSROOM

7. How many students do you have that are gifted, and are Latino/a and bilingual?
8. What types of strategies do you use to challenge gifted bilingual learners?
9. Describe how you might differentiate instruction for your gifted bilingual students.
10. What challenges, if any, have you had when attempting to differentiate instruction for your gifted, bilingual students?
11. In your opinion, what does a school need in order to meet the needs of Latino/a, gifted, bilingual students? Maybe the top three requirements?
12. From your experience, how would you describe the motivational level of your gifted, bilingual students as compared to their peers?
13. What kinds of characteristics do you look for when recognizing giftedness in bilingual, Latino/a students?

PARENTAL INVOLVEMENT
14. What kinds of relationships have you been able to have with the parents of students here at your school?

15. In your opinion, what role do parents play in the motivational level of their student?

GENERAL

16. Is there anything else you would like to add that would tell me something interesting about yourself, your students, or your school?

This has been very nice getting to know you better! Thank you for your time!
Appendix F: GT Coordinator Interview Protocol

Participant ID #:
Date:

1. Tell me a little bit about yourself, and your teaching and/or educational background.

2. Tell me how you became interested in working with gifted and talented students?

3. What does giftedness mean to you?

4. Tell me about your role as GT coordinator?

5. Do you feel confident about the identification plan that is in place by the district?

6. Please tell me about the process of placing gifted students in appropriate services at your school.

7. In your position, what is available to you to help ensure that all underserved students are equitably represented in the GT program?

8. What type of leadership and support do you offer to help school personnel on gifted education issues?

9. Do you take part in the district strategic planning processes? If yes, please tell me about the way it works.

10. Tell me about the types of communication sent home to parents, and the process to make it accessible to them?

11. Is there anything else that would be important for me to know about your position at the school?

Thank you so much for your time! It has been a pleasure getting to speak with you about your school!
Appendix G: Principal/Administrator Interview Protocol

Principal/Administrator Participant ID #: 
Date: 

1. Tell me a little bit about yourself, and your teaching and/or educational background.

2. Tell me how you became interested in working with gifted and talented students?

3. What does giftedness mean to you?

4. What is the process that a student goes through to receive gifted services?

5. What kind of training does a teacher need in order to teach gifted students? What about gifted, bilingual students?

6. What kinds of relationships do you have with the parents of the students here at your school?

7. What is your favorite part of working in a school that serves gifted students that speak two languages?

8. What has been the most challenging thing about working with bilingual gifted students, and/or their parents?

9. Is there anything else that you would like to add that would tell me more about your experiences working here with bilingual gifted students?

It is a pleasure getting a chance to speak to you about your school, your teachers, and students!
Appendix H: Parent Interview Protocol

Parent Participant ID number:
Child’s ID number:
Date:

1. Tell me about your experiences with the gifted program. If this is your first year, tell me about your experiences thus far?
   a. Tell me more about __________.

Hableme de sus experiencias con el programa de superdotados. Si es su primer año, háblame de sus experiencias hasta este momento por favor. Cuénteme más de ________.

2. What type of learning and teaching activities have you seen as beneficial to your child’s learning experiences and success at school thus far?
   a. Tell me more about __________.

¿Qué tipo de actividades de enseñanza y aprendizaje ha visto como beneficioso para las experiencias de aprendizaje de su hijo y el éxito en la escuela hasta este momento? Cuénteme más de ________.

3. What do you believe motivates your child in school? At home?
   a. Tell me more, why do you think this motivates your child?

¿Cuál cree que motiva a su hijo en la escuela? ¿Y en la casa? Cuénteme más de lo que Ud. cree que motiva a su hijo/a?

4. What kinds of things might you do to motivate your child if you noticed that he or she was not interested in completing a homework assignment?
   a. Tell me more about __________.

¿Qué tipo de cosas puede usted hacer para motivar a su hijo si se dio cuenta de que él o ella no estaba interesada en hacer una tarea? Cuénteme más de ________.

5. What kinds of expectations do you have for your child’s academic future?

¿Qué tipo de expectativas tiene Ud. para el futuro académico de su hijo? Cuénteme más de ________.

6. In your opinion, what type of support does your child need in order to be successful as a gifted student?
   a. Tell me more about __________.
En su opinión, ¿qué tipo de apoyo necesita su hijo con el fin de tener éxito como estudiante superdotado? Cuénteme más de ______.

7. Is there anything else you would like to add that would tell me something interesting about your child, about this school, or about yourself?

¿Hay algo más que le gustaría añadir? ¿Algo interesante acerca de su hijo/a, sobre esta escuela, o de Ud. mismo?

It has been very nice getting to know more about you and your child!

Ha sido muy agradable para conocerlo/a más y a su niño/a también, muchas gracias.
<table>
<thead>
<tr>
<th>Teacher:</th>
<th>Date:</th>
<th>Subject/Content Area:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td>Room:</td>
<td>Students:</td>
</tr>
<tr>
<td>Time Sample:</td>
<td>Activity Summary:</td>
<td>Observer Comments:</td>
</tr>
</tbody>
</table>


# Appendix J: Activity Log for Field Notes

<table>
<thead>
<tr>
<th>Teacher/Parent/Administrator:</th>
<th>Date:</th>
<th>Subject/Content Area if applicable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td>Room:</td>
<td>Students?:</td>
</tr>
<tr>
<td>Time Sample:</td>
<td>Activity Summary:</td>
<td>Observer Comments:</td>
</tr>
</tbody>
</table>

|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |
|                                  |                                  |                                  |

201
Appendix K: Identification Guidelines for the district where Eastwood is located

Identification Guidelines

Process:
- Body of Evidence Gifted Profile (Data Form)  2
- Identification Overview  4
- District Guidelines/Screening for Elementary Identification  5
- District Guidelines/Screening for Middle School Identification  7
- Guidelines for Reporting Newly Identified Students  8
- Keeping Track of Your Identification Screening  9
- Codes for IC in the GATE tab  10
- Sample Portfolio/Product/Performance Items  11
- Form to Report Newly Identified Students to the GT Dept  13

District Body of Evidence Gifted Profile Form

<table>
<thead>
<tr>
<th>I. COGNITIVE ABILITY</th>
<th>General or specific intellectual ability</th>
<th>Strong Indicator S</th>
<th>Moderately Strong M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Abilities Test (CogAT):</td>
<td>(S 95-99%  M 90-94%)</td>
<td>V ☐</td>
<td>V ☐</td>
</tr>
<tr>
<td></td>
<td>Verbal Score  Quantitative Score</td>
<td>Q ☐</td>
<td>Q ☐</td>
</tr>
<tr>
<td></td>
<td>Non-Verbal Score</td>
<td>NV ☐</td>
<td>NV ☐</td>
</tr>
<tr>
<td>Raven’s Progressive Matrices:</td>
<td>(S 95-99%  M 90%)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Individually District or School Administered Assessments: -Weschler Pre-school Intelligence Scale</td>
<td>(S 130+  M 120-129)</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
DIRECTIONS: Use this form to help you complete the GT identification report form. Mark the report form with “S” if it the score reflects a strong indicator and “M” if it represents a moderately strong indicator.

<table>
<thead>
<tr>
<th>II –ACHIEVEMENT IN THE CURRICULUM</th>
<th>Specific academic indicator of student’s knowledge</th>
<th>Strong Indicator S</th>
<th>Moderately Strong M</th>
</tr>
</thead>
<tbody>
<tr>
<td>[State Standards Assessment] Proficiency Level</td>
<td>(S Adv Middle or High  M Adv Low)</td>
<td>Record <strong>advanced scores only</strong>; mark appropriate indicator box</td>
<td>R [ ] W [ ] M [ ] S [ ]</td>
</tr>
<tr>
<td></td>
<td>Reading (R) Writing (W) Math (M) Science (S) La Lectura (L) La Escritura (E)</td>
<td>Underrepresented Population: Mid-</td>
<td></td>
</tr>
<tr>
<td>III – ADDITIONAL INDICATORS</td>
<td>Nomination Forms, Checklists, and Inventories</td>
<td>Strong Indicator S</td>
<td>Moderately Strong M</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Parent Inventory</td>
<td>S: 13 or more checks with strong indicators in comments section</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M: 10-12 checks with moderate indicators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Developmental Reading Assessment (DRA/Elementary) / Evaluación del Desarrollo de la Lectura (EDL)**
- proficient scores (Moderately Strong)
- (S two or more grade levels above OR one grade level above for Underrepresented Population students)

**Scholastic Reading Inventory (SRI/Middle School)**
- (S Advanced Range)

**Other: (Consult GT Office for SI or MSI ranges)**
- Woodcock Johnson-Revised (WJ-R) Tests of Achievement
- Woodcock Johnson-Revised (WJ-R) Spanish Version
- Iowa Test of Basic Skills (ITBS)
- Northwest Evaluation Association Measures of Academic Progress (NWEA-MAPS)
<table>
<thead>
<tr>
<th>Teacher/Specialist Checklist</th>
<th>S: 13 or more checks with strong indicators in comments section</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M: 10-12 checks with moderate indicators in comments section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other: Self-Nomination, Interview, Product and Performance, etc.</td>
<td>Indicator Given: __________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CREATIVITY (CREATIVE THINKER)**
* Stands alone as a separate GT identification category*

1. Four possible Creativity indicators must be used
2. A total of three indicators must be recorded

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Strong Indicator S</th>
<th>Moderately Strong M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divergent Thinking Activity</td>
<td>Must have at least two categories with a “3” on rubric</td>
<td></td>
</tr>
<tr>
<td>Humor Activity</td>
<td>Must have at least two categories with a “3” on rubric</td>
<td></td>
</tr>
<tr>
<td>Circles/Lines Activity</td>
<td>Must have at least three categories with a “3” on rubric</td>
<td></td>
</tr>
<tr>
<td>KOI</td>
<td>Must score in the “Superior” or “Very Superior” range</td>
<td></td>
</tr>
<tr>
<td>Teacher/Parent Creativity Checklist</td>
<td>Must have 10 or more checks with strong indicators in comments section</td>
<td></td>
</tr>
<tr>
<td>Product/Performance</td>
<td>Must have at least three categories with scores of 4 or 5 on the Product/Performance Rating Scale</td>
<td></td>
</tr>
</tbody>
</table>

- **Gifted and Talented Identification**: Yes □
- **Date submitted to the GT Office**: _____
- **Creativity (Creative Thinker) Identification**: Yes □
- **[District exceptionally gifted] Identification**: Yes □
- **GT Rep**: GT Rep
- **Twice Exceptional (IEP in place)**: Yes □
- **Watch List**: Yes □
**Criteria for GT Identification:**

1. A total of **three** indicators must be recorded. Remember that district guidelines require that every student be screened on at least four instruments.
2. At least **two** indicators **must** come from **I-Cognitive Ability** and/or **II-Achievement in the Curriculum** (i.e. two from Cognitive Ability or two from Achievement in Curriculum or one from each section)
3. CogAT subtests can be used as separate indicators (Verbal, Quantitative, Non-Verbal)
4. Each CSAP assessment can be used as a separate indicator
5. Underrepresented Populations - one year above grade level on the SRI/DRA/EDL

Underrepresented Population student. Mid-Proficient scores on CSAP (Moderately Strong) for Underrepresented Population students--

**Criteria for GT Creativity (Creative Thinker) Identification:**

- A total of **three** indicators must be recorded (from the Creative Thinker section). Remember that district guidelines require that every student be screened on at least four instruments.

**Criteria for GT Watch List:**

- Fewer than three indicators
- Students who are in the top 10% of the school population (Cognitive Ability, Achievement, Curriculum)

**Strength Area(s) (Aligns with Gifted Service Plan):**

Reading ☐ Writing ☐ Math ☐ Science ☐ Verbal (CogAT) ☐
Quantitative (CogAT) ☐

Non-Verbal (Raven’s/CogAT) ☐ Intellectual Ability (IQ) ☐ Creativity (Creative Thinker) ☐

**IDENTIFICATION OVERVIEW**

**Read the identification overview thoroughly.** It contains suggestions, requirements, worksheets, instructions and best practices for administering testing instruments, and inventories for identification.

*Identification must be reported to the GT Department by **first week of May***

**Use the Excel spreadsheet to report newly identified students as a data collection tool.**

**GT IDENTIFICATION**

1. **Four possible criteria** must be used for all students being assessed.
2. All students at a grade level need to be assessed on the **same four criteria**.
3. A total of **three** indicators **must** be recorded for formal GT identification.
4. At least **two** indicators **must** come from I-Cognitive Ability and/or II-Achievement in the Curriculum (i.e. two from Cognitive Ability or two from Achievement in Curriculum or one from each section).

5. CogAT subtests (if tested for HGT) can be used as separate indicators (Verbal, Quantitative, and Non-Verbal).

6. Each [state standards] assessment can be used as a separate indicator.


**CREATIVITY (CREATIVE THINKER) IDENTIFICATION**

1. Four possible Creativity indicators must be used for all students being assessed.
2. A total of **three** indicators **must** be recorded (from the Creativity sections).
3. A total of **two** indicators **must** be recorded from the Creativity “Strong Indicator” section.

**WATCH LIST**

1. Fewer than three indicators
2. Students who are in the top 10% of the school population (Cognitive Ability, Achievement, Curriculum, Creativity)

**IDENTIFICATION OVERVIEW**

**District Guidelines for Identification by Grade Level -- Elementary**

**Kindergarten:** Children are screened for enrollment in the [district] Advanced Kindergarten Program. THIS IS NOT GT IDENTIFICATION. *These students may receive services, as needed.*

**First grade:** *These students should receive services, as needed, but are not necessarily formally identified. In unique cases, appropriate instruments for first grade include:*

- Teacher/Specialist checklist
- Teacher Observation Index (KOI), if all teachers are trained
- CogAT, if available (sub-tests can be used as separate indicators)
- Reading inventory
- Extraordinary products or performances
- Achievement or ability testing, if available
Second grade:  *Formal identification generally starts in second grade since there are more instruments available for students at this age.*  Appropriate instruments for second grade include:

- Parent checklists - to be sent home (ideally with registration packets) to the parents of every second grade student
- Teacher/Specialist checklists - 3-4 blank forms given to every second grade teacher. More may be given if needed.
- Teacher Observation Index (KOI) – if all teachers are trained, in the second quarter of school
- **Raven’s Test** – given to all 2nd graders
- CogAT, if available (sub-tests can be used as separate indicators)
- Reading inventory
- Extraordinary products or performances.
- Achievement or ability testing, if available

Third grade:  *Appropriate instruments for third grade include:*

- Parent checklists - for students new to the school, whose parents did not fill one out in second grade
- Teacher/Specialist checklists - 3-4 blank forms given to every third grade teacher. More may be given if needed.
- **Creativity (Creative Thinker) indicators**  
  - Parent creative thinker Checklist
  - Teacher creative thinker Checklist
  - Divergent Thinking Activity
  - Humor Activity
  - Circles Activity
  - Product/Performance
  - KOI
- Raven’s Test - for students new to the district, who did not take the Raven’s as a second grader
- Reading inventory
- Extraordinary products or performances.
- Achievement or ability testing, if available
- KOI, if available

Fourth grade:  *Appropriate instruments for fourth grade include:*

- Parent checklists - for students new to the school, whose parents did not fill one out in second grade.
- Teacher/Specialist checklists - 3 - 4 blank forms given to every fourth grade teacher. More may be given if needed.
- Standardized achievement tests (CSAP). Each CSAP score can be used as a separate indicator.
- **Raven’s Test** – given to all 4th graders
• Reading inventory
• Extraordinary products or performances
• Achievement or ability testing, if available

Fifth grade:  *Appropriate instruments for fifth grade include:*

• Parent checklists - for students new to the school, whose parents did not fill one out in fourth grade.
• Teacher/Specialist checklists - 3 - 4 blank forms given to every fifth grade teacher. More may be given if needed.
• **Creativity (Creative Thinker) indicators**
  - Parent creative thinker Checklist
  - Teacher creative thinker Checklist
  - Divergent Thinking Activity
  - Humor Activity
  - Lines Activity
  - Product/Performance
  - KOI
• Raven’s Test - for students new to the district, who did not take the Raven’s as a fourth grader
• Reading Inventory
• Standardized achievement tests. Each score can be used as a separate indicator.
• Extraordinary products or performances
• Achievement or ability testing, if available

IDENTIFICATION OVERVIEW
District Guidelines for Identification by Grade Level - **Middle School**

Sixth grade:  *Appropriate instruments for sixth grade include:*

• Parent checklists - to be sent home (ideally with registration packets) to the parents of **every sixth grade student**
• Teacher/Specialist checklists - 3 - 4 blank forms given to every sixth grade teacher. More may be given if needed.
• Raven’s Test - for students new to the district, who did not take the Raven’s as a fourth grader
• Reading Inventory (SRI)
• Standardized achievement tests. Each score can be used as a separate indicator
• Extraordinary products or performances
• Achievement or ability testing, if available

Seventh/Eighth grade:  *Appropriate instruments for seventh/eighth grade include:*

209
• Parent checklists - to be sent home (ideally with registration packets) to the parents of every sixth grade student
• Teacher/Specialist checklists - 3 - 4 blank forms given to every sixth grade teacher. More may be given if needed.
• Raven’s Test - for students new to the district, who did not take the Raven’s as a fourth grader
• Reading Inventory (SRI)
• Standardized achievement tests. Each score can be used as a separate indicator
• Extraordinary products or performances
• Achievement or ability testing, if available

Reporting Newly Identified Students to the Gifted Education Department

1. Report only newly identified students not already listed on your GT printout.

2. On a separate Newly Identified Sheet, report previously identified student’s strength area/s so this information can be updated online.

3. These reports should be submitted at least once a year, usually in the spring. You may submit additional reports at any time of the school year.

4. List only students who have met the district guidelines for formal identification.

5. Record student name and ID number. Data is entered by ID number, so please be sure that you have accurately recorded the ID number.

6. Place a checkmark in the box corresponding to the qualifying criteria for the student.

Keeping Track of Your Identification Screening

It is extremely important that the opportunity for identification is equitable for all students and that the results are defensible to teachers, parents, and the district.

• Remember that district guidelines require that every student be screened on four instruments.
  o You may therefore find it more efficient to use the computer database/Excel spreadsheet to keep track of your identification process. That way you will
have complete data for every student in the school, those who did not qualify for G/T services as well as those who did.

- If you choose to do your record-keeping by hand, you may use a copy of the report form. The first time a child meets a criterion, write that child’s name and indicate the score (if relevant) or mark an x in the appropriate column.

- Remember that you should continue using your screening instruments for all students at a grade level, not just the ones who met the first criteria.

- Continue your screening, using as many instruments as you would like, but at least four. Mark each qualifying criteria for the students screened.

- Scan the worksheet for students with at least three x’s, including at least two from section I-Cognitive Ability and/or II-Achievement in the Curriculum. Add these students’ names and identifying instruments to the G/T Reporting Form so that they will be formally identified. Then complete an insert for cumulative record identifying a student as Gifted, preferably on brightly colored paper.

- Scan the worksheet for students with two x’s and determine what other information might be gathered for them for identification.

**SAMPLE PORTFOLIO/PRODUCT/PERFORMANCE ITEMS:**

- Creative writing samples that are significantly above and beyond those of their peers and even some adults
- Independent projects that involve physical or visual products that are significantly above and beyond those of their peers and even some adults
- In-depth research projects of inventions that are significantly above and beyond those of their peers and even some adults
- Class projects that are significantly above and beyond those of their peers and even some adults
- Video tapes of oral presentations that are significantly above and beyond those of their peers and even some adults
- Documented examples of creativity that are significantly above and beyond those of their peers and even some adults
- Essay tests that show evidence of creative thinking that are significantly above and beyond those of their peers and even some adults
- Parent narratives of specific evidence of a student’s creative thinking and/or in-depth study of topics of interest to the student or extra-curricular activities that are significantly above and beyond those of their peers and even some adults
- Major school or outside awards or recognition involving a high level of creative thinking or extraordinary productivity.
SAMPLE PORTFOLIO/PRODUCT/PERFORMANCE ITEMS:

- Creative Writing samples that are significantly above and beyond those of their peers and even some adults

- Independent projects that involve some sort of physical or visual product that are significantly above and beyond those of their peers and even some adults

- In-depth research projects that are significantly above and beyond those of their peers and even some adults

- Class projects that are significantly above and beyond those of their peers and even some adults

- Video tapes of oral presentations that are significantly above and beyond those of their peers and even some adults

- Documented examples of creativity that are significantly above and beyond those of their peers and even some adults

- Essay Tests that show evidence of creative thinking that are significantly above and beyond those of their peers and even some adults

- Parent narratives of specific evidence of student’s creative thinking and/or in-depth study of topics of interest to the student or extra-curricular activities that they are involved in that are significantly above and beyond those of their peers and even some adults
Appendix L: Teacher Training Questionnaire

1. Please list your bachelor’s degree(s) and institution:
2. If applicable, please list your master’s degree and institution:
3. If applicable, please list your doctorate degree and institution:
4. Do you speak other languages besides English?
   a. If yes, please list language(s) and your fluency estimate:
5. Do you hold an ESL endorsement? If yes, please list the institution:
6. Do you hold a foreign language endorsement?
   a. If yes, please list language and institution:
7. Is your teacher’s license provisional?
8. Do you hold a professional teachers license? In what area?
9. Have you completed a graduate level gifted-education specialist program?
   a. If yes, please list the name of the institution:
10. Do you hold a gifted education specialist endorsement?
11. If you have completed an endorsement for a gifted education specialist, please check all
    the areas of competency that were included below:
    a. All characterizations of gifted and talented, including minority cultures and languages.
    b. Knowledge of traits and needs of all gifted and talented students from other cultures and language minorities
    c. Special populations of gifted and talented students, including the culturally and linguistically diverse.
    d. Knowledge about the nomination, identification, and assessment processes for culturally and linguistically diverse gifted students.
    e. Knowledge about the types of instructional strategies and differentiation instruction needed to meet the needs of culturally and linguistically diverse gifted students.
    f. Knowledge about how to monitor, assess, and evaluate ongoing instructional programs for culturally and linguistically diverse gifted students; their impact on students’ achievement and progress; and provide on-going modification to a student’s learning plan, as indicated.
12. Do you hold a culturally and linguistically diverse education K-12 endorsement?
    a. If yes, from which institution?
13. Have you completed any coursework in second language acquisition? If yes, please list:
14. Please list any professional development you have had for the following areas:
    a. gifted education:
    b. gifted education for the culturally and linguistically diverse:
    c. bilingual education:
15. Please list additional coursework in any of the above three areas, if they did not culminate in a degree or endorsement:
16. Please list any work experience with gifted culturally and linguistically diverse students, or bilingual students, if it was not part of a degree or endorsement: