As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Robert Kraemer entitled Special Education Placement Factors for Latino Students and recommend that it be accepted as fulfilling the dissertation requirements for the Degree of Doctor of Philosophy.

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Final approval and acceptance of this dissertation is contingent upon the candidate’s submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirements.

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ABSTRACT

The disproportionate representation of minority students in special education programs has been a problem for over forty years. Factors contributing to minority overrepresentation include the lack of primary prevention, inappropriate language and educational assessment, over-referral of minority students for suspected learning difficulties, duration of enrollment in language support services [i.e. English as a Second Language instruction (ESL)], and lack of cultural and linguistic knowledge by K-12 teachers, specialists, and administrators. The goal of the investigator was to determine pertinent placement factors used by Multidisciplinary Educational Team (MET) members when deciding whether or not to place Latino English Language Learner (ELL) students in special education for a suspected specific learning disability (SLD). Identification of such factors may elucidate why some ELL students are inappropriately placed in special education for a SLD while others who need services are not. The investigator also will determine the extent special education eligibility determination was based on standardized achievement test scores, Intelligence Quotient (IQ) test scores, IQ-achievement discrepancy criteria, and qualitative data such as MET report data.

Keywords: English language learner, special education, assessment
CHAPTER 1
INTRODUCTION

Disproportionality

The disproportionate representation of minority students in special education programs has been a problem for over forty years (Artiles, Rueda, Salzar, & Higareda, 2005; Artiles, Rueda, Salzar, & Higareda, 2002; Artiles, Trent, & Kuan, 1997; Artiles & Trent, 1994). Disproportionate representation can exist in the form of either an under-representation of certain minority students (e.g. Latinos categorized as gifted and talented) or over-representation of certain minority students [e.g. African Americans categorized as mentally retarded (MR)] (Donovan & Cross, 2002) in special education programs.

Dunn (1968) first reported that minority students were overrepresented frequently in the special education category of MR. He reported that 60 to 80% of students placed in special education programs were of minority status (e.g. African American, Latino, and Native American). Several scholars (Deno, 1970; Wright & Santa Cruz, 1983; Meir, Stewart, & England, 1989; Artiles & Trent, 1994) have since extended the work of Dunn, creating a more comprehensive understanding of minority students’ overrepresentation in special education programs.

Factors contributing to minority student overrepresentation include students’ lack of or inconsistent participation in primary prevention programs (i.e. Head Start), inappropriate language and educational assessment, over-referral of minority students for suspected learning difficulties, duration of enrollment in language support services, and lack of cultural and
linguistic knowledge by K-12 teachers, specialists, and administrators (Artiles et al., 2005; Artiles et al., 2002; Artiles et al., 1997; Artiles & Trent, 1994; Serna & Nielsen, 1998). Even though more is known now, program changes have been implemented slowly (Donovan & Cross, 2002; Serna & Nielsen, 1998). Several of the program changes that the aforementioned researchers have brought forth have been documented by Klingner, Artiles, Kozleski, Utley, Zion, Harry, Duran, and Riley (2005). These researchers called for culturally responsive actions designed to improve the education of all students including culturally and linguistically diverse students.

**Culturally Responsive System Changes Needed**

The National Center for Culturally Responsive Educational Systems (NCCRESt) is a project funded by the U.S. Department of Education's Special Education Programs. Professionals at NCCRESt provide technical assistance and professional development designed to close the achievement gap between minority students and their peers, and reduce inappropriate referrals to special education.

A team of researchers at NCCRESt published recommendations for individuals working with minority students (Klingner et al., 2005). The researchers presented their recommendations within three interrelated domains: (a) culturally responsive policy, (b) culturally responsive practice, and (c) culturally responsive people as change agents. The first culturally-responsive policy Klingner and her colleagues (2005) recommended for change is the amendment of current legal requirements at both the federal and state levels regarding eligibility and determination of students suspected of needing special educational support services. They suggest consistent and
equitable eligibility policies across the states for all students. Currently, each state’s policy makers can interpret the federal law as they see fit, which may lead to inconsistent services across states. Students receiving special education services in one state may not be eligible in another.

The researchers also called for a comprehensive review of policies that affect how and where resources and money are spent. Klingner and colleagues (2005) suggested that policies are set up to benefit students attending financially wealthy school districts rather than those attending poorer school districts. Administrators of these wealthier districts are able to offer a higher salary to teachers and specialists, thus enabling them to draw more experienced personnel. Consequently, first-time and less experienced teachers must seek employment in poorer school districts. Klingner and colleagues (2005) also stated that students attending wealthy school districts often have access to higher quality tangible resources such as state of the art computer labs, latest editions of classroom textbooks, and lower student to teacher ratio.

Klingner and her colleagues (2005) also called for a change in teacher certification methods. The researchers recommended that state policies include monetary incentives for teachers working with minority students. This change in policy is designed to attract older, more experienced teachers to teach at poorer, failing schools having a high minority student population.

Culturally responsive practices that Klingner and her colleagues (2005) recommended consisted of a nationwide implementation of early intervention, universal screenings, and continuous monitoring. Additionally, district administrators should collaborate with one another
rather than work against one another. Unfortunately, general and special education personnel run their programs separately rather than jointly. Administrators can combine or co-run monthly staff meetings and encourage an open dialogue among the regular and special education staff during the meetings. The sharing of information disseminated by administrators would allow all teachers the opportunity to learn about the others’ educational issues and concerns.

Culturally responsive practices also include practices that influence teacher education, professional development, and evidence-based instruction. Klingner and her colleagues (2005) recommended that university-level researchers disaggregate student performance data to determine “what” instruction or intervention is most effective with “which” population of students. For instance, researchers may determine that the Fernald method benefits ELL students who do not possess a specific learning disability (SLD) more so than ELL students having an SLD.

Klingner et al. (2005) also recommended that university level researchers in general education and special education departments collaborate and that research endeavors include all students rather than only students with SLD or emotional and behavior disorder (EBD) with non-disabled students as control participants. The goal of culturally responsive research practices is to acquire new, useful knowledge that can be applied easily by educators to all students.

Finally, Klingner and her colleagues (2005) presented the notion that culturally responsive systems change requires involvement of individuals who are culturally responsive agents of change. That is, every person working in education needs to embrace the concept that he or she is the most powerful change agent in the lives of all students. The person responsible
typically has the most influence over the school climate, thus principals must ensure that their school personnel use culturally responsive, evidence-based teaching methods. General and special educators can implement culturally responsive instruction by connecting each student’s academic work to his or her family, community, and culture as minority students often feel they must choose between academic success and their cultural practices.

Specific Learning Disability

Definition of SLD

The definition of SLD that appears today in IDEA 2004 was adopted from the National Advisory Committee on the Handicapped (NACH) report to congress (NACH, 1968). The term “specific learning disability” refers to:

- a disorder in one or more of the basic psychological process (e.g. attention, memory, and retrieval) involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes conditions such as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include a learning problem that is primarily the result of visual; hearing; motor disabilities; mental retardation; emotional disturbance; or an environmental, cultural, or economic disadvantage.

As stated above, an SLD cannot be attributed to learning problems caused by “environmental, cultural, or economic disadvantage.” This part of the SLD definition pertains to students who are ELL and also have been identified as having a SLD. ELL students frequently exhibit learning problems in the general education classroom due to a combination of poor English language skill, a language impairment in their first language, and a SLD in reading, writing, and/or math (Donovan & Cross, 2002). In this case multiple program placement in ELL,
speech-language, and SLD support is appropriate. A problem arises, however, when an ELL student is placed in multiple support programs when he or she may be struggling to learn a new language, academic content, and culture. These students require additional language learning resources rather than specialized individualized reading, writing, or math instruction. An appropriate and valid determination of the presence of a language-impairment or SLD is vital to ensuring SLD services are provided to those students who truly possess a learning disorder rather than those students who struggle in the classroom because of other learning obstacles.

**ELL Language Support Eligibility**

For an ELL student to qualify for school-based ELL support services, parents or guardians must provide home language information. A student’s home language information can be documented on a separate “Home Language Survey” form or provided by the parent or guardian on the student’s School Enrollment form. Administrators can use either of these forms to gather the following data to determine whether a student may be ELL. Three questions presented on the forms are (a) what language is spoken in the home, (b) what language(s) are currently spoken by the student, and (c) what was the first language spoken by the student? The individual responsible for ELL placement decisions (e.g. Local Education Agency, State Education Agency, and/or ELL instructor) uses these data to determine placement. Obtaining a student’s home language is the first step in a multi-step process in determining ELL placement.

Once a student has been identified as an ELL, his or her proficiency in speaking, comprehending (typically referred to as oral language), reading, and writing English must be determined. Several commercially available language proficiency tests include the English
Language Development Assessment (World-class Instruction Design and Assessment (WIDA) consortium, 2005), IDEA Proficiency Test (Ballard-Tighe, 2005), Language Assessment System (McGraw-Hill, 2000), Stanford English Language Proficiency Test (Harcourt Assessment, 2005), the Woodcock-Muñoz Language Survey – Revised (Woodcock, Muñoz-Sandoval, Ruef, & Alvarado, 2000) and, in the state of Arizona, the Arizona English Language Learner Assessment (AZELLA, 2005). The AZELLA is the assessment tool used by English as a Second Language (ESL) instructors to determine whether an ELL student continues to qualify for ELL services or has acquired a “proficient” level of English language skills and can be dismissed from the program.

**Special Educational Evaluation of ELL Students**

When a student, regardless of ethnicity or current language status, struggles with learning and/or retaining academic concepts, he or she often is referred by the classroom teacher to a child study team (CST) for an evaluation. CST members, the school psychologist, special and classroom education teachers, the speech-language pathologist, and the student’s parents or guardians, discuss possible instructional recommendations. If the recommendations implemented by the classroom teacher do not result in student progress, a follow-up meeting is held and a psycho-educational evaluation is recommended. If recommendations turn out to be effective no further action is required by the team. This method of intervention is often called Response to Intervention (RTI): An evidence-based method of identifying and instructing struggling students (Fuchs, et al., 2003). Several variations of RTI have been implemented, some properly, others
improperly. Proper implementation of RTI as it applies to ELL students is presented in the Alternative Approaches to Assessment section.

**State of Arizona Assessment Options**

Three evaluation options are available for use by the state of Arizona district personnel assessing ELL students for an SLD. District personnel using the first option will themselves be bilingual and assess students in both first and second languages (sometimes a third language is considered). Doing this ensures that the determination of an SLD is not attributed to low or poor second language (English) skills. Personnel using the second option will not be bilingual and will conduct the assessment with the use of interpreters. Personnel using third option will typically be mono-English speakers and will not rely on interpreters but will use translated versions of tests. The use of translated assessments has the least appeal as these “altered” tests lose their statistical integrity: That, is they may have been normed without the use of members of the population being assessed.

**The IQ-Achievement Discrepancy Model**

For ELL students, the psycho-educational evaluation may be problematic, especially when Intelligence Quotient (IQ) scores are used to make placement decisions (Donovan & Cross, 2002). Several distinct problems arise when using a student’s IQ score, regardless of ethnicity or language ability, as a significant criterion for eligibility determination. The first problem is treatment validity. Treatment validity is defined as how well (or poorly) a test’s construct matches the treatment construct. That is, will the use of a test score lead to effective treatment? Thus, when using a student’s IQ score as a major criterion for identifying a SLD, poor treatment
validity occurs (Donovan & Cross, 2002). First, IQ scores are unrelated to the design, implementation, and evaluation of intervention developed to overcome learning and behavioral problems in school (Donovan & Cross, 2002).

Another aspect of IQ score misuse is when evaluators use the IQ-achievement discrepancy model as a criterion for making eligibility determinations for ELL students. The IQ-achievement discrepancy model is based on the premise that a typically developing student’s ability to achieve academically is equal to his or her intelligence (IQ-achievement consistent). That is, a student who achieves at his or her grade level is thought to have a “normal” level of intelligence. Subsequently, a student who struggles to achieve at his or her grade level and has been diagnosed as having “normal” intelligence on psychometric tests may be considered learning disabled or IQ-achievement discrepant. Psychometric tests such as the Woodcock-Johnson Tests of Achievement III (WJ III ACH), Woodcock-Johnson Test of Cognitive Abilities III (WJ III COG), the Kaufman Assessment Battery for Children, second edition (KABC) and the Wechsler Intelligence Scales for Children, fourth edition (WISC IV) often are used by evaluators when making diagnoses as to whether a student is IQ-achievement discrepant or IQ-achievement consistent. The evaluator obtains an intelligence quotient (IQ) that is constructed such that, theoretically, the population mean IQ is 100 with a standard deviation of 15. The expected population mean of both verbal (VIQ) and performance (PIQ) sub-tests is also 100, hence the expected discrepancy between sub-tests in a large enough, normal, population is zero. Whereas an individual discrepancy of 9 (p < 0.05) to 12 (p < 0.01) is statistically
significant, an individual discrepancy is not considered clinically significant unless it is greater than 15. Thus, a student whose test scores do not result in a significant IQ-achievement discrepancy does not, theoretically, possess an SLD. Likewise, a student whose test scores result in at least one IQ-achievement discrepancy does possess an SLD. Therefore, an unexplained reason exists why this student is underachieving in light of having "normal" intelligence.

IQ scores do not remain static over time, often fluctuating as students age, if a student has an SLD (Krassowski & Plante, 1997). Thus, a student’s IQ is a questionable piece of data when used for special education considerations. For example, a student with a Performance IQ score of 85 and Full Scale IQ score of 100 would qualify “numerically” for special education services. If that student were to be assessed the following year (assuming the previous testing was not performed) his or her IQ scores may not result in a “qualifying” discrepancy. That is, one’s IQ score does not remain constant over his or her lifetime. As one matures and cognitive processes become entrenched, one becomes more intelligent (all things being equal). Thus, several authors deem the IQ-based discrepancy procedure as psychometrically unsound and inappropriate for all students, regardless of ethnicity or possible disability (Donovan & Cross, 2002; Krassowski & Plante, 1997).

Several authors (Donovan & Cross, 2002; Krassowski & Plante, 1997) have expressed other reasons for dissatisfaction with the use of the IQ-achievement discrepancy procedure. These include (a) the discrepancy size is an arbitrary number, 15 in some states and 22 in others, (b) problems concerning methodologies used for determining discrepancy determination in most states do not account for the phenomenon of regression to the mean, a special problem with
extreme scores (failure to account for regression effects penalizes lower-scoring students in
decreasing the likelihood of being diagnosed as SLD rather than MMR), (c) multidisciplinary
team members may request testing a student until the evaluator finds a discrepancy, and (d) the
IQ-achievement discrepancy procedure is unreliable when used as the single criterion for
placement eligibility. Therefore, alternative non-biased approaches or accommodations to
current assessment methods need be developed to ensure valid and reliable assessment of ELL
students.

**SLD Assessment of ELL Students**

Current assessment practices for determining an SLD in ELL students include the use of
(a) English-only standardized achievement and IQ tests which lead to an IQ-achievement
discrepancy, (b) bilingual achievement and IQ tests administered by a bilingual evaluator, (c)
English-only standardized achievement and IQ tests with the use of an interpreter, (d) non-verbal
assessment tests such as the Comprehensive Test of Nonverbal Intelligence (CTONI) and the
Universal Nonverbal Intelligence Test (UNIT), and (e) alternative “qualitative” methods, of
which, several are discussed below. The determination of an SLD in an ELL student is a
challenging and serious endeavor. Poorly conducted assessments are especially harmful to ELL
students as these students are susceptible to being misdiagnosed as having an SLD when they
may be undergoing the unenviable task of learning a new and strange language, culture, and
academic concepts (Echevarria & Graves, 2003). Thus, culturally appropriate, ecologically
valid, and reliable educational assessment is crucial when one is evaluating an ELL student for
an SLD (Donovan & Cross, 2002; Valdez Pierce, 2003). Without this type of assessment, ELL students will continue to be diagnosed inappropriately as having an SLD.

**Alternative Approaches to Assessment**

District personnel using alternative approaches will obtain a valid ecological assessment of ELL students. Personnel who implement early screening measures will gain a clearer understanding of a student’s academic skills. Rather than wait until the student’s struggles negatively affect his or her academic and/or behavior performance, pertinent and functional assessment should be conducted. Several tools, such as the Texas Primary Reading Inventory, the Teacher Observation of Child Adjustment, and First Step to Success have been used by evaluators and show promise as appropriate identification and methods for remediation of students having an SLD and behavior difficulties (Donovan & Cross, 2002).

Other alternative or nontraditional methods of assessing ELL students consist of test modification, curriculum-based measurement (CBM), portfolio assessment, and RTI. Test modification typically consists of translating the language of test items into a standardized test in the student’s native language (L1). This is an arduous task, which subsequently, violates the standardization of the test’s norms. Performing a translation of a standardized test from English into another language, thus re-norming the original test data are permissible when the scores derived from the test are used in conjunction with other forms of data. Data derived from the translated test will at the very least allow the evaluator to gain insight into student performance in his or her home language. This technique is more acceptable and defensible when making special education program recommendations than use of data derived from a non-translated test.
Screening tools are alternative assessment tools. Many times school psychologists, psychometricians, speech-language pathologists, and special education teachers develop their own locally-normed tests (screeners). These tools are created by gathering test items from various standardized tests with the sole purpose of collecting preliminary data prior to administration of standardized tests. As with any assessment, results of screening tools should never be used as a single measure to determine eligibility.

CBM consists of frequent discrete measures of a skill such as reading rate, reading comprehension, or math calculation. A classroom teacher uses CBM to monitor student learning over a period of time. A student’s performance in an academic or behavioral area is graphed and tracked over a short period of time. Performance tracking allows the teacher to identify whether a student is making progress or performing poorly, or whether his or her learning has reached a plateau. If the student is making progress, his or her teacher can adjust the curriculum (McCloskey & Athanasiou, 2000). If the student’s progress has reached a plateau, the teacher can adjust the curriculum to an easier level. CBM can be used with all students, regardless of the student’s native language. CBM can be time consuming but can be a valid method to measure academic development (Valdez Pierce, 2003).

Portfolio assessment has been identified as an effective performance-based procedure for the alternative assessment of ELL students (McCloskey & Athanasiou, 2000; Abedi, 2006). A student’s portfolio, a collection of a student’s classroom work, is one of the most valid representations of a student’s classroom performance available. Portfolio assessments are holistic in nature and when used with supporting data such as CBM or standardized test scores can be
used to assist CST members in making placement decisions. CST members who rely on student portfolio data to further support or enhance other means of ELL student evaluation ensure the valid ecological assessment of these students.

**Response to Intervention: A Tiered Identification/Intervention Approach**

Personalized instruction lies at the very heart of RTI. With RTI each student’s unique needs are evaluated and appropriate instruction is provided by teachers. This method of instruction allows teachers to provide all students the opportunity to succeed academically (Brown, 2008). Most RTI models are comprised of three tiers. During the first tier, Tier I, the classroom teacher collects baseline data for each student while also monitoring achievement on a regular basis. In an RTI model, classroom teachers use evidence-based curricula and instruct in a manner consistent with the curriculum developer’s intent. For instruction to be effective and appropriate for ELL students, assessment as well as instruction must be culturally and linguistically congruent. That is, a teacher who wants to teach ELL students appropriately and effectively must know each ELL student’s level of language proficiency in both first language (L1) and second language (L2). Teachers must plan assessment and instruction using culturally relevant curricula that reflect the background and experiences of the students (Brown, 2008; Fuchs, et al., 2003). Once instruction is adjusted to meet each student’s individual needs, progress is monitored closely and decisions are made as to whether students are meeting predetermined targets. If, after providing instructional modifications that could include (a) re-teaching of content, (b) smaller grouping of students in the general education classroom, or (c)
providing instruction in the student’s L1, a student does not make the targeted gains, as measured using CBM, the student will receive Tier II support (Fuchs, et al., 2003).

In Tier II, interventions, rather than instructional adjustments to the general curriculum, are provided to the students. Tier II interventions often are delivered in small group settings and may be provided by a specialist (i.e. Title I teacher, reading specialist, or special education teacher) (Brown, 2008) Tier II interventions are supplemental to the general education curriculum. Instructional interventions for ELL students should be both linguistically and culturally appropriate. Ongoing collection and monitoring of student achievement data are made by instructors. A Tier II student who fails to reach identified instructional targets is a candidate to move to Tier III (Brown, 2008). A student who makes gains may cycle back to Tier I with close observation of the student’s continuing progress (Fuchs, et al., 2003).

In Tier III, interventions are more intensive and delivered individually or in small groups (Brown, 2008). Student progress continues to be monitored closely by the instructors. In many RTI models, Tier III would be considered special education and students who progress to this tier would qualify automatically for special education services (Brown, 2008).

The RTI model, when implemented correctly and its tenets adhered to by district personnel, allows for comparisons of students to other similar or true peers in their local cohort rather than to national norms. This identification and intervention approach is more favorable than an identification approach relying on evaluator interpretation of standardized assessment data which typically lacks the consideration of an ELL student’s linguistic status, and perhaps most importantly his or her cultural status.
Summary

Eligibility determination for ELL students suspected of having an SLD should be based on appropriate assessment techniques, such as those mentioned in the previous section, and with agreement of all CST members. Inappropriate placement of ELL students in special education may result when invalid assessment tools and poor CST decision-making skills are exercised. An important fact to remember is that the CST members have the power to positively affect a student’s academic future by using both culturally valid and reliable assessment tools with student data.

Need for Research

Although several factors may predict an ELL student’s placement into a special education program, these factors were arrived at post hoc. The fact remains that many of these students have been placed into a special education program on poor placement practices. The presence of a learning disability is difficult at best to determine in monolingual speakers of English. This process is extremely difficult when evaluating ELL students. Only a comprehensive review of eligibility determination criteria used by school district personnel nationwide will reveal whether the methods used by district personnel when placing (or not placing) an ELL student in special education are considered valid and culturally responsive.

In districts nationwide, members of the school’s CST (which is comprised of the school psychologist, speech-language pathologist, and special education teacher) are the gatekeepers of special education. These personnel, along with the classroom teacher, review and discuss a struggling student’s classroom performance data. During these meetings these personnel provide
intervention recommendations to the classroom teacher with the caveat that a future meeting may occur in the event the student in question continues to struggle with the curriculum – which is a given for many floundering ELL students. Students who continue to struggle academically post intervention are once again discussed by the team members and often are recommended for an educational evaluation.

The data derived from student evaluation may or may not be used in a valid or culturally-responsive manner. That is, are the scores derived from a standardized test of intelligence or achievement truly representative of the student’s intellectual or academic performance? Chances are, for an ELL student, test scores are a meager representation of the student’s English language ability and not the construct tested. Conversely, if the test scores provide a piece of the larger puzzle along with ecological language proficiency and achievement data then the evaluation may indeed be culturally responsive.

Therefore, a key concern is how district personnel, school psychologists and special education teachers make special education eligibility decisions. Do they consider culturally responsive data such as student portfolios or do they rely solely on data derived from standardized tests? Do they consider an ELL student’s first language proficiency or disregard first language status, altogether? These factors are important when one is determining the direction of a student’s academic career.

A comprehensive review of eligibility criteria used by district personnel nationwide may be the best method to determine whether the methods used by district personnel when placing (or not placing) an ELL student in special education is considered valid and culturally responsible. A
study of this magnitude could be conducted by way of surveying various school district personnel nationwide. The survey instrument must represent the construct of eligibility criteria (i.e. qualitative data, standardized test score data, and other factors such as English and first language proficiency) and be a valid representation of the determination process.

**Goal of Study**

Based on pertinent literature, the investigator developed several research questions regarding special education placement for ELL students suspected of having an SLD. The data were collected from one school district having elementary, middle, and high schools. The three questions are as follow: (a) did ELL students placed in special education perform similarly on achievement and IQ assessments when compared to ELL students who were not placed, (b) did district personnel use a standardized procedure when evaluating ELL students suspected of having an SLD and (c) to what extent did qualitative factors acquired from the MET report data contributed in the MET members’ placement decisions.
CHAPTER 2
REVIEW OF LITERATURE

The disproportionate representation of minority students in special education programs has been a longstanding problem. Disproportionate representation continues to exist in the form of either (a) an under-representation of Latino students categorized as gifted and talented, (b) an over-representation of Latino students as learning disabled, or (c) an over-representation of African American students categorized as MR. A key concern in the identification process is how district personnel, school psychologists and special education teachers make special education eligibility decisions. They must consider culturally responsive data such as student portfolios along with data derived from standardized tests. In terms of ELL students, first and second language proficiency must be considered.

Eligibility determination for ELL students suspected of having an SLD should be based on appropriate assessment techniques. Inappropriate placement of ELL students in special education may result when invalid assessment tools and poor CST decision-making skills are exercised. An important fact to remember is that the CST members have the power to positively affect a student’s academic future by using both culturally valid and reliable assessment tools with student data.

Selection of Studies

Studies to be reviewed for this analysis were obtained using two methods. First, the researcher obtained pertinent articles from University of Arizona special education, rehabilitation, and school psychology (SERP) department faculty members familiar with
this area of research. Second, the researcher searched the Educational Resources Information Center (ERIC) and PsycINFO databases for articles pertaining to minority overrepresentation in special education.

Several computer searches were conducted via ERIC. The first search using the keywords “minority overrepresentation” yielded a list of 17 articles. Two criteria were then used by the researcher to determine whether the article should be included in the literature review. The first criterion was that when the researcher scanned the Result List article text, it had to include the words misrepresentation or overrepresentation of minority students in special education programs. The second criterion was that pertinent articles had to be data driven. That is, the researchers used methods to analyze student or electronic data to demonstrate whether minority overrepresentation occurred. Ten articles fulfilled the first criterion. Only four articles fulfilled the second, more stringent, criterion. A second computer search of the ERIC database using the terms “language learner overrepresentation”, “language learner misrepresentation”, and “ELL students with SLD” resulted in no articles.

Several computer searches were conducted using the PsycINFO database. When the keywords “minority overrepresentation” were used to search for potential articles, 15 records were found. After scanning the articles, the researcher found only one of these articles that met the overrepresentation or misrepresentation text requirement. The aforementioned article was found in the ERIC search. The researcher also searched PsycINFO for the terms “language learner overrepresentation”, “language learner misrepresentation”, and “ELL students with SLD” and found no articles.
The researcher also reviewed the citations of articles obtained by the SERP faculty. Several articles’ titles included the words overrepresentation or misrepresentation of minority students in special education, thus qualifying them for the researchers’ literature review process. In all, three articles met the criteria of a data driven study.

**Analysis of Articles**

The researcher grouped the final ten articles into two categories: (a) theory driven articles, and (b) data driven articles. Information presented in the theory driven articles was used by the researcher to conceptualize ideas presented in this paper as well as to support information presented in the Introduction section. Information presented in the data driven articles were analyzed by the researcher and discussed in the Review of Literature section of this paper.

**Results**

Disproportionate representation, as defined by Artiles et al. (2005), is the “extent to which membership in a given group affects the probability of being placed in a specific special education disability category” (p. 288). The study of disproportionate representation has been conducted by researchers who have (a) reported trends in the representation of minority students classified as SLD (Chin and Hughes, 1987), (b) identified variables that predict program placement of minority students (Artiles et al., 1998), and disaggregated district data to better understand the interaction of a student’s level of proficiency in both his or her native and English language on subsequent program placement (Artiles et al., 2005).

**Review of Study Methods**

Chin and Hughes (1987) analyzed Office of Civil Rights (OCR) school survey data for
the years 1979, 1980, 1982, and 1984. Categories of exceptionality included in the OCR survey data included educably mentally retarded (EMR), trainable mentally retarded (TMR), seriously emotionally disturbed (SED), specific learning disability (SLD), speech impaired (SI), and gifted and talented (G/T). The authors reported a decline in representation of Hispanics classified as EMR and an incline in the overrepresentation of African Americans in EMR categories (e.g. educable mentally handicapped, trainable mentally handicapped, and seriously mentally handicapped) from 1978 to 1984. The authors also reported that Hispanics, African Americans and Native Americans continued to be underrepresented in gifted and talented education (GATE) programs. Data for enrollment trends from 1978 to 1984 are presented in Table 1.

Table 1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>15.08%</td>
<td>19.81%</td>
<td>27.25%</td>
<td>25.55%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.54%</td>
<td>8.53%</td>
<td>8.81%</td>
<td>13.38%</td>
</tr>
<tr>
<td>Asian/Pacific Islanders</td>
<td>0.78%</td>
<td>1.01%</td>
<td>1.21%</td>
<td>1.49%</td>
</tr>
<tr>
<td>American Indians</td>
<td>1.19%</td>
<td>0.88%</td>
<td>0.63%</td>
<td>0.976%</td>
</tr>
<tr>
<td>Whites</td>
<td>75.41%</td>
<td>69.76%</td>
<td>62.08%</td>
<td>58.61%</td>
</tr>
</tbody>
</table>

Artiles et al. (1998) identified placement predictors in SLD programs for Latino, African-American, and Anglo students. The sample of the study was drawn from the original work of
Ingels, Abraham, Karr, Spencer & Frankel (1990). As the result of their work, Ingels and colleagues (1990) developed the National Education Longitudinal Study (NELS) database. This study was designed to record the experiences of eighth-grade students and to relate those experiences to current academic achievement and to later achievement in school and life. Ingels and colleagues (1990) gathered data in the following areas: work status, opinions, values, school characteristics, school atmosphere, school work, school performance, guidance, special programs, after-school supervision, involvement with the community, after-school activities, educational and occupational life goals and financial assistance.

Artiles et al. (1998) used eighth-grade NELS data that included 25,000 eighth grade students who attended 1,052 schools. NELS data were collected from students, their parents, teachers, and school administrators via self-report questionnaires designed to measure multiple domains. The NELS student questionnaire was comprised of nine domains related to the following areas: (a) general background characteristics, (b) language background, (c) family/home characteristics, (d) future aspirations, (f) home responsibilities, (g) school experience/characteristics, (h) home responsibilities, and (i) extra-curricular activities. The NELS parent questionnaire was comprised of six domains: (a) general family characteristics, (b) the respondent child-school achievement/experience, (c) the family/home experience, (d) the parents’ perception of their child’s self-perception, (e) parental aspirations, and (f) the family’s financial situation.

Artiles and his colleagues (1998) selected a sample of eighth-graders (n=3,439) from the NELS database. They selected groups of students categorized as SLD and selected non-disabled
peers having similar family and personal characteristics. Risk and protective factors were included in the study to predict educational placement. According to Artiles et al., risk refers to an “actuarial or probabilistic relation between one index and the likelihood of attaining a given outcome of interest” (p. 543) and protective factors are “attributes, environmental conditions, biological predispositions, and positive events that can act to contain the expression of deviance or pathology” (p. 543) Artiles and colleagues conducted their study under the premise that certain risk factors and protective factors can enhance or constrain student development.

Artiles and colleagues (1998) selected 12 variables from the literature because of their potential influence on students’ developmental and educational outcomes. The authors created two domains, student and family, as a way to determine whether predictors vary by ethnic group. The authors concluded that some factors predicted placement in SLD programs for all ethnic groups but the strength of the predictors varied by students’ ethnicity. Thus, variables that strongly predicted placement for the Latino students were a weaker predictor for White and African-American students. The power of the predictive model was moderate as it explained between 17% and 26% of the variance among predictors. The 12 predictor variables are presented across ethnic groups in Table 2.

Table 2

| Student Variables that Predict Placement |
|-------------------------------|-----------------|-----------------|-----------------|
| Variable                      | Ethnic Group    | Predictor       |
|                               | Latino          | African         | White           |
Table 2 (cont.).

*Student Variables that Predict Placement*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Latino</th>
<th>African American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student self esteem</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Perception of social status</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Student locus of control</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Perception of academic standing</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Perception of school risk factors</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Perception of school protective factors</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Student behavioral history</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Student academic history</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Perception of parent expectations</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Family structure/rules</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Family size</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Math achievement</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

Note: ‘N’ denotes that the variable as a predictor was statistically significant (p<.05). ‘Y’ denotes that the variable was not a statistically significant predictor of placement (p>.05) via discriminate analyses. From “Predicting Placement in Learning Disabilities Programs: Do Predictors Vary by Ethnic Group?” by A.J. Artiles, Z. Aguirre-Munoz, and J. Abedi, 1998, *Exceptional Children*, 64 (4), 543-560.

Artiles and his colleagues (1998) acknowledged several limitations to their study. First,
they admit that a description of the participants was lacking. This, they suggest, was due to the study sample being comprised of system-identified students. Second, due to the variability of SLD identification procedures used in school districts throughout the country, knowledge of the type of learning problem was unavailable. Third, several factors may have affected study results: in the NELS database, students with disabilities tended to over-excluded from the sample, several variables were assessed via self-reports [self report data possess inherent limitations (Abedi, Lord, & Plummer, 1997)], and the large sample size might have influenced the results of the statistical analyses.

To determine special education placement trends for ELL students in an urban California school district, Artiles et al. (2005) disaggregated data into factors such as disability, grade level, language proficiency, social class, language support, and participation in special education programs. Artiles and colleagues argued that researchers have overestimated the homogeneity of ELL students, thus assuming all ELL students possess identical levels of language proficiency and cultural history. The authors used three measurements, composite index, risk index, and odds ratio to determine special program representation trends for ELL students. The measurements are presented in Table 3.

Table 3

*Measurements Used in Determining Special Program Representation Trends*

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite Index</td>
<td>Calculated by dividing the number of students of a given racial</td>
</tr>
</tbody>
</table>
Table 3 (cont.).

*Measurements Used in Determining Special Program Representation Trends*

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement definition or ethnic group within a particular disability category by the total number of students for all ethnic groups within that same disability.</td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>Calculated by dividing the number of students in a given racial or ethnic category served in a given disability category by the total enrollment for that racial ethnic group in the school population.</td>
</tr>
<tr>
<td>Odds ratio</td>
<td>Described as the probability of a minority student’s being assigned to an SLD class. The ratio is the percentage of minority students classified as SLD divided by the percentage of minorities who are not in special education classes categorized as SLD.</td>
</tr>
</tbody>
</table>

Artiles and colleagues calculated these indices for subgroups of ELL students in categories of MD, SLD, speech and language impaired using English proficient students as the comparison group. Ethnic percentages are as follow: Latino 69%, White 10.5%, African American 13.6%, Asian 4.3%, Philipino 1.9%, Pacific Islander 0.4%, and American Indian 0.3%.

Artiles et al. (2005) found that disproportionate representation patterns were related to
grade level, language proficiency status, disability category, type of special education program, and type of language support services. ELL students in secondary grades were overrepresented as SLD while elementary ELL students were represented fairly. Artiles and colleagues also discovered that ELL students proficient in neither L1 nor English were more likely to be placed earlier and for a longer period of time.

As Artiles and colleagues (2005) have reported, the overrepresentation of ELL students in special education programs is multifactorial. That is, several factors may interact more frequently than others in influencing the placement of an ELL student into a special education program. Chinn and Hughes (1987) reported placement trends of all students enrolled for special education services. Unlike Artiles et. al. (2005), these authors used data that included students nationally, not locally. Although Chinn and Hughes’ efforts were worthwhile their analysis may not have been thorough enough.

**Summary**

In their most recent study, Artiles and his colleagues (2005) disaggregated data into factors such as disability, grade level, language proficiency, social class, language support, and participation in special education programs. In doing so, the authors found that disproportionate representation patterns were related to grade level, language proficiency status, disability category, type of special education program, and type of language support services. ELL students in secondary grades were overrepresented as SLD while elementary ELL students were represented fairly. Artiles and colleagues also discovered that ELL students who were not proficient speaking their first language as well as English were more likely to be placed in a
special education program sooner and for a longer period of time. Thus, the overrepresentation of ELL students in the district Artiles et al. (2005) studied was a phenomenon specific to this student population and their multi-factorial backgrounds and language proficiency.

Conclusion

The disproportionate representation of minority students in special education programs continues to be a problem for many school district personnel and education researchers alike. Many factors contribute to the overrepresentation problem: the lack of primary prevention, inappropriate language and educational assessment, over-referral of minority students for suspected learning difficulties, duration of enrollment in language support services such as ESL, Structured English Immersion (SEI), and lack of cultural and linguistic knowledge by K-12 teachers, specialists, and administrators.

As scholars in the field of special education continue to peel away the many layers covering the core factors contributing to the complex problem of disproportionate special education representation, ELL students continue to matriculate through the education system. Nonetheless, these scholars have contributed vital data regarding a problem as pertinent today as 40 years ago. Unfortunately, 40 years of hard work has not resulted in 40 years of continued progress in developing appropriate methods to properly identify minority students suspected of having an SLD.
CHAPTER 3

METHOD

The disproportionate representation of minority students in special education programs has been a longstanding problem. Disproportionate representation continues to exist in the form of either (a) an under-representation of Latino students categorized as gifted and talented, (b) an over-representation of ELL Latino students as learning disabled, or (c) an over-representation of African American students categorized as MR.

A key concern in the identification process is how school district personnel such as school psychologists and special education teachers make special education eligibility decisions. They must consider culturally responsive data such as student portfolios along with data derived from standardized tests. In terms of ELL students, first and second language proficiency must be considered as eligibility determination for ELL students suspected of having an SLD should be based on appropriate assessment techniques.

The disproportionate representation of minority students in special education programs continues to be problematic for many school district personnel. Factors affecting ELL students’ progress in their classrooms include the lack of primary prevention, inappropriate language and educational assessment, over-referral of minority students for suspected learning difficulties, duration of enrollment in language support services such as ESL, Structured English Immersion (SEI), and lack of cultural and linguistic knowledge by K-12 teachers, specialists, and administrators.

The goal of the investigator was to determine: (a) whether ELL students placed in special
education performed similarly on the achievement and IQ assessments when compared to ELL students who were not placed, (b) whether district personnel used a standardized procedure when evaluating ELL students suspected of having an SLD and (c) to what extent did qualitative factors acquired from the MET report data contribute in the MET members’ placement decisions. The determination of the presence of a standardized evaluation procedure by district personnel may lead to a better understanding of how the individuals in this district implement culturally responsive evaluation procedures. Conversely, the lack of such a procedure will only add to the corpus of data previously collected on improper evaluation of ELL students.

**Participants**

The investigator conducted this study in a small, rural school district in southern Arizona. Participant data were obtained by the investigator from a list of ELL students provided by the director of Special Education Services. From this list of 20 participants, 10 were evaluated for an SLD and subsequently placed in special education and 10 students were evaluated but not placed in special education.

The investigator reviewed existing student assessment data: WJ III ACH test scores, verbal and non-verbal IQ scores, and Multidisciplinary Educational Team (MET) report data (psychologists, special and general education teachers, parents, and other professionals’ input). Participant names were not recorded as each was given a group assignment and corresponding number.

At the time of the study, the district was comprised of one primary school (grades
K-2), one grade school (grades 3-5), one middle school (grades 6-8), one high school (grades 9-12), and two elementary schools: one grades K-6 and one grades K-8 school.

**Inclusionary and Exclusionary Criteria**

Latino ELL students who were dually-placed in ELL and special education support services were assigned in the Placed (P) group. Students who received ELL support services and have been evaluated for a language-based learning disability but were not placed into special education were assigned to the Not Placed (NP) group.

**Instruments**

**Achievement Testing**

The WJ III ACH battery was used by district personnel to assess participant achievement (please refer to Appendix A for standard battery test description). Although data were collected on all test areas, only language-based areas were analyzed. In terms of the WJ III ACH, cluster scores analyzed consisted of the following: (a) Broad Reading which is comprised of tests Letter-Word Identification, Reading Fluency, and Passage Comprehension; (b) Reading comprehension Skills which is comprised of test Passage Comprehension; (c) Written Expression which is comprised of tests Writing Fluency and Writing Samples; (d) Basic Reading Skills which is comprised of test Basic Reading Skills; (e) Academic Skills which is comprised of tests Letter-Word Identification, Calculation, and Spelling; (f) Academic Fluency which is comprised of tests Reading Fluency, Math Fluency, and Writing Fluency; (g) Academic Application which is comprised of tests Passage Comprehension, Applied Problems, and Writing Samples.
Intelligence testing

Kaufman Assessment Battery – Children

The KABC is an IQ test often used by school psychologists and diagnosticians to determine cognitive ability of students. This test not only provides excellent predictors of academic achievement but also can be used to determine the strengths and weaknesses of a student. Students with severe language based disabilities may have very low scores on the WISC-IV. Please refer to Appendix B for the test description.

Wechsler Intelligence Scale – Children

The WISC-IV is an IQ test often used by school psychologists and diagnosticians to determine cognitive ability of students. This test not only provides excellent predictors of academic achievement but also can be used to determine the strengths and weaknesses of a student. Students with severe language based disabilities may have very low scores on the WISC-IV. Please refer to Appendix C for the test description.

Non-Verbal IQ tests are designed to give a comprehensive, standardized assessment of general intelligence with entirely nonverbal administration and response formats. Two commonly used tests are the CTONI and the UNIT. Nonverbal IQ tests are essentially ‘language free’ and require the student to respond via nonverbal communication (e.g. head nodding) as directions are presented nonverbally. Please refer to Appendices D and E, respectively for test descriptions.
Data Analysis

The investigator entered each of the participant’s test score data into a SPSS (2009) readable *.sav format. Statistical analysis consisted of conducting independent t-tests between each participant group’s WJ III ACH data mean cluster scores. Group means, standard deviations, and significance level are presented in the results section. Participant IQ data were not analyzed for group differences for the simple fact that an IQ test was not administered to each participant.
CHAPTER 4

RESULTS

The goal of the investigator was to determine (a) whether or not a standardized evaluation procedure was used by district personnel when evaluating ELL students suspected of having an SLD, (b) whether or not ELL students suspected of having an SLD performed similarly on the achievement and IQ assessments and (c) to what extent qualitative factors acquired from the MET report data contributed in the MET members’ placement decisions.

The investigator placed participants into one of two groups. Participants who were dually-placed in ELL and special education support services were assigned to the Placed (P) group. Participants who received ELL support services and have been evaluated for a language-based learning disability but were not placed into special education were assigned to the Not-Placed (NP) group. Participant data, in the form of standardized test scores, were analyzed by the investigator using independent t-tests. Qualitative analysis was performed by the investigator on each participant’s MET report data.

Statistical Analysis

Results of the statistical analysis are presented in tables 4 and 5. On the WJ III ACH, differences between the P and NP groups were statistically significant (p< .05) on the following subtests: Reading Fluency, Spelling, Passage Comprehension, Applied Problems. Differences between the P and NP groups were statistically significant (p< .01) on both Writing Fluency and Writing Samples subtests. NP participants performed higher than P participants on each of the
subtests. No statistically significant difference was found between P and NP groups for the subtests Letter-Word Identification and Word Attack.

Table 4

WJ III ACH Test Scores Independent Samples T-test Results for P and NP Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Placement Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter-Word Identification</td>
<td>NP</td>
<td>10</td>
<td>91.9</td>
<td>9.96</td>
<td>.136</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>9</td>
<td>82.44</td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>NP</td>
<td>8</td>
<td>87.75</td>
<td>4.86</td>
<td>.020*</td>
</tr>
<tr>
<td>Fluency</td>
<td>P</td>
<td>7</td>
<td>76.57</td>
<td>10.81</td>
<td></td>
</tr>
<tr>
<td>Spelling</td>
<td>NP</td>
<td>10</td>
<td>89.2</td>
<td>6.87</td>
<td>.014*</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>9</td>
<td>77.78</td>
<td>10.97</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>NP</td>
<td>7</td>
<td>98.29</td>
<td>10.12</td>
<td>.006**</td>
</tr>
<tr>
<td>Fluency</td>
<td>P</td>
<td>6</td>
<td>78.83</td>
<td>10.91</td>
<td></td>
</tr>
<tr>
<td>Passage</td>
<td>NP</td>
<td>10</td>
<td>87.6</td>
<td>7.32</td>
<td>.013*</td>
</tr>
<tr>
<td>Comprehension</td>
<td>P</td>
<td>9</td>
<td>78.0</td>
<td>7.71</td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td>NP</td>
<td>10</td>
<td>96.7</td>
<td>10.48</td>
<td>.028*</td>
</tr>
<tr>
<td>Problems</td>
<td>P</td>
<td>9</td>
<td>85.67</td>
<td>9.34</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>NP</td>
<td>10</td>
<td>98.8</td>
<td>11.21</td>
<td>.0023**</td>
</tr>
<tr>
<td>Samples</td>
<td>P</td>
<td>9</td>
<td>80.22</td>
<td>20.48</td>
<td></td>
</tr>
<tr>
<td>Word</td>
<td>NP</td>
<td>6</td>
<td>97.00</td>
<td>8.22</td>
<td>.148</td>
</tr>
<tr>
<td>Attack</td>
<td>P</td>
<td>5</td>
<td>83.4</td>
<td>19.23</td>
<td></td>
</tr>
</tbody>
</table>

Note: Word Attack is a test on the WJ III ACH Extended battery. All other tests are part of the WJ III ACH Standard battery.

*p < .05, two-tailed. ** p < .01, two-tailed.

Results of independent samples t-test with corresponding means and standard deviations.
for each of the WJ III ACH cluster scores are presented in Table 5. On the WJ III ACH cluster score analysis, differences between the P and NP groups were statistically significant ($p < .05$) on both Broad Reading and Academic Fluency. NP participants performed higher than P participants on each of the clusters. Differences between the P and NP groups were statistically significant ($p < .01$) on the following clusters: Reading Comprehension, Written Expression, Broad Written Language, and Academic Application. NP participants performed higher than P participants on each of the above clusters. No statistically significant difference was found between P and NP groups on Basic Reading Skills and Academic Skills clusters.

Table 5

*WJ III ACH Cluster Score Independent Samples T-test Results for P and NP Groups*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Placement Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig. (2-tailed)</th>
<th>p&lt; .05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Reading</td>
<td>NP</td>
<td>9</td>
<td>85.89</td>
<td>8.59</td>
<td>.028*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>9</td>
<td>74.11</td>
<td>11.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>NP</td>
<td>2</td>
<td>98.00</td>
<td>2.82</td>
<td>.005**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>5</td>
<td>68.8</td>
<td>7.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Expression</td>
<td>NP</td>
<td>8</td>
<td>98.38</td>
<td>10.57</td>
<td>.002**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>9</td>
<td>76.89</td>
<td>12.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad Written Language</td>
<td>NP</td>
<td>8</td>
<td>94.00</td>
<td>7.84</td>
<td>.003**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>9</td>
<td>74.67</td>
<td>13.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Reading Skills</td>
<td>NP</td>
<td>6</td>
<td>92.5</td>
<td>9.73</td>
<td>.159</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>6</td>
<td>79.5</td>
<td>18.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5 (cont.).

WJ III ACH Cluster Score Independent Samples T-test Results for P and NP Groups

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Placement Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig. (2-tailed) p &lt; .05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Skills</td>
<td>NP</td>
<td>8</td>
<td>90.88</td>
<td>10.51</td>
<td>.063</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>7</td>
<td>76.43</td>
<td>16.73</td>
<td></td>
</tr>
<tr>
<td>Academic Fluency</td>
<td>NP</td>
<td>6</td>
<td>86.17</td>
<td>7.78</td>
<td>.030*</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>7</td>
<td>72.86</td>
<td>10.90</td>
<td></td>
</tr>
<tr>
<td>Academic Application</td>
<td>NP</td>
<td>8</td>
<td>92.00</td>
<td>8.07</td>
<td>.002**</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>7</td>
<td>74.86</td>
<td>9.51</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, two-tailed. ** p < .01, two-tailed.

Table 6 shows which of the WJ III ACH standard scores were obtained for each participant in group P via psycho-educational evaluation. Noteworthy is that several participants were not administered all of the subtests needed to compute a composite score.

Table 6

WJ III ACH Cluster Scores Obtained for Participant Group P

<table>
<thead>
<tr>
<th>Cluster</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Achievement</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Oral Expression</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
Table 6 (cont.).

*WJ III ACH Cluster Scores Obtained for Participant Group P*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Reading</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Listening Comprehension</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Written Expression</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Broad Written Language</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Basic Reading Skills</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Academic Skills</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Academic Fluency</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Academic Application</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

Note: Y = yes, test was administered. N = No, test was not administered.

Table 7 shows which of the WJ III ACH standard scores for each participant in group NP...
were obtained via psycho-educational evaluation. Noteworthy is that several participants were not administered all subtests needed to compute a composite score.

Table 7

*WJ III ACH Cluster Score Obtained for Participant Group NP*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>NP1</th>
<th>NP2</th>
<th>NP3</th>
<th>NP4</th>
<th>NP5</th>
<th>NP6</th>
<th>NP7</th>
<th>NP8</th>
<th>NP9</th>
<th>NP10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Achievement</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Oral Expression</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Broad Reading</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Listening Comprehension</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<tr>
<td>Written Expression</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Broad Written Language</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Basic Reading Skills</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Academic Skills</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>
Table 7 (cont.).

*WJ III ACH Cluster Score Obtained for Participant Group NP*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>NP1</th>
<th>NP2</th>
<th>NP3</th>
<th>NP4</th>
<th>NP5</th>
<th>NP6</th>
<th>NP7</th>
<th>NP8</th>
<th>NP9</th>
<th>NP10</th>
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</thead>
<tbody>
<tr>
<td>Academic Fluency</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Academic Application</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Note: Y = yes, test was administered. N = No, test was not administered.

Table 8 shows which intelligence test (if any) was administered to each of the participants in group P.

**Table 8**

*General and Nonverbal Intelligence Tests Administered to Participant Group P*

<table>
<thead>
<tr>
<th>Test</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC-IV</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>KABC</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<tr>
<td>UNIT</td>
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<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>C-TONI</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

Table 9 shows which intelligence test (if any) was administered to each of the participants in group NP.
Table 9

*General and Nonverbal Intelligence Tests Administered to Participant Group NP*

<table>
<thead>
<tr>
<th>Test</th>
<th>NP1</th>
<th>NP2</th>
<th>NP3</th>
<th>NP4</th>
<th>NP5</th>
<th>NP6</th>
<th>NP7</th>
<th>NP8</th>
<th>NP9</th>
<th>NP10</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC-IV</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>KABC</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>UNIT</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>C-TONI</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Descriptive Analysis**

MET report data are presented for each participant. These data were collected from each participant’s MET document. In the report is the team members’ rationale for program placement decisions. Each participant’s test score is included to provide all data used by the MET members.

**Evaluation Report and Determination of Eligibility Data for Participant Group NP**

NP1. NP1 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

Based on accumulated data, teacher input, records review, observation, and progress towards goals, it has been determined that NP1 is performing at the level of his cognitive abilities and that a significant discrepancy does not exist between ability and performance. It was also determined that NP1’s current academic difficulties may be attributed to an educational disadvantage due to numerous absences.

Test scores, when available, for NP1 are as follow: WJ III ACH Broad Reading = 90,
Written Expression = 91, and Broad Written Language = 94. WISC-IV Verbal Comprehension = 59, Perceptual Reasoning = 71, Working Memory = 91, Processing Speed Index = 78, Full Scale Intelligence Quotient = 68. UNIT Memory Quotient = 97, Reason Quotient = 77, Symbolic Quotient = 82, and Unsymbolic Quotient = 91.

NP2. NP2 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

although there are some notable discrepancies between his cognitive abilities and achievement in some areas, the possible role played by bilingualism, culture, and teaching styles, within both the cognitive and academic realms, preclude any diagnosis of a learning disability. Recommendations: A significant discrepancy DOES NOT exist between intellectual and academic achievement.

Test scores, when available, for NP2 are as follow: WJ III ACH Broad Reading = 78, Basic Reading Skills = 87, Academic Skills = 87, and Academic Application = 82. KABC Short Term Memory = 80, Visual-Spatial Thinking = 109, Long Term Retrieval = 94, Fluid Reasoning = 85, Comprehension-Knowledge = 75, Mental Processing Index = 88, and Nonverbal Index = 91.

NP3. NP3 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

A significant discrepancy does not exist between academic achievement and nonverbal intellectual ability on the KABC in the areas of reading or mathematics. Writing Skills were not an area of suspicion and have shown to be within the low average to average range on previous screening instruments. The MET must consider second language acquisition, coupled with low average intellectual skills, low average Spanish language skills, and severely delayed English vocabulary as factors contributing to NP3’s slower rate of learning. Continued service through the ELL program is suggested.
Test scores, when available, for NP3 are as follow: WJ III ACH Broad Reading = 92, Written Expression = 96, Broad Written Language = 94, Academic Skills = 106, Academic Fluency = 80, and Academic Application = 102.

NP4. NP4 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

NP4 missed 53 days of school in kindergarten to 1st grade. Functioning in the “average” range when compared to children in same grade but “low average” range when compared to children his same age. NP4 entered kindergarten as a non-English speaker. NP4 was retained in 1st grade.

Test scores, when available, for NP4 are as follow: WJ III ACH Broad Reading = 98, Reading Comprehension = 100, Written Expression = 111, Broad Written Language = 108, Basic Reading Skills = 104, Academic Skills = 105, Academic Fluency = 95, Academic Application = 102. KABC Short Term Memory = 94, Visual-Spatial Thinking = 100, Long Term Retrieval = 108, Fluid Reasoning = 93, Comprehension-Knowledge = 92, and Fluid Crystallized Index = 95.

NP5. NP5 was not placed in special education based on the following information provided by the MET members as documented on the MET report Summary Section III:

A significant discrepancy DOES NOT exist between ability and achievement in any area.

Test scores, when available, for NP5 are as follow: WJ III ACH Broad Reading = 81, Written Expression = 85, Broad Written Language = 87, Basic Reading Skills = 86, Academic Skills = 86, Academic Fluency = 81, Academic Application = 88. KABC Short Term Memory =
74, Visual-Spatial Thinking = 81, Long Term Retrieval = 100, Fluid Reasoning = 90, Comprehension-Knowledge = 89, and Fluid Crystallized Index = 83.

NP6. NP6 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

NP6 is a seven-year-old second grade student. He was referred for evaluation because of concerns regarding his limited progress in reading and writing. He is an English language learner, whose home language is Spanish. As measured by the WISC-IV, NP6 appears to perform within the Low Average range of intellectual functioning. There was no statistically significant difference between his scores on the Verbal Comprehension Composite and the Perceptual Reasoning Composite. His ability to integrate his motor skills with visual stimuli falls within the average range. The criterion score for eligibility in Special Education services as a student with a Specific Learning Disability based on NP6’s full scale score of 88 on the WISC-IV is 75.

Recommendations include: It is recommended to the Multi-Disciplinary Evaluation Team that NP6 DOES NOT meet the State of Arizona eligibility requirements for eligibility as a student with specific learning Disability (SLD) due to the following: A significant discrepancy DOES NOT exist between ability and achievement in any academic area. NP6 will benefit from continued English language support through the ELL program at school.

Test scores, when available, for NP6 are as follow: WJ III ACH Broad Reading = 90, Written Expression = 104, Broad Written Language = 94, WISC-IV Verbal Comprehension = 89, Perceptual Reasoning = 88, Working Memory = 94, Processing Speed Index = 97, Full Scale Intelligence Quotient = 88.

NP7. NP7 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

Significant discrepancy DOES NOT exist between intellectual ability and academic achievement.
Test scores, when available, for NP7 are as follow: WJ III ACH Broad Reading = 70, Reading Comprehension = 96, Written Expression = 98, Broad Written Language = 89, Basic Reading Skills = 82, Academic Skills = 82, Academic Fluency = 77, and Academic Application = 91. KABC Short Term Memory = 88, Visual-Spatial Thinking = 90, Long Term Retrieval = 94, Fluid Reasoning = 85, Comprehension-Knowledge = 87, Mental Processing Index = 85 and Nonverbal Index = 90.

NP8. NP8 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

NP8 does not have any processing deficits nor does she have a significant discrepancy between ability and achievement at this time. The MET believes that she is an emerging reader. Her difficulties may be more related to worrying or lack of confidence rather than a learning disability.

Test scores, when available, for NP8 are as follow: WJ III ACH Broad Reading = 91, Written Expression = 114, Broad Written Language = 102, Basic Reading Skills = 105, Academic Skills = 98, Academic Fluency = 94, Academic Application = 99. KABC Short Term Memory = 100, Visual-Spatial Thinking = 103, Long Term Retrieval = 108, Fluid Reasoning = 102, Comprehension-Knowledge, and Fluid Crystallized Index = 108.

NP9. NP9 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

Although there are some notable discrepancies between his cognitive abilities and achievement in some areas, the possible role played by bilingualism, culture, and teaching styles, within both the cognitive and academic realms, precludes and diagnosis of a learning disability” Continue ELL support. A significant discrepancy DOES NOT exist between intellectual ability and academic achievement.
Test scores, when available, for NP9 are as follow: WJ III ACH Basic Reading Skills = 91, Academic Skills = 81, and Academic Application = 83. KABC Short Term Memory = 77, Visual-Spatial Thinking = 79, Long Term Retrieval = 89, Comprehension-Knowledge = 68, Mental Processing Index = 78, and Fluid Crystallized Index = 111.

NP10. NP10 was not placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

The results of this evaluation indicate a significant discrepancy between NP10’s cognitive abilities and achievement in the area of written expression; however, when closely examining his cognitive profile it is possible that difficulties in this area are due to a current transition period in the acquisition of English as a second language from basic interpersonal to academic learning skills rather than learning disability.

Test scores, when available, for NP10 are as follow: WJ III ACH Broad Reading = 83, Written Expression = 88, Broad Written Language = 84, Academic Skills = 82, Academic Fluency = 90, and Academic Application = 89. KABC Short Term Memory = 97, Visual-Spatial Thinking = 97, Long Term Retrieval = 114, Fluid Reasoning = 102, and Comprehension-Knowledge = 132. UNIT Memory Quotient = 94, Reason Quotient = 94, Symbolic Quotient = 97, Unsymbolic Quotient = 91, and Full Scale Intelligence Quotient = 93.

**Evaluation Report and Determination of Eligibility Data for Participant Group P**

P1. P1 was placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III.

A significant discrepancy DOES exist between intellectual ability and academic achievement in the areas of Basic Reading, Reading Comprehension, and Broad Written Language.
Test scores, when available, for P1 are as follow: WJ III ACH Broad Reading = 64,
Reading Comprehension = 68, Written Expression = 71, Broad Written Language = 74, Basic
Reading Skills = 72, Academic Skills = 81, Academic Fluency = 68, Academic Application = 73.
UNIT Memory Quotient = 93, Reason Quotient = 122, Symbolic Quotient = 104, Unsymbolic
Quotient = 111, Full Scale Intelligence Quotient = 108.

P2. P2 was placed in special education based on the following information provided by
the MET members as documented on the MET Report Summary Section III:

A significant discrepancy DOES exist between intellectual ability and academic
achievement in the area of Basic Reading and a moderate delay in Math
Calculation. Based on P2’s classroom performance to date, P2’s math calculation
skills are sufficiently delayed to significantly impact his performance in the
classroom. Thus, despite the fact that there is not a significant discrepancy between
his cognitive functioning and math ability, it is recommended that he receive
resource support in this area also.

Test scores, when available, for P2 are as follow: WJ III ACH Broad Reading = 65,
Written Expression = 71, Broad Written Language = 70, Basic Reading Skills = 63, Academic
Skills = 70, Academic Fluency = 68, and Academic Application = 79. KABC Short Term
Memory = 71, Visual-Spatial Thinking = 81, Long Term Retrieval = 78, Fluid Reasoning = 77,
Comprehension-Knowledge = 66, Mental Processing Index = 71 and Nonverbal Index = 72.

P3. P3 was placed in special education based on the following information provided by
the MET members as documented on the MET Report Summary Section III:

P3 is an 8 year old 2nd grade student at____ Elementary. She was referred for
evaluation by her classroom teacher and her mother because of concerns regarding
her limited academic progress since first grade but the school she was attending did
not feel an evaluation was appropriate. P3 developed 2 hemangiomas shortly after
birth. She has been seen by a pediatric neurologist since birth to treat this condition.
These vascular and brain abnormalities appear to be impacting P3’s ability to learn. As measured by the WISC-IV, P3 appears to perform within the Low Average range of intellectual functioning. There was no statistically significant difference between her scores on the Verbal Comprehension composite and the Perceptual Reasoning composite of the WISC-IV. P3 did demonstrate a significant difference between her verbal and nonverbal skills on the RAIS (Reynold’s Intellectual Assessment Scale) in favor of her verbal reasoning abilities. Particularly impacted was P3’s auditory recall, which was minimal as measured by the Verbal Memory subtest on the RAIS.

Test scores, when available, for P3 are as follow: WJ III ACH Broad Reading = 84, Written Expression = 94, and Broad Written Language = 88. WISC-IV Verbal Comprehension = 81, Perceptual Reasoning = 82, Working Memory = 94, Processing Speed Index = 100, and Full Scale Intelligence Quotient = 84.

P4. P4 was originally evaluated in the spring of 2005 and was not placed in special education based on the following data:

A significant discrepancy does not exist between nonverbal intellectual ability and academic achievement in any area of basic reading skills, reading comprehension, math calculations, math reasoning not written expression. Furthermore, P4 does not demonstrate significant discrepancies between intellectual ability and oral expression or listening comprehension in her primary language.

P4 was evaluated in the fall of 2006 and was subsequently placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

P4 is an 8 year old 2nd grade student at ____ Elementary. She was referred for evaluation because of concerns regarding her limited progress academically as well as her distracted behavior in class. She has received after school tutoring and small group support since March 2005. Prior to that she was evaluated for special education but found not eligible as a child with a Specific Learning Disability. At that time concerns were noted regarding her inattentive behaviors. As measured
by the KABC, P4 obtained scores that fell significantly below average and greater than 2 standard deviations below the mean. It is the opinion of this examiner that her distracted behaviors and her lack of interest/motivation as well as language issues interfered with obtaining an accurate score on this measure. On the UNIT she appears to perform within the Low Average range of intellectual function. Her ability to integrate her motor skills with visual stimuli also falls within the Average range. P4 qualifies for Special Education in the area of basic reading skills and reading comprehension. In addition, the MET recommended that P4’s mother take P4 to a physician to evaluate possible diagnosis of Attention Deficit Disorder. If a diagnosis is given and a medical certificate verifying this diagnosis is provided, the team may wish to reconvene to consider additional eligibility as a child under the category of Other Health Impaired.

Test scores, when available, for P4 are as follow: WJ III ACH Broad Reading = 83, Reading Comprehension = 61, Written Expression = 91, Broad Written Language = 82, Basic Reading Skills = 91, Academic Skills = 89, Academic Fluency = 86, and Academic Application = 80. KABC Short Term Memory = 83, Visual-Spatial Thinking = 82, Long Term Retrieval = 78, Fluid Reasoning = 93, Comprehension-Knowledge = 75, and Mental Processing Index = 79.

The following conference notes are included to demonstrate the MET members’ rationale for ELL program dismissal:

P4 is a 5th grade student who is 11 years old. She has a number of important strengths including the fact that she is respectful and has a pleasant demeanor. She follows school rules and has not exhibited any behavioral problems. Results of the initial psycho-educational assessment indicated that P4’s nonverbal IQ on the TONI-3 was within the Below Average range (SS=89) and in the Below Average range (SS=74) on the KABC. P4 has weaknesses in long term retrieval (memory), Verbal Ability, and in abstract reasoning that have a significant impact on her ability to process information and learn at an expected rate. P4 continues to exhibit significant academic delays and has continued to approach the standard on the AIMs assessment in reading and writing. Based on classroom performance to date, P4 continues to exhibit significant delays in the area of reading comprehension. Despite the fact that P4 has attended kindergarten through 5th grade in U.S. schools, is clearly acculturated to U.S. customs; has received linguistic support since
kindergarten in ELL classes, general education, and resource support since 2nd grade; English language proficiency has remained at the Intermediate Level on the Arizona English Language Learner Assessment (AZELLA) for the past few years. The AZELLA is a grade level test, but P4’s reading comprehension and writing skills are similar to students at the end of 2nd grade. To early 3rd grade, The AZELLA Proficiency cutoff scores increases with each grade level, and P4’s scores continue to fall just short of the Proficiency range. The team agreed that the data indicates P4’s cognitive processing problems are the primary cause of her learning difficulties rather than her ELL status. In fact, her lack of appropriate gains in English language acquisition seems to be a direct result of her learning problems. Furthermore, attendance in the ELL program means that P4 has less access to the general education curriculum and decreased exposure to proficient English speaking students. Therefore, the team concurred that her needs are best served via special education service than ELL services. Continue with special education support and exit from ELL.

P5. P5 was placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

It is recommended to the multi-disciplinary Evaluation Team that P5 DOES meet the State of Arizona eligibility requirements for eligibility as a student with a specific learning disability (SLD) due to: 1) A significant discrepancy DOES exist between ability and achievement in the areas of basic reading skills, reading comprehension, and written expression. P5 will benefit from continued participation in the ELL to improve her ability to communicate in English.

The following conference notes are included to demonstrate the MET members’ rationale for continued special education placement and ELL program dismissal:

Results of a three year, special education re-evaluation indicated that P5 was a youngster with a multitude of cognitive, and academic issues. In the area of cognitive processing, the initial evaluation revealed P5 had some significant deficits in the area of Verbal Comprehension and Perceptual Reasoning. She was administered the UNIT, a nonverbal assessment, and scored within the average range. At present, evaluation results also indicated academic skills deficits in the areas of reading, writing, and math. Her skills in these areas were comparable to students in the early 1st grade to late 2nd grade range. Staff members reported that P5 is a pleasure to have in class. She is polite, kind, and a well-behaved student. P5
continues to struggle with academic skills acquisition. P5 is an English Language Learner (ELL) who continues to score at the Basic to Intermediate level on the AZELLA. It is important to note that the AZ English Language Learner Assessment (AZELLA) is a grade level assessment. Each year, the test becomes progressively more difficult and a higher score is needed in order to perform within the proficient range. In P5’s case, this means she took a 3rd grade level English language assessment when her reading skills were only a K – 1st grade level. In February, 2008, P5 took the 3rd grade AZELLA test which was a different and more complex test that primary test used for K-2. She scored within the Basic range on all portions of the test. It is important to note that she was scoring at the Intermediate level on the Primary test in 1st and 2nd grade. A review of the interventions provided to P5 during her school career indicated the following: 1) P5 has always been educated in English. She has lived in the United States for many years and has attended U.S. schools since kindergarten; therefore, she is well assimilated into U.S. culture. 2) She has received ELL support for 5 years. 3) P5 has been receiving special education resource support in language arts and math, as well as speech/language services since 2nd grade. 4) She was retained in kindergarten due to frequent absences. Results of the current evaluation indicate that P5 has a specific learning disability in the areas of reading, writing, and math. In fact, this data indicates that P5’s learning disability/processing problems have contributed to her difficulties with English language acquisition in the same manner that they have interfered with her acquisition of reading, writing, and math skills. Despite the fact that she has received five years of general education in English, 5 years of ELL support, and three years of special education resource support to address her specific academic difficulties, P5 continues to demonstrate significant academic delays in reading, writing, and math. P5 will continue to receive resource support to address her reading, writing, and math deficiencies. The team recommended that P5 be exited from ELL services.

Test scores, when available, for P5 are as follow: WJ III ACH Broad Reading = 76, Written Expression = 79, and Broad Written Language = 82. WISC-IV Verbal Comprehension = 53, Perceptual Reasoning = 67, Working Memory = 74, Processing Speed Index = 107, and Full Scale Intelligence Quotient = 67. UNIT Memory Quotient = 94, Reason Quotient = 97, Symbolic Quotient = 90, Unsymbolic Quotient = 100, and Full Scale Intelligence Quotient = 95.
P6. P6 was placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

P6 meets the State of Arizona eligibility requirement for certification as a specific learning disability (SLD) student due to the following: A significant discrepancy exists between achievement and ability in the areas of reading comprehension and written expression if the nonverbal ability is used as indices of ability in conjunction with academic age norms. If grade norms are used there is not a discrepancy.

Test scores, when available, for P6 are as follow: WJ III ACH Broad Reading = 87, Reading Comprehension = 80, Written Expression = 84, and Broad Written Language = 78.

The following conference notes from a spring 2005 meeting are included to demonstrate the MET members’ rationale for continued special education placement and ELL program support:

P6 has significantly improved her basic reading and comprehension skills on the WJIII. She no longer demonstrates a significant discrepancy in reading and written expression. However, using age norms, she has a discrepancy in spelling and math reasoning. The MET feels that P6 continues to need special education support and services in mathematics. The MET would like to begin transition out of resource in reading and begin inclusion in regular 4th grade classroom for reading. The MET would like to add math resource for 4th grade. The MET would also like to consider an individualized spelling program for 5th next year, with decreased writing support in resource. The MET will again re-covene near end of 5th grade to discuss need for additional data and continued special education eligibility. No new data requested at this time.

The following conference notes from a spring 2007 meeting are included to demonstrate the MET members’ rationale for continued special education placement and ELL program support:

According to a review of records P6 attended school from kindergarten through 5th grade. Although she made satisfactory progress by the end of kindergarten in most
areas, her teacher reported that she struggled with letters and numbers. P6 was promoted to 1st grade and began to have significant difficulty with reading, math, and writing. By the end of her 1st grade year, she knew just 9 out of 100 sight words. She was consequently retained in 1st grade. By the end of P6’s retention year in 1st grade she made satisfactory progress in math, continued to have significant difficulty in reading and writing. Consequently, she was referred for a psycho-educational evaluation and scored within the low average of ability on both MAT-EF and KABC Nonverbal scales. She struggled with visual closure, visual-reproduction of designs and auditory sequential memory. Expressive vocabulary was severely delayed in both English and Spanish. Receptive vocabulary was delayed in English but within average range in Spanish. Spanish academic skills were delayed in both reading and spelling. At that time, she scored within the low average range in math on the WJIII. However, English academic skills were at 1.4 GE in reading and 1.0 GE in writing. Age norms were significantly delayed in written language and reading comprehension. P6 was placed in special education by the MET as a student with specific learning disability in reading comprehension and writing. She continued to receive ESL services. She was also evaluated by a speech-language therapist, who found her language delays to be exclusive to English and not her primary language of Spanish. P6 made good academic progress in reading and writing through 4th grade. As a 4th grader, she was academically re-evaluated using WJIII. She attained a broad reading 3.4 GE, a broad math 2.9 GE, and a broad written language 3.0 GE. Spelling and math reasoning skills were found to be significantly delayed. P6 continued to be eligible for special education services as a student with a specific learning disability in reading comprehension, written expression, and math reasoning. The MET reported that even though P6 did not have a significant discrepancy in the area of reading, eligibility was continued in order to transition her from resource room services to inclusionary services. As a 5th grader, she received just 10 minutes per day of special education support within the general education classroom in reading and writing. However, she received 30 minutes daily of inclusionary support in math. When her IEP was re-written in April of the 5th grade, her service time was increased to 30 minutes per day within the resource room for reading, writing, and math. P6 was promoted to the 6th grade and was scheduled into resource math and language arts. She continued to receive ELL support. The MET has determined that P6 continues to manifest a significant discrepancy between intellectual ability and academic achievement in the areas of math calculations and math reasoning skills. Furthermore, she continues to demonstrate a significant discrepancy in the areas of writing conventions and expression when the writing fluency subtest is not considered. The MET has determined that she is no longer eligible for reading resource room services. The MET recommends that P6 finish the school year in resource language arts, but be placed in a general education language arts class as an 8th grader with resource
study skills support for her writing. She continues to require individualized math
instruction with in the resource room due to severely delayed math skills. She will
also continue to receive ELL support services.

P7. P7 was placed in special education in the spring of 2004 based on the following
information provided by the MET members as documented on the MET Report Summary
Section III:

P7 is limited English proficient, but does also have a learning disability. P7
continues to require English Language support. He has significant difficulty with
reading in the classroom. P7 is paired with peer readers in science and social
studies. He struggles with figurative language and needs concepts explained in a
different more concrete manner. P7 should not be penalized for spelling errors as
long as he can get his point across. P7 needs to work on spelling and use a
dictionary to find correct spellings.

Test scores, when available, for P7 are as follow: WJ III ACH Broad Reading = 55,
Reading Comprehension = 62, Written Expression = 60, Broad Written Language = 59, Basic

The following conference notes from spring 2009 are included to demonstrate the MET
members’ rationale for continued special education placement and ELL program dismissal:

P7 has made great gains from ELL program, yet continues to fall just short of the
proficient range. Despite the fact that he has received at least 10 years of general
education in English, nine years of ELL support, and five years of special education
resource support to address his specific learning disability, P7 continues to
demonstrate significant academic delays in reading, writing, and math reasoning.
Therefore, the team concurs that P7’s academic and language needs are directly
related to his learning disability rather than to being an English language learner.
The team also considered P7’s continued participation in the ELL program means
that he has decreased access to meaningful opportunities to grow and develop in
other areas. For example, he is not able to take an elective. Furthermore,
participation in the ELL program means that he is not exposed to a more diverse
and enriched classroom environment with peers who are proficient English speakers
for that period of the day, as well as reduced opportunities to apply his reading
skills in the general curriculum. After considering all factors, the team agreed that special education resource support to address his reading is the most effective way to address his educational needs. P7 will continue to receive resource support to address his reading, writing, and math deficiencies. The team also recommended that P7 be exited from ELL services.

P8. P8 was placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

P8 is a 13 year old 7th grader, who was initially placed in special education as a student with a speech/language impairment in kindergarten. He has continued to receive language impaired therapy services through his current 7th grade placement. P8 was referred for a psycho-educational evaluation in 4th grade and qualified for services as a student with a specific learning disability in reading comprehension. Math services were added in the 5th grade after falling far below the standards and scoring low on the KEY MATH. He has continued to receive resource room instruction in language arts and math since that time. P8 was retained in 6th grade but that decision was reversed and he was promoted to 7th grade in the middle of the school year. P8 continues to have poor school attendance. He passed all classes during the 3rd quarter of 7th grade with the exception of resource math. P8’s last AIMS scores were at the approaches the standards level in reading and far below the standards in mathematics. P8 was referred for an updated psycho-educational evaluation by the MET to assist in continued special education determination. He was administered the TONI-3, to assess nonverbal intelligence due to his language impairment. P8 attained a TONI-3 SS of 96 to place him within the average range (39th percentile). P8 was also administered the WJIII Tests of Cognitive Abilities and demonstrated significant intra-cognitive discrepancies. He attained SS’s of 74 on both Verbal Ability and Comprehension-Knowledge Clusters, which is commensurate with his language impairment. However, P8 demonstrated severe processing deficit on the Long-Term Retrieval Cluster he attained a SS of 47 to place him below the 1st percentile. P8 struggled with visual-associative memory skills. However, short-term memory was within the average range as he attained a SS of 104. P8 used several compensatory strategies to include auditory rehearsal and visualization. Visual-spatial ability was also in the average range as he attained a SS of 99. Academic Skills on the WJIII were 3.7 GE for Reading Comprehension, 5.6 GE for Broad Reading, 6.4 GE for Reading Fluency, 5.1 GE for Math Calculations, 5.1 GE for Math Reasoning, and 5.2 GE for Written Expression. Thus, it is recommended by the MET that P8 may continue to meet State of Arizona eligibility requirements for certification as a specific learning disabled (SLD) student if the MET considers the following factors: P8 demonstrates a significant
discrepancy between intellectual potential and academic achievement in the area of Oral Expression and Listening Comprehension. P8 demonstrates a significant discrepancy between intellectual potential and academic achievement in reading comprehension and math calculations if the IQ range of 96-104 is used as a predictor of ability. Due to P8’s significant language impairment and long-term memory deficits, it is hypothesized that these scores obtained on the TONI-3 and WJII cognitive Battery may take into consideration the impact his learning disability has on cognition.

Test scores, when available, for P8 are as follow: WJ III ACH Broad Reading = 87, Reading Comprehension = 73, Written Expression = 84, Basic Reading Skills = 108, Academic Skills = 99, Academic Fluency = 77, Academic Application = 83. WISC-IV Verbal Comprehension = 77, Perceptual Reasoning = 84, Working Memory = 99, Processing Speed Index = 75, Full Scale Intelligence Quotient = 78.

P9. P9 was placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

P9 has been receiving individual instruction on a daily basis, with limited results. P9 was retained in kindergarten. He has made progress with his acquisition of English although he demonstrates a better ability to speak than understand English. Spanish is the primary language at home although P9 has older siblings who are fluent in English. As measured by the WISC-IV, P9 appears to perform in the Borderline range of intellectual functioning. This full scale IQ may be an underestimate of P9’s actual cognitive abilities as he demonstrated a significant weakness in his Verbal Comprehension that may be due to a language impairment. When considering P9’s Full Scale IQ score on the UNIT, a nonverbal measure, as well as his standard score of 82 on the Perceptual Reasoning Index of the WISC-IV, P9 demonstrates a greater ability to reason on tasks that do not require language.

Test scores, where available, for P9 are as follow: WJ III ACH Broad Written Language = 89 and Basic Reading Skills = 84. WISC-IV Verbal Comprehension = 69, Perceptual Reasoning = 82, Working Memory = 80, Processing Speed Index = 100, and Full Scale
Intelligence Quotient = 76. UNIT Memory Quotient = 94, Reason Quotient = 79, Symbolic Quotient = 87, Unsymbolic Quotient = 85, and Full Scale Intelligence Quotient = 85.

P10. P10 was placed in special education based on the following information provided by the MET members as documented on the MET Report Summary Section III:

P10 is a 14 year old student who was referred for a psycho-educational evaluation due to academic difficulties in the 7th grade. P10 is a friendly and cooperative child who completed the evaluation throughout four different sessions. His overall cognitive ability is difficult to summarize in a single score due to the variability of his performance. He was administered the WISC-IV as well as the Bateria III Pruebas de Hablidades Cognitivas in order to measure his skills in English and his primary language, Spanish. His ability to solve problems using language is better developed in Spanish as performed within the low average range (SS=89) when compared to English (SS=53). His ability to solve problems without the use of language was within the low average range on both batteries (WISC PRI = 84, Bateria Habilidad Pensar = 83). P10’s ability in processing simple or routine visual material without making errors was borderline to very low in both languages (WISC PSI = 70, Bateria Eficiencia cognitiva = 63). His ability to hold information in memory and manipulate it was within the extremely low range on the WISC (WMI=56); however, when the information and instructions were presented in Spanish he performed within the low range (SS=73). P10’s phonemic awareness as measured by the Bateria was average when compared to other Spanish speaking students his age (SS=93). His visual-motor integration as measured by the DTVMI is appropriate as he scored within the average range (SS-91). His oral language as measured by the Bateria was appropriate as he performed in the low range. His ability to decode single words was significantly impacted by his language as he demonstrated a big difference between his ability in English (SS=65) and Spanish (SS=96). His ability to understand read material was also better in Spanish (SS=79) than English (SS=66). His speed of reading was also different; however, the difference is not as marked as in the other reading subtests. P10’s mathematical skills were similarly developed in both languages as the difference was not significant: Calculation was within the low to low average range (W JIII=83, Bateria=79), his ability to quickly solve simple arithmetic problems was delayed as he performed in the low to very low range (WJIII=70, Bateria=74). Although P10 scored better on the Spanish writing subtests, his performance is significantly delayed in both languages in spelling (WJIII=43, Bateria=67) and his ability to put ideas in writing (WJIII=40, Bateria=68) as he scored within the very low range.
on both subtests. Nonetheless, his speed of writing was within the very low to low range (WJIII=40, Bateria=68). In deciding placement for P10, it is recommended that the multidisciplinary team consider the following information: Language acquisition issues appear to be significantly influencing P10’s performance in reading as his ability is comparatively higher in Spanish than in English. The acquisition of cognitive academic language proficiency, required for students to be successful in school, usually takes from five to seven years. P10 has been in English speaking schools for four years. Although P10’s written expression was higher in Spanish, he does demonstrate a discrepancy between overall cognitive ability and achievement in this area in his native language as well as in English. P10 also demonstrates a significant discrepancy between overall cognitive ability and achievement in the area of math reasoning in both languages. P10 continues to require significant ELL services to improve English language acquisition, vocabulary, and functional language as well as English reading and writing.

Test scores, when available, for P10 are as follow: WJ III ACH Broad Reading = 66, Written Expression = 58, Broad Written Language = 50, Basic Reading Skills = N/A, Academic Skills = 56, Academic Fluency = 67, and Academic Application = 58. WISC-IV Verbal Comprehension = 53, Perceptual Reasoning = 84, Working Memory = 56, Processing Speed Index = 70, and Full Scale Intelligence Quotient = 42.
CHAPTER 5

DISCUSSION

The disproportionate representation of minority students in special education programs has been a longstanding problem. Disproportionate representation continues to exist in the form of either an under-representation of Latino students categorized as gifted and talented, an over-representation of Latino students as learning disabled, or an over-representation of African American students categorized as MR.

A key concern in the identification process is how district personnel, school psychologists and special education teachers make special education eligibility decisions. They must consider culturally responsive data such as student portfolios along with data derived from standardized tests. In terms of ELL students, first and second language proficiency must be considered.

Eligibility determination for ELL students suspected of having an SLD should be based on appropriate assessment techniques. Inappropriate placement of ELL students in special education may result when invalid assessment tools and poor CST decision-making skills are exercised. An important fact to remember is that the CST members have the power to positively affect a student’s academic future by using both culturally valid and reliable assessment tools with student data.

The investigator of this study asked the following questions: (a) did ELL students placed in special education perform similarly on the achievement and IQ assessments than student who were not placed, (b) did district personnel use a standardized procedure when evaluating ELL...
students suspected of having an SLD and (c) to what extent did qualitative factors acquired from
the MET report data contributed in the MET members’ placement decisions.

The investigator discovered that ELL students in the P group performed differently than
NP participants on the WJ III ACH. Differences between the P and NP groups were statistically
significant (p< .05) on WJ III ACH subtests Reading Fluency, Spelling, Passage Comprehension,
Applied Problems and statistically significant (p< .01) on both Writing Fluency and Writing
Samples. NP participants performed higher than P participants on each of the subtests. No
statistically significant difference was found between P and NP groups for the subtests Letter-
Word Identification and Word Attack. On the WJ III ACH cluster score analysis, differences
between the P and NP groups were statistically significant (p< .05) on both Broad Reading and
Academic Fluency and statistically significant (p< .01) on Reading Comprehension, Written
Expression, Broad Written Language, and Academic Application clusters. NP participants
performed higher than P participants on each of the clusters. No statistically significant
difference was found between P and NP groups on clusters Basic Reading Skills and Academic
Skills.

The investigator discovered that district personnel did not use a standardized evaluation
procedure when evaluating ELL students suspected of having an SLD. The presence of
inconsistent achievement and IQ evaluation methods were present for both groups of
participants. Most troubling was the inconsistent use, or non-use, of non-verbal IQ tests.
Evaluators often compare student’s non-verbal assessment standard scores with verbal IQ scores.
This procedure is useful in determining a student’s intellectual functioning in the absence of
language. Evaluators assessing ELL students suspected of having an SLD need to acquire non-verbal IQ scores for these students as this will help eliminate low cognition as a reason for poor language and academic performance. Once non-verbal testing has been performed, achievement and verbal IQ testing can commence. Details on proper achievement and IQ assessment procedures will be discussed below.

To assess achievement, the WJ III ACH, when used as designed, allows evaluators the flexibility to assess certain academic areas. Evaluators can assess cluster areas such as reading, writing, or math and use resultant scores as placement data. Although, it is unclear whether the lack of a district-mandated standardized assessment protocol led to improper ELL special education placement, it is sufficient to say that using a standardized WJ III ACH test administration would place evaluators in a better position to make placement decisions. The administration of all language-based tests on the WJ III ACH, thus determining cluster scores in Reading, Written Expression, Oral Language, may lead to a clearer picture of whether certain academic struggles appear on the assessment.

No single assessment tool should be used by evaluators as the “sole” assessment tool. Furthermore, an assessment using only English-language based tools such as the WJ III ACH is not recommended for ELL students having little or no experience speaking English. Evaluators need to assess each language spoken by ELL students. When both achievement and IQ assessments are conducted by English speaking evaluators using English-only test items, only the participants’ English language skills are determined.
Test Score Group Comparisons: Quantitative Data

One can infer very little based on the between group test score comparisons. The only achievement tests in which participants in both groups performed similarly were the WJ III ACH Letter-Word Identification and Word Attack. Both Letter-Word Identification and Word Attack tests assess phoneme-grapheme knowledge: a pre-requisite for reading and spelling at letter, real word, or pseudo-word levels. This result may be due to the fact that these ELL students may have acquired phoneme-grapheme knowledge from English-language based instruction and exposure to the English language during their school day.

On WJ III ACH cluster score comparisons, participants in each group performed similarly on Basic Reading Skills and Academic Skills. The fact that participants in both groups performed similarly on Basic Reading Skills is understandable because this cluster is comprised of Letter-Word Identification and Word Attack. A similar explanation can be made for the similar performance of both groups on the Academic Skills cluster in that this cluster is comprised of Letter-Word Identification, Calculation and Spelling tests. Similar to participant performance on the individual tests, these results may be due to the fact that these ELL students may have acquired phoneme-grapheme knowledge as well as simple math skills from English-language based instruction and exposure to the English language during their school day.

Intelligence Assessment: Group Comparisons

IQ test scores were not available for all of the participants. For some reason the evaluators did not administer the WISC-IV, KABC, UNIT, and C-TONI to each participant. While a few participants were administered both verbal and non-verbal versions of IQ tests,
several were not administered either type. Subsequently, not enough data were available to justify conducting statistical analyses for each group on these measures.

Placement Factors

After analyzing participants’ MET report data, the investigator identified two placement factors used by MET members that may have led to a participant’s subsequent program placement. The two factors are the inconsistent use of the IQ-achievement discrepancy criterion as basis for special education placement (or non-placement) and the MET members’ consideration for the degree of a participant’s second language experience.

The IQ-achievement discrepancy criterion typically is used by MET members of this district when making general or special education placement decisions. Whether a student qualifies for special education under the category of SLD often depends on whether the evaluator has documented that the differences between the student’s IQ and achievement scores are statistically significant. The investigator revealed that the discrepancy criteria were not documented in the MET report for NP participant NP4 and P participants P4, P7, and P9. Further, although participants NP2, NP9, and NP10 were found to have “notable discrepancies between cognitive abilities and achievement in some areas” MET members chose not to place these students in special education based on the “possible role played by bilingualism, culture, and teaching styles, within both the cognitive and academic realms.” In each of these cases, MET members overrode the often used discrepancy criteria in favor of a more sensitive piece of data: time. Quite simply ELL students often exhibit test scores similar to those truly having an SLD but simply need more time (and practice) using English. The fact that only three participants
received this consideration is puzzling. The lack of documented discrepancy criteria for participants NP4, P4, P7, and P9 can not be explained. One possible explanation is that the evaluator(s) did not arrive at a discrepancy.

The second factor, MET members’ consideration of participant’s degree of second language experience, was only present for one of the twenty participants. Only P10 was administered a test in his first language, Spanish. The remaining 19 participants were evaluated by English-speaking individuals using English language assessment tools. The extent these factors contribute in the MET members’ placement decisions is unknown.

Other than the three participants who qualified based on test scores but were not placed, the MET members placed students who did have a higher need for individualized instruction. P group participants did have lower language-based WJ III ACH test scores than their NP peers. Although the evaluation tools used to evaluate ELL students was not optimum, the MET members were consistent in their decision making. The MET members who relied on their clinical judgment for the three NP participants made good judgments.

**Evaluation Instruments**

The assessment of ELL students suspected of having an SLD should be conducted by individuals who select and administer tests that do not lead to racially and culturally discriminatory results. Furthermore, the assessment tools used by evaluators need to be validated by the test developer for the specific purpose for which they may be used. That is, an achievement test such as the WJ III ACH should not be administered to a Spanish-speaking ELL
student suspected of having an SLD; the Batería III Woodcock-Muñoz: Pruebas de Habilidades Cognitivas (Woodcock et al., 2000) is a preferred tool in such a situation.

In all aspects of a special education evaluation, the use of translations of tests that have been standardized in English has many limitations when used with ELL students. These tests are not psychometrically sound as they have been developed and subsequently “normed” with the sole purpose of assessing an SLD in English speaking students. Assessment tools designed solely for native English speakers may not be as reliable and valid when administered for ELL students (Abedi, 2006). This claim is elaborated on by the Standards for Educational and Psychological Testing (1999):

For all test takers, any test that employs language is, in part a measure of their language skills. This is of particular concern for test takers whose first language is not the language of the test. Test use with individuals who have not sufficiently acquired the language of the test may introduce construct-irrelevant components to the testing process. In such instances, test results may not reflect accurately the qualities and competencies intended to be measured. Therefore, it is important to consider language background in developing, selecting, and administering tests and interpreting test performance (p. 91).

The concept of “construct-irrelevant” applies to the situations in which a construct other than the construct targeted in an assessment is involved. For example, when ELL students with beginner level English language skills are being assessed on math content, English language becomes another construct being measured: testing for English language skills is not relevant to the content being assessed but is involved in the student’s performance. Language, therefore, interferes with the targeted content in the assessment (Abedi, 2006).

Both students with an SLD and ELL students (particularly those at the lower levels of
English proficiency distribution) may have more difficulty with test items that have unfamiliar words or complex linguistic structure. Thus, language factors that affect the performance of the ELLs may also influence the performance of students with SLD. These similarities between language background characteristics and the level of English proficiency make ELL students with lower levels of English particularly vulnerable for misclassification as students with SLD.

**Recommendations: SLD Assessment Procedures**

Below are four scenarios in order from best case to acceptable. The first scenario is the “best case” scenario that would allow evaluators to incorporate culturally-responsive practices. The remaining three scenarios that could be used by evaluators also are acceptable as they include the bilingual individuals who must be knowledgeable in the student’s first language. The investigator has shown in this study that evaluators will conduct SLD assessments with little or no consideration of an ELL student’s second language status.

**Scenario 1:** The “best case” scenario consists of (a) assessments conducted by “qualified” bilingual evaluators, (b) the use of assessment tools that have been standardized and validated in the student’s first language, (c) the use of student classroom work, (d) evaluators having both oral and written skills in English as well as in the student's first acquired language (or home language other than English), and (e) evaluators having knowledge and understanding of the cultural background of the student being evaluated.

**Scenario 2:** If a bilingual evaluator is not available, scenario 2 is the next best option. In this option trained bilingual assistants or aides, under the supervision and direction of the evaluator, (a) gather data from the parents/guardians and obtain perceptions of the problems
leading to the referral, (b) observe the student in and out of the classroom to provide to the evaluator information about cultural and linguistic differences that may affect the student’s school performance, (c) gather information on the student's receptive language skills in his or her first language, (d) obtain, transcribe, and evaluate a first-language sample (oral and/or written), (e) translate or adapt culturally and linguistically relevant parts of English language assessments and administer them in the student's first language (Please note that once translated, a test is no longer standardized and therefore can be used only for diagnostic purposes), (f) interpret the assessment results at MET conferences, and (g) share perceptions about the student's linguistic and cultural characteristics and the possible effects of these characteristics on the student's test performance.

**Scenarios 3 and 4:** When neither a bilingual evaluator nor a trained bilingual assistant is available to conduct the assessment, scenario 3 or 4 is recommended. In scenario 3, the evaluator conducts the assessment along with a certified ELL teacher who is proficient in the student’s first language and has training working with SLD students. Scenario 4 is very similar to scenario 3 in that the main evaluator is a mono-lingual English speaker. Instead of incorporating a certified ELL instructor, other trained individuals such as non-certified staff in special education, non-Certificated staff in an ELL program, regular bilingual certified staff, regular bilingual non-certificated staff, or other trained bilingual individuals such as university tutors, community volunteers, or parents. Although these last two scenarios are not optimal when compared to the first two, they are far better than assessments conducted by mono-lingual English speakers who do not consider an ELL student’s first language status.
Assessments conducted in the student's native language, using a combination of standardized and qualitative information, such as teacher and parent questionnaires, will produce the most reliable and valid information. Evaluators must consider as many aspects of the student's life circumstances as possible to accurately interpret the results of educational testing. In particular, a student's emotional well-being, length of time in the United States, and overall health status must be considered. ELL students who have migrated from other countries will often have life and educational experiences that vary greatly from U.S. born and educated students. Thus, obtaining background information is essential for adequate assessment.

**Recommended Assessment Process**

**Child Study Team Referrals**

The assessment process begins with a teacher referral. Classroom teachers typically refer struggling students to the CST members in hope of these students receiving assistance in the form of intervention support, modified curriculum or special education placement. CST members should recommend either intervention techniques or modified curriculum the classroom teacher or teacher aide can implement. The intervention need be tailored to the needs of each struggling student and progress must be monitored. If after six weeks time the student fails to make adequate progress, the CST members can recommend a formal assessment. CST members must consider intervention before assessment otherwise students who may not need special education may be placed and students who may need such services may not qualify. The goal of the CST members need be to assess only those ELL students who persist in their academic struggles.
Special Education Assessment of ELL Students

If students do not respond to classroom intervention, formal assessment is most likely to occur. CST members must obtain the following information before the assessment takes place: (a) current English and first language proficiency scores (no older than six months), (b) years lived in the U.S., (c) years of formal instruction in U.S. and/or other countries, (d) years of oral instruction in English in U.S. and other countries, (e) years of instruction in English reading in U.S. and other countries, (f) number of schools attended in the U.S., (g) frequency of absences and (h) results of parental contacts. This information is important to the CST members responsible for assessing the student as knowing the student’s language and school history may dictate whether testing occurs and is so, which language the testing need be administered.

Standardized Assessment Tools

As mentioned above in the scenarios section, all evaluations of ELL students must be conducted by qualified personnel employing procedures, tests and materials that are selected and administered so as not to be racially or culturally discriminatory and validated for the specific purpose for which they are used. The following series of assessment tools is recommended when assessing bilingual ELL Latino students suspected of having an SLD.

The first assessment tool of the series is the Bilingual Verbal Abilities Test (BVAT) (Cummins, et al., 1998). Evaluators using the BVAT will obtain a measure of overall verbal ability for bilingual individuals while assessing the total knowledge of a bilingual individual using a combination of two languages. If the student can not respond to an English test item, he or she will be asked to respond to a Spanish equivalent. The second assessment tool evaluators
should administer is the Bateria III Woodcock-Muñoz Language Survey – Revised (Woodcock et al., 2000). This tool is a normed-referenced measure of reading, writing, listening and comprehension and established language proficiency in both English and Spanish. This survey will provide information to the evaluator how best to proceed in regard to the language of achievement and IQ testing. The third assessment tool in the series is UNIT (Bracken, et al., 2000). This nonverbal IQ test is designed to reduce situational sources of test and removal of dependence on oral language ability. Evaluators will obtain an “idea” of the educational potential of the student but performance on this test does not predict how the student will perform in the classroom. The fourth test recommended in the series is the WISC-IV Spanish (Wechsler, 2000). This verbal IQ test is only recommended if the student is a Spanish language dominant student and is in his or her first five years in the U.S. education system. If the student is determined to be English dominant, the WISC-IV (Wechsler, 2004) is recommended. Finally, two test batteries recommended to assess an ELL student’s achievement are the Bateria III Woodcock- Muñoz (Woodcock et al., 2000) and the WJ III ACH. The Bateria is recommended for student’s who has had very little or no educational experience in U.S. schools and whose primary language is Spanish. The Evaluators using the Bateria will obtain information on the student’s general intellectual ability, specific cognitive abilities, scholastic aptitude, oral language, and academic achievement. ELL students who have attended U.S. schools and have been taught in English, the WJ III ACH is recommended. Student work in the form of a portfolio, developmental history, and any supporting data in the form of classroom and home observations must also be collected
by the evaluation team members and incorporated into the assessment process. The assessment process is shown in Figure 1.

**Figure 1.**

**Assessment Process**

CST Teacher referral

CST recommends Intervention/modified curriculum

Teacher employs intervention and monitors progress

Student made progress?

Yes

No

No assessment at this time

Initiate assessment process

**Limitations of this Study**

This study has several limitations. The first limitation is that sample size of participants
in each group is small. Having a small number of participants prevented the investigator from conducting more sophisticated statistical analyses, such as multiple regression. Furthermore, one would have a difficult time generalizing these results to ELL students attending schools in other school districts. The second limitation has to do with the generalizeability of the MET report data. Each participant’s MET report data were unique to his or her test scores and language status. Placement outcomes for these participants may have been different if a different set of MET members had reviewed the data.

**Future Research Directions**

Future research into identifying factors affecting MET members’ decision to place ELL students into special education need be conducted by individuals interested in continuing the efforts of others in reducing disparities in special education placement. Continued efforts by research professionals in determining (a) what constitutes best practices in assessment and instruction of ELL students, (b) what constitutes evidence-based culturally responsive practices, (c) how best to implement district-wide RTI practices, (d) methods to improve the special education referral process thus reducing inappropriate referrals, and (e) best methods of implementing both early identification and intervention practices for ELL students (Skiba et al., 2003).

The implementation of culturally responsive early identification and intervention practices is tantamount in curtailing the inappropriate referrals made by teachers of ELL students. Many times the cause of the student’s struggles is the result of factors other than SLD (i.e. second language acquisition). Furthermore, early identification and intervention practices
may significantly improve the academic achievement of ELL students without being inappropriately placed in special education.

The findings of this study can be used by school district personnel who wish to better serve the ELL student population. School district personnel who understand and incorporate culturally-responsive practices will, hopefully, reduce inappropriate assessments of ELL students while at the same time engage in culturally responsive instruction.
### WJ III ACH STANDARD BATTERY: TEST AND CURRICULAR AREA

#### DESCRIPTION

<table>
<thead>
<tr>
<th>Sub-test</th>
<th>Curricular Area</th>
<th>Narrow CHC Ability</th>
</tr>
</thead>
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<tr>
<td>Test 1: Letter-Word Identification</td>
<td>Reading</td>
<td>Reading decoding</td>
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<td>Test 2: Reading Fluency</td>
<td>Reading</td>
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<tr>
<td>Test 3: Story Recall</td>
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<td>listening ability</td>
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<td></td>
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<td>meaningful memory</td>
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<td>Test 4: Understanding Directions</td>
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<td></td>
<td>Comprehension</td>
<td>Language development</td>
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<td>Test 5: Calculation</td>
<td>Mathematics</td>
<td>Math Achievement</td>
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<td></td>
<td>number fluency</td>
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<tr>
<td>Test 6: Math Fluency</td>
<td>Mathematics</td>
<td>Math Achievement</td>
</tr>
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<td>Test 7: Spelling</td>
<td>Spelling</td>
<td>Spelling</td>
</tr>
<tr>
<td>Test 8: Writing Fluency</td>
<td>Writing</td>
<td>Writing speed</td>
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<td>Test 9: Passage Comprehension</td>
<td>Reading</td>
<td>Reading comprehension</td>
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<td></td>
<td></td>
<td>verbal (printed) language comprehension</td>
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<td>Test 10: Applied Problems</td>
<td>Mathematics</td>
<td>Quantitative reasoning</td>
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<tr>
<td>Test</td>
<td>Domain</td>
<td>Subject</td>
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<tr>
<td>Test 11: Writing Samples</td>
<td>Writing</td>
<td>Writing ability</td>
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<tr>
<td>Test 12: Story Recall – Delayed</td>
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<td>Meaningful memory</td>
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<tr>
<td>Test 13: Word Attack</td>
<td>Reading</td>
<td>Reading decoding</td>
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<td>Test 14: Picture Vocabulary</td>
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<td>Test 15: Oral Comprehension</td>
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<td>Test 17: Reading Vocabulary</td>
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<td>Test 18: Quantitative Concepts</td>
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<td>Test 19: Academic Knowledge</td>
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<td>General information</td>
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<tr>
<td>Test 20: Spelling of Sounds</td>
<td>Spelling</td>
<td>Spelling</td>
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</table>
phonetic coding: analysis and synthesis

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<tr>
<th>Test 21: Sound Awareness</th>
<th>Reading</th>
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<td>Test 22: Punctuation</td>
<td>Writing</td>
<td>English usage</td>
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<tr>
<td>and Capitalization</td>
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<tr>
<td>Sub-test</td>
<td>Definition</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Block Design</td>
<td>A measurement of an individual’s ability to analyze and synthesize an abstract design and reproduce that design from colored plastic blocks. Spatial visualization and analysis, simultaneous processing, visual-motor coordination, dexterity, and nonverbal concept formation are involved. The students use logic and reasoning to successfully complete the items.</td>
<td></td>
</tr>
<tr>
<td>Similarities</td>
<td>A measurement of an individual’s logical thinking, verbal concept formation and verbal abstract reasoning. Two similar but different objects or concepts are presented, and the student is asked to tell how they are alike or different.</td>
<td></td>
</tr>
<tr>
<td>Digit Span</td>
<td>A measurement of an individual’s short-term auditory memory and attention. The digits have no logical relationship to each other and are presented in random order by the examiner. The student must then recite the digits correctly by recalling them in the same order. On the second part of this subtest the student must remember the order in which digits are presented, but recite them in reverse order.</td>
<td></td>
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<tr>
<td>Picture Concepts</td>
<td>A measurement of an individual’s categorical, abstract reasoning, and the items here increase in difficulty. Students are asked to look at two (or...</td>
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</tbody>
</table>
three) rows of pictured objects and indicate (by pointing) the single picture from each row that shares a characteristic in common with the single picture(s) from the other row(s).

Coding
A measurement of an individual’s visual-motor dexterity, associative nonverbal learning, and nonverbal short-term memory. Fine-motor dexterity, speed, accuracy and ability to manipulate a pencil contribute to task success; perceptual organization is also important.

Vocabulary
A measurement of an individual’s verbal fluency and concept formation, word knowledge, and word usage.

Letter-Number
A measurement of an individual’s attention span, short-term auditory recall, and processing.

Sequencing
A measurement of an individual’s speed and sequencing abilities. The task involves listening to and remembering a string of digits and letters read aloud at a speed of one per second, then recalling the information by repeating the numbers in chronological order, followed by the letters in alphabetical order.

Matrix Reasoning
A measurement of an individual’s visual processing and abstract, spatial perception and may be influenced by concentration, attention, and persistence.

Comprehension
A measurement of an individual’s common-sense social knowledge, practical judgment in social situations, and level of social maturation,
along with the extent of development of their moral conscience.

**Symbol Search**  A measurement of an individual’s ability to determine whether a target symbol appears among the symbols shown in a search group. Memory is not a primary requirement for success on this task; perception and recognition are the two prime requirements, in addition to speed, accuracy, attention, and concentration. The symbols are geometric forms, rather than familiar letters or numbers.

**Picture Completion**  A measurement of an individual’s ability to recognize familiar items and to identify missing parts. The student's task is to separate essential and nonessential parts from the whole. It is necessary to observe each item closely and concentrate on picture detail. Students must name or indicate the missing part by saying the name of the part or by pointing to it.

**Cancellation**  A measurement of an individual’s visual vigilance/neglect, selective attention, and speed in processing visual information in accordance with previous attempts along the same line.

**Information**  A measurement of an individual’s general cultural knowledge, long-term memory, and acquired facts.

**Arithmetic**  A measurement of an individual’s numerical accuracy, reasoning and mental arithmetic ability.

**Word Reasoning**  A measurement of an individual’s verbal abstract reasoning requiring
analogical and categorical thinking, as well as verbal concept formation and expression.

| Perceptual | A measurement of an individual’s perceptual and organizational skills, reflecting ability to interpret reason with, and/or organize visually perceived material. | Reasoning Index | A measurement of an individual’s ability to interpret reason with, and/or organize visually perceived material. |
# APPENDIX C

## KABC-II SCALES, SUB-TESTS, AND CHC ABILITY

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<tr>
<th>Scale</th>
<th>Sub-test</th>
<th>CHC Ability</th>
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<tr>
<td>Simultaneous</td>
<td>Triangles</td>
<td>Gv (Visual Spatial Thinking)</td>
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<td>Face Recognition</td>
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<td></td>
<td>Pattern Reasoning (ages 5 and 6)</td>
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<td>Story Completion (ages 5 and 6)</td>
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<td></td>
<td>Conceptual Thinking</td>
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<td></td>
<td>Rover</td>
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<td></td>
<td>Gestalt Closure</td>
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<tr>
<td>Sequential</td>
<td>Word Order</td>
<td>Gsm (Short Term Memory)</td>
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<td>Number Recall</td>
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<td></td>
<td>Hand Movements</td>
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<td>Planning</td>
<td>Pattern Reasoning (ages 7–18)</td>
<td>Gf (Fluid Reasoning)</td>
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<td></td>
<td>Story Completion (ages 7–18)</td>
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<td>Learning</td>
<td>Atlantis</td>
<td>Glr (Long Term Retrieval)</td>
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<td></td>
<td>Atlantis Delayed</td>
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<tr>
<td></td>
<td>Rebus</td>
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<td></td>
<td>Rebus Delayed</td>
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<tr>
<td>Knowledge</td>
<td>Riddles</td>
<td>Gc (Comprehension- Knowledge)</td>
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<td></td>
<td>Expressive Vocabulary</td>
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<td></td>
<td>Symbolic Mediation</td>
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<td>Symbolic Memory</td>
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<td>Analogic Reasoning</td>
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<td>Object Memory</td>
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<td></td>
<td>Nonsymbolic Mediation</td>
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<td>Spatial Memory</td>
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<td>Cube Design</td>
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<td>Mazes</td>
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</table>
### APPENDIX D

**UNIT QUOTIENTS AND ASSOCIATED ABILITIES**

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<tr>
<th>Quotient</th>
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<tbody>
<tr>
<td></td>
<td>Memory Sub-test</td>
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<td>Reasoning Sub-test</td>
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<td>Symbolic Mediation</td>
<td>Symbolic Memory</td>
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<td></td>
<td>Analogic Reasoning</td>
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<td>Object Memory</td>
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<tr>
<td>Nonsymbolic Mediation</td>
<td>Spatial Memory</td>
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<td>Cube Design</td>
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<td>Mazes</td>
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</table>
### APPENDIX E

**C-TONI SUB-TESTS**

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pictorial Analogies</td>
<td>A measurement of an individual’s ability to recognize the relationship of two objects to each other and to find the same relationship between two different objects.</td>
</tr>
<tr>
<td>Geometric Analogies</td>
<td>A measurement of an individual’s ability to recognize the relationship of two geometric designs to each other and to find the same relationship between two different designs.</td>
</tr>
<tr>
<td>Pictorial Categories</td>
<td>A measurement of an individual’s ability to select from a set of different pictures the one that is the most similar to two other related pictures.</td>
</tr>
<tr>
<td>Geometric Categories</td>
<td>A measurement of an individual’s ability to select from a set of different geometric designs the one that is the most similar to two other related designs.</td>
</tr>
<tr>
<td>Pictorial Sequences</td>
<td>A measurement of an individual’s ability to select from a set of pictures the one that completes a sequence of actions shown in three pictures.</td>
</tr>
<tr>
<td>Geometric Sequences</td>
<td>A measurement of an individual’s ability to select from a set of geometric designs the one that completes a sequence of actions shown in three designs.</td>
</tr>
</tbody>
</table>
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