

## **Educational decisions and academic achievement: A focus on Mexican American students**

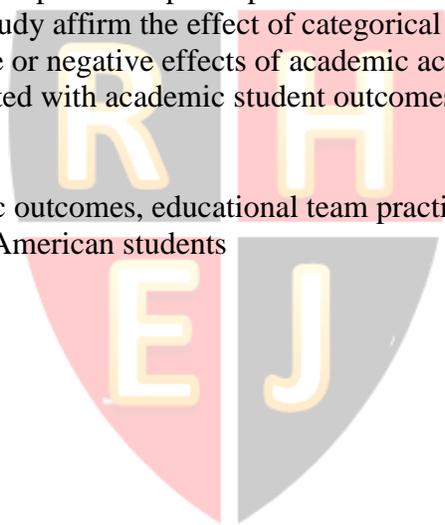
Mary Ruth Fernandez  
Our Lady of the Lake University – San Antonio, Texas

Norma Guzman  
Texas A&M University – Kingsville

### **ABSTRACT**

This mixed methods study examines factors associated with student learning outcomes for Mexican American students in the public elementary schools. The problem of disproportionate identification of cultural and linguistically diverse students in special education is addressed. This study looks at 23 third and fourth grade students by means of a retroactive educational records review; an interview with a sub set of educators and parents and the use of member checks with a select group of adult participants to evaluate the validity of the interpreted results. The results from this study affirm the effect of categorical factors previously described in the literature as having positive or negative effects of academic achievement and identifies specific team practices associated with academic student outcomes for thirteen educational teams.

Keywords: Diversity, academic outcomes, educational team practices, over-representation, educational success, Mexican American students



Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <http://www.aabri.com/copyright.html>.

## **INTRODUCTION**

Mexican American students are referred for support services in public schools on a daily basis. These students are referred because they have difficulty with language, literacy and academic achievement. These abilities are diminished by disorders with communication, learning, and English language learning or a combination of these. Professional challenges in identifying and addressing these differentially is reason that public schools have a disproportionate number of minority and other at risk students in special education.

### **Statement of the Problem**

Educator's knowledge and background related to general education, bilingual education, special education and ancillary support services is related practices contribute to the disproportionate representation of minority students in special education. According to Artiles, Kozleski, Trent, Osher, & Ortiz (2010) educational systems are built on a set of assumptions that define competence and difference, which frames: that is how students are classified, how programs are organized and how personnel prepared. Issues of equity in education include questions about student mis-identification i.e. over or under-representation and the long term consequences of special education placements are being questioned.

### **Research Questions**

1. What factors influenced the achievement of literacy and academics in Mexican American children?
2. How do factors, such as, team constitution, team process, and program options clarify the levels achieved by students?
3. What factors were taken into consideration by teams during the referral process and placement?

### **Purpose of the Study**

Historically, educators have provided students with one of three options: general education or special education or bilingual education. In addition, educators have provided a variety of support services to promote the success of each student. Using a pre-referral process to special education called response to intervention (RtI), and evaluations provided by psychologists and speech-language pathologists, educational teams have made placement decisions related to student placement and supplemental program options. The educational team's implementation of (RtI) and professional evaluation practices have contributed to the over-identification for special services for at risk students. According to Ortiz (2002) students who struggle in school can be categorized into three groups. This study takes into account team practices and these three groups and aims to clarify the factors that influence the educational outcomes for at risk students in public schools.

## **REVIEW OF THE LITERATURE**

There are three lines of research that has been completed that explore the factors that contribute to this problem of disproportionate representation of minorities in special education

that relate to the team, the parents and the students. The first line of research takes into account the role family plays and the student has in the process of academic success. The focus of this research centers on parental factors that include the motives of Mexican American families related to the children's education (Lopez, Rodriguez, & Sanchez, 1995; Vazquez, 1996) and the importance of parental press for attaining literacy skills (Hammer, Miccio & Wagstaff, 2003). This line of study tends to put the responsibility for student success on the parents. This line of research, while valid, tends to place the greatest burden on the family of the student when it comes to preparation for educational success.

A second line of research tends to examine the factors the student brings to the task of education. A text by Brice (2002) takes into account the individual characteristics of each student and the expected responses to education and special interventions. Rumberger (2001) and Rumberger & Larson (1998) describe the factors that impact the educational attainment of Mexican American students and other marginalized students in public schools. Ortiz (2002) takes into account the characteristics of the three types of students in a discussion of preventing failure in public education. This line of research tends to place the burden on the student.

A third regards the educational team. A study by Johnson, Lessem, Bergquist, Carmichael and Whitten (2002) asserts the notion that educational teams can diminish the problem of overrepresentation by taking responsibility and addressing the disproportionate identification of minority students in special education. In another study by McDermitt (1993), an parsimonious illustration of the social construction of a disability and its effect on student success. Detwiler, Detwiler, Blood, & Qualls, (2004) describe the diminished level of confidence that team members feel when it comes to working with clients whose parents do not speak English. Berrigner, Vermeulen, Abbott, McCutchen, Cotton, and Cude (2003) highlight the impact that instructional methods and curricular content play in educational attainment of students. Jimenez (2001) describes the outcomes of minority students who have not had the benefit of additional time and authentic instruction. Baca (2002) and Zentella (1998) take into account principles of teaching English language learners and time and educational support needed by some students to meet the standards of a mainstream education. Artilies and Ortiz (2002) the features and need for authentic assessment. Finnerty (2002) and Hjorn (2003) have reported problem with the level of expertise that the educational team have in working with minority students and the ritualization use of non-professional discourse during team meetings that lead to erroneous use of diagnostic labels and the tacit transfer of responsibility from the educational team to the student. Ortiz (2002) describes the following types of students referred for special services in public schools.

Type I is the student who has problems that result from difficulties that occur in the teaching-learning environment. This environment includes students are being taught in a language that they do not understand as with those who are referred to as linguistically diverse. They may be presented materials that do not promote competitive levels of learning. This type may use curricula or instructional methods that do not reflect the student's life experience, particularly for those who are culturally diverse. Method and materials that do not capitalize on what is familiar to the student, result in learning difficulty for the student.

Type II are students has for whatever reason gotten behind and need more time to learn one portion of the curriculum before moving to advanced levels. This may have occurred because of extending period of absences or moves from one school to another. For other the learning that requires pre-requisite skills for current tasks, increasingly complex and cognitively challenging language or thinking skills that have not been fully developed can create difficulty learning the most recently presented materials. Not addressing this additional time needed or

scaffolding of cognitive activities can create learning difficulties. These students have adequate learning aptitudes and show positive responses to teaching strategies outside of special education. Both group 1 and 2 have difficulty in school not because they have a genuine disability of some type but because of the education does not promote success for them.

Type III, according to Ortiz (2002), includes those students, who have real disabilities. These disabilities consist of one or combination of medical conditions, injuries, or congenital conditions that result in diminished memory, reasoning errors, neurologically or peripherally based processing deficits, and language or learning problems that lead to reduced or diminished success in school. This third group of students includes those identified as having Autism, Deafness, Hearing Impairment, Specific Learning Disability, Speech or Language Impairment and Traumatic Brain Injury. These students require special education services (Artiles & Ortiz, 2002, McDermitt, 1998). The challenge for educators is in determining which students are which. Some students benefit from general education placement, others from special education and others from some combination of the two. But all require an education that matches education to their student profiles. Education that does not capitalize on student characteristics, whether the student is considered mainstream or diverse, ends in a created learning disability (Finnerty, 2002).

## **METHODOLOGY**

This mixed methods study explored how team decisions, team constitution, team process, and program options clarify the level of achievement for students as measured by grade point average, performance on high stakes testing, and promotion to the next grade level. The data was collected from archived student records that covered a five year period from pre-kindergarten to third grade for each student. The data collected from these records were the primary focus of analysis. Data taken open ended questions on the survey and in interviews was analyzed for themes and evaluation of the interpretation of results. The investigator looked specifically at how team membership, team process, program options and other factors named by participating team members related to the achievement of students who struggled in school.

### **Participants**

The researcher contacted speech and language clinicians, district administrators and school principals from several school districts to identify pre-referral team members to participate in the study. The researcher contacted team members who worked in schools that had large numbers of Mexican American students enrolled. Volunteer participants consisted of students, families and educational teams in the San Antonio Metropolitan area from two school districts, nine elementary schools, and included 13 teams and 23 student records.

### **Data Collection**

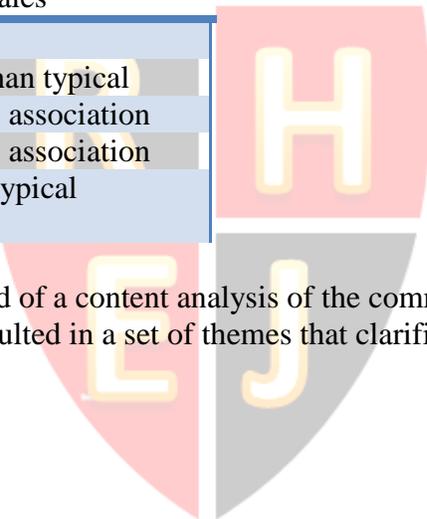
The Educational Decision Inventory (EDI) was used to collect information about team decision and students outcomes. The investigator completed and retroactive review of educational records for students from Kindergarten through the third grade. The data was coded onto the Educational Decision Inventory (EDI). The EDI is a survey that was constructed over a period of three years. It has established construct and content validity (Fernandez, 2003). The EDI had Chronbach-alpha ratings of 84.8-100 (Fernandez, 2008) for individual subtests, overall

.93 for relevance, clarity, simplicity, ambiguity, and comprehensiveness with *p* values ranging from .01-.05. The results of the evaluation of the EDI indicate that the instrument will yield interpretable results. The subtests of the Educational Decision Inventory (EDI) include sections that explore the characteristics of team membership, the educational team process, student demographics, language proficiency measures, educational team options, language of instruction, teacher’s educational background, language used to qualify for speech, language and hearing services, evaluation and treatment services, therapist’s background, literacy and academic measures and additional comments from school participants. The data was prioritized such that the records review was completed first, the follow up interviews were done secondly and the member checks were completed once data was analyzed and the interpretation was summarized.

A quantitative analysis consisted of a descriptive analysis of the data related to the participants and secondly associative comparisons between team decision and student outcomes using Eta scores and Cohen values were attained. The Eta analysis compared the following team decisions: the placement, language choice and supplemental services to the grade point average, passing scores on high stakes testing for reading and promotion to the next grade. The strength of Eta values as indicated on the Cohen scales are listed in Table 1.

Table 1: Eta Values & Cohen Scales

Eta Values	Cohen Scales
$\eta = .10 - .23$	small or smaller than typical
$\eta = .24 - .36$	medium or typical association
$\eta = .37 - .44$	medium or typical association
$\eta = .45 +$	much larger than typical association



The qualitative analysis consisted of a content analysis of the comments from the open ended questions and interviews that resulted in a set of themes that clarified student success.

## RESULTS

### Student Learning Outcomes

Data collected revealed that 95% of the time students recorded grades were A, B and C grades across curriculum, 55% of the time high stakes reading scores met the standard and 80% of the time students were promoted or placed to the next grade.

### Team Decisions and Student Learning Outcomes

The associations measured by Eta scores revealed that the decisions made by the teams regarding language match, educational placement, professional services offered the student, tutoring, specific strategies or modifications, and the content of the curriculum had a Cohen value from typical to much stronger than typical associations with student grade point average, meeting standards on high stakes reading measures and promotion to the next grade. See Table 2.

Table 2: Description of Association of Decisions and Student Achievement

Decision Point to	Association Strength to Student Outcome		
	Grade Point Average	Met Standard on TAKS Reading Test	Advanced to next grade
Language Match**	Typical to Much Larger than Typical*	Typical	Typical to Much Larger than Typical*
Educational Placement**	Typical to Much Larger Typical*	Typical	Typical to Much Larger than Typical*
Support Services	Typical	Typical	Larger than Typical
Professional Services**	Typical to Much Larger Typical*	Larger than Typical	Typical and Much Larger than Typical*
Tutoring***	Typical and Much Larger than Typical*	Larger than Typical and Much Larger than Typical*	Typical to Much Larger Typical*
Special Strategies & Modifications*	Typical to Much Larger Typical*	Typical and Larger than Typical	Typical
Changes in curriculum & instruction**	Typical to Much Larger Typical*	Typical and Much Larger than Typical*	Typical and Larger than Typical

### Rates of Language Match

Descriptive data revealed that language match recommended by the Language Proficiency Assessment Committee was not consistently honored. Table 2 reveals that records reveal a language match was present on average 51% of the time.

### Educational Team Members

With regard to team make up and process, the members in attendance at meeting ranged from 1-9. The average was two members but the typical number in attendance was one member. While members included general education teachers, speech-language pathologists, parent or guardian, administrators, bilingual or ESL teacher, special education teacher, representative of the language proficiency committee, counselor, diagnostician, district representative, language support teachers and other specialists representatives e.g. dyslexia specialist, nurse, music/art teacher. The typical members in attendance were the classroom educator (general, bilingual, special education), the speech-language pathologist, the parent and administrator. The teams in this study meet for eight different purposes during annual reviews, tri-annual and specially called meeting that included: parent, teacher, student team study, ARD, pre-referral teams, coordinate services, discuss student promotion. In addition these teams met to report the results of student observations, planning the student’s academic year, adjusting the curriculum and special instruction types, obtaining parental consent and presenting test results.

### **Rate of Using Language Recommended by LPAC**

With regard to other factors that emerged from the team member survey responses and member check the following was obtained: the rates of language match as defined by the use of the language of instruction recommended by the LPAC and the language noted in the record ranged from 22% to 57%. The rate of not recording the language of instruction ranged from 9% to 35%.

### **Other Factors that Clarify Team Practices and Student Outcomes**

Content analysis of the open ended question responses on the EDI and team member interviews revealed that while grade level teams and pre-referral teams were regularly meeting and that they used evidence based practices that the inability to get access to professional reports and basic student records interfered with the function of the educational team and ultimately the success of the student. In addition, the analysis revealed that models in bilingual education require clarification in terms of the type of measurement of language proficiency and schedules for re-assessment to measure proficiency changes. There was no mention of the educational team's formal recommendations for students who of a non-standard forms of English e.g. Mexican American English Vernacular. Interviewees indicated a need of additional bilingual education personnel and for a clarification of the transition process from bilingual to English language educational instruction. The importance of support serves was also a theme that emerged from the analysis.

The principal's contact with students, teachers and families was reported effective means of promoting student success. The provision of basic family needs via parent training and the provision of supplies e.g. coats, shoes, and school materials were reported to be effective in promoting school success. The principals' weekly teacher meetings providing a forum for reporting on student progress was also reported to promote success. The level of professional expertise was also a theme that emerged. Comments included the practice of orientation provided by senior educators as the only form of training for working with culturally and linguistically diverse students and special needs students. Team members also reported using the least restrictive environment and early intervention as a focus for team decisions at times interfered with the timely provision of special services needed. A form of response to intervention was reported as useful in promoting success in the classroom except in instances when a medical, intellectual or psychological problem served only to delay needed special services the student required.

The practice of the fifteen point discrepancy between intelligence measures and language development or academic measures in some instances continued to keep students from utilizing special or support services that would have otherwise been provided. The theme of legal obligation emerged in terms of the desire to avoid of placement of culturally and linguistically diverse students in special education or speech therapy in order to keep from the appearance of over-identification minority students.

### **DISCUSSION AND IMPLICATIONS**

The results of the this study suggests that before, during and after school tutoring and changes in curriculum instruction had typical-to-much larger than typical associations with

performance on high stakes reading tests. Educational team training in the provision of tutoring provided by paraprofessionals, peers and professional personnel is therefore appropriate pre-service training at the university level for degree candidates or at the district level during yearly continuing education presentations. In addition tutoring alone had typical to much larger than typical effects on all three outcomes, namely, grade point average (GPA), performance on high stakes reading tests (PHSRT) and advancement to the next grade. Professional services such as those provided by speech-language pathologist or psychologists also had typical-to-much stronger than typical associations with GPA, PHSRT and ANG. The next group of decision points that showed strong association with student outcomes was language match and educational placement. Academic outcomes were associated to the use of specific strategies and modifications and by support services.

An exploration of survey comments and interviews revealed that regularly held meeting, designed to address a variety of purposes including report of student progress, in addition to customary educational placement and promotion decisions were considered important for student success. Experts reported continued difficulty distinguishing differences from disorders and considered this lack of expertise a detriment to student success. Over the last thirty years researchers have explored the factors that promote and diminish the success of students at risk in public schools. The focus of the preponderance of previous research has pointed to the family, the student and more recently the testing practices to explain this phenomenon of disproportionate representation of minorities in special education. This study affirms the assertions of previous research hold true and adds reports from practicing teams that professional training in aspects of service to cultural and linguistic diversity populations; explanation of educational placement and curricular options and methods of providing student-family support hold promise in promoting student academic achievement. This data takes a close look at the experiences of 23 students as reflecting in their educational records and the perceptions of those who serve them. The student outcomes suggest the need for continued research in this area and in-service educators of students at risk.

These results support the need for pre-service training to support educators as they serve minority and other at risk students in the public school system. This training should include emphasize on collaborative models to promote student success. These training sessions whether they be pre-professional or school provided in-service training should focus on the measurement and progression of language proficiency, the integration of school programs general, bilingual and special education, general support services that support the basic needs of students, such as school supplies, lunches, essential clothing items and parental support-education. Specific educational team building will prepare educators to meet the needs of the three types of students referred for special services as described by Ortiz (2002).

## REFERENCES

- Artiles, A. J., & Ortiz, A. (2002). English language learners with special education needs: Contexts and possibilities. In A. J. O. Artiles, A. (Ed.), *English Language Learners With Special Educational Needs: Identification, Assessment, and Instruction* (pp. 14). McHenry, IL: Delta Systems Co. Inc.
- Baca, L. M. (2002). Educating English Language Learners with Special Needs: Trends and Future Directions. In A. J. O. Artiles, A. (Ed.), *English language learners with special needs: Identification, assessment and instruction*. (pp. 191-202). McHenry, IL: Delta Systems Inc.
- Berringer, V. W., Vermeulen, K., Abbott, R., MCCutchen, D., Cotton, S., & Cude, J., (2003). Comparison of three approaches to supplementary reading instruction for low achieving second grade readers. *Language, Speech and Hearing Services in the Schools*, 34(101-116).
- Brice, A. (2002). *The Hispanic child: speech, language, culture and education*. Boston, MA: Allen & Bacon.
- Fernandez, M.R. (2003). Educational Placement Inventory: Content analysis of transcription interview. Unpublished data.
- Fernandez, M. R. (2008). *The Relationship between Educational Decision and Academic Achievement: A focus on Mexican American students*. San Antonio, Tx: University of Texas at San Antonio.
- Finnerty, L. J. (2002). *Cultural and Linguistic Diversity: Difference or disability? An exploratory case study of the team evaluation process*. Boston, Ma: The University of Massachusetts.
- Hammer, C. H., Miccio, A. W., & Wagstaff, D. (2003). Home literacy experiences and their relationship to bilingual preschoolers' developing English literacy abilities: and initial investigation. *Language, Speech and Hearing Services in the Schools*, 34, pp 20-30.
- Hammer, C. S., Detwiler, J. S., Detwiler, J., Blood, G. W., & Qualls, C. D. (2004). Speech-language pathologist's training and confidence in serving Spanish-English bilingual children. *Journal of Communication Disorders*, 37, 91-108.
- Hjorne, E., & Saljo, R. (2003). *"There is something about Julia" Symptoms, Categories and the Process of Invoking ADHD in the Swedish School: A case Study*: Gothenburg, Sweden: Goteborg University.
- Jimenez, R. (2001). Strategic Reading for language-related disabilities: The case of a bilingual Latina student. In M. d. I. L. Reyes & J. J. Halcon (Eds.), *The Best for Our Children* (pp. 153-167). New York, NY: Teachers College Press.
- Johnson, C., Lessem, A., Bergquist, C., Carmichael, D., & Whitten, G. (2002). *Disproportionate Representation of Minority Children in Special Education*. College Station, Tx: Texas A&M University.
- Lopez, L. C., Rodriguez, R. F., & Sanchez, V. V. (1995). The relationship between parental education and school involvement of Mexican American parents. *Psychological Reports*, 77, 1203-1207.
- McDermitt, R. (1993). The acquisition of a child by a learning disability. In *Understanding Practice: Perspective on Activity and Context* (pp. 269-305). New York, NY: Cambridge University Press.

- Ortiz, A. (2002). Prevention of school failure and early intervention for English language learners. In A. J. Artilies & A. A. Ortiz (Eds.), *English Language Learners With Special Educational Needs* (pp. 31-48). McHenry, IL: Delta Systems Co., Inc.
- Rumberger, R. W. (2001). *Why Students Drop Out of School and What Can Be Done*. Paper presented at the Drops in America: How Severe is the Problem? What Do We Know about Intervention and Prevention? Harvard University.
- Rumberger, R. W., & Larson, K. A. (1998). Student mobility and the increased risk of high school dropout. *American Journal of Education*, 107, 1-35.
- Valdez, G. (1996). *Con respeto: Bridging the distance between culturally diverse families and schools. An ethnographic study*. New York, NY: Teachers College, Columbia University.
- Zentella, A. C. (1998). *Growing up bilingual*. Malden, MA: Blackwell Publishers Inc.

