



Identity and Motivation Among Hispanic English Language Learners in Disparate Educational Contexts

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Abstract: Perception of scholastic competence, perception of educational opportunities, motivation, and acculturative stress are student level variables that have been established in the relevant literature as predicting academic achievement. This study examined the degree to which those variables accurately predict student group membership in two districts (Texas and Arizona) with disparate language acquisition methods: Structured English Immersion (SEI) and Bilingual Education (BE) classrooms. The sample included 295 Hispanic English Language Learners (ELLs) in middle elementary school, ages 9-11. Students' perceptions of scholastic competence, perceptions of educational opportunities, motivation, and acculturative stress contributed to predict 73.3% of the participants' group membership. Post-hoc analyses of group differences resulted in moderately higher scholastic competence and perceived educational opportunities for ELLs in the Texas district, whereas acculturative stress, perceived discrimination, and maladaptive motivation scores were moderately higher for ELLs in the Arizona district. ELLs in the SEI group, however, also had slightly higher scores on adaptive motivation. Competing hypotheses and policy implications are discussed in the context of prior research.

Keywords: English language learners; achievement; language acquisition policies; motivation.

Identidad y motivación entre alumnos hispanos que aprenden inglés en contextos educativos diferenciados

Resumen: Las percepciones sobre la competencia escolar, oportunidades educativas, la motivación y el estrés de aculturación son variables a nivel de los estudiantes que se han establecido en la literatura especializada para predecir el rendimiento académico. Este estudio examinó el grado en que esas variables predicen con exactitud la participación en grupos de estudiantes de dos distritos (de Texas y Arizona) con dos métodos diferentes de aprendizaje del idioma Inglés: Sistema Estructurado de Inmersión (SEI) y Educación Bilingüe (BE). La muestra incluyó a 295 estudiantes hispanos que están aprendiendo inglés (ELL) en la escuela primaria media, con edades entre 9-11 años. Las percepciones de los estudiantes de la competencia escolar, de las oportunidades educativas, motivación y estrés de aculturación contribuyeron a predecir el 73,3% de la participación en grupos diferenciados de estudiantes. Análisis post-hoc de las diferencias de grupo dio como resultado un aumento moderado en las habilidades académicas y la percepción de las oportunidades educativas para los estudiantes ELL en el distrito de Texas, mientras que el estrés de aculturación, la discriminación percibida, la motivación y los resultados desadaptativos fueron moderadamente más altos para los estudiantes ELL en el distrito de Arizona. Los estudiantes ELL en el grupo de SEI, sin embargo, también tuvieron puntuaciones ligeramente más altas en su motivación para adaptarse. Hipótesis alternativas e implicaciones políticas se discuten en el contexto de investigaciones previas. **Palabras clave:** Estudiantes de inglés; logros académicas; políticas de adquisición de idioma; motivación.

A identidade e a motivação dos estudantes hispânicos que aprendem Inglês, em contextos educativos díspares

Resumo: A percepção da competência escolar, a percepção das oportunidades educacionais, motivação e stress de aculturação são variáveis ao nível dos alunos bem estabelecidas na literatura para prever seu desempenho acadêmico. Este estudo examinou o grau em que essas variáveis prevêem com precisão a participação em agrupamentos de alunos em dois distritos (em Texas e Arizona), com dois métodos diferentes de aprendizado de inglês: sistema estruturado de imersão (SEI) e Educação Bilíngüe (BE). A amostra incluiu 295 estudantes hispânicos que aprendiam inglês (ELL) nos anos finais do Ensino Fundamental, com idades entre 9 e 11 anos. As percepções dos estudantes sobre competência escolar, oportunidades de educação, motivação e stress de aculturação contribuíram para prever 73,3% dos agrupamentos de estudantes. Uma análise posterior de diferenças dos grupos resultou em um aumento moderado de habilidades acadêmicas e conhecimento das oportunidades educacionais para alunos ELL, no distrito do Texas, enquanto o stress de aculturação, discriminação percebida, a motivação e desempenho foram moderadamente altas para os alunos ELL, no distrito do Arizona. Alunos ELL no grupo SEI, no entanto, também tiveram notas ligeiramente superiores em sua motivação para se adaptar. Cenários alternativos e as implicações políticas são discutidas no contexto da pesquisa anterior. **Palavras-chave:** Aprendizizes de Língua Inglesa, formação acadêmica, políticas de aquisição da linguagem, motivação.

Introduction¹

More than four decades after the federal Bilingual Education Act (1968) established basic guidelines for the responsibilities of states and local public school districts to the particular needs of English Language Learners (ELLs), and with a more recent attempt to address aggressively the achievement disparity with the No Child Left Behind Act (NCLB; 2001), ethnicity continues to be one of the dominant predictors of academic success (Sirin, 2005). Although Hispanic youths are among the most at-risk for academic failure with 22% dropping out of school (National Center for Education Statistics, 2008), Hispanic ELLs are even more at-risk with 59% dropping out of school (Fry, 2003).

The chief means of addressing the problem of Hispanic ELL achievement has been a focus on the effectiveness of language acquisition methods. The debate has most often hinged between models that incorporate native language support (i.e., bilingual education) and those that emphasize English acquisition without native language support (i.e., Structured English Immersion or SEI). Despite decades of research, the ongoing debate regarding language acquisition models has only been fueled by inconsistencies across findings (e.g., Greene, 1998; Rossell & Baker, 1996). Without an examination of the ways language policies influence students' perceptions of self, however, the potential long-term effects of any language acquisition method will remain unclear.

The Present Study

Scholars have established that scholastic competence (e.g., Bandura, 1997) and a sense of belonging (e.g., González & Padilla, 1997) are among the strongest predictors of academic achievement, whereas perceived discrimination is predictive of academic underachievement (e.g., DeGarmo & Martinez, 2006). To date, however, these student-level variables have been unexamined across educational contexts using disparate language acquisition methods. Examining how students differ on motivational constructs, as well as variables that influence ethnic identity, provides much needed evidence about the potential effects of education reform efforts on students.

Specifically, the present study examined the following research questions: (a) Do student-level variables that have been established in the relevant literature as predicting academic achievement (perceptions of scholastic competence, perceptions of educational opportunities, motivation, and acculturative stress) accurately predict student group membership for ELLs in middle elementary school across two locations with disparate language acquisition policies? (b) What are the magnitudes of the group differences across the variables that contribute to group prediction?

Theoretical Model

The examination of how disparate educational contexts contribute to variables related to academic achievement is complex and requires the simultaneous consideration of numerous sources. To examine whether variables related to academic achievement would predict group membership in either SEI or bilingual settings, I used McCaslin's (2009) co-regulation of emergent identity model as a theoretical framework.

The co-regulation of emergent identity model takes into account the influence of both the cultural and social context on the development of identity. The cultural context encompasses norms

¹ I wish to thank the students, parents, educators, and administrators of the participating school districts for their cooperation in this research. I also wish to thank Darrell Sabers, Mary McCaslin, and Tom Good for their helpful comments.

and values of the group with whom students identify (e.g., Mexican Americans, children, etc.), whereas the social context encompasses the rules that are imposed on students as members of the collective group (e.g., at-risk). While both the cultural and social influences refer to the contexts that inform an individual's identity, the individual is also believed to influence reciprocally both the cultural and social context.

The primary focus of the present study is student identity, which at the individual-level, is contingent on the personal influences of the model. Personal influences encompass two primary constructs: adaptive strategies and the role of motivation in identity. I explain the constructs of the personal influences in detail below, and follow with a discussion of the model as it applies to the present study.

Adaptive Strategy Development

Adaptive strategies refer to self-regulation, or learning that is guided by metacognition, planning, monitoring, and evaluating progress. In the co-regulation of emergent identity model, the development of adaptive strategies is believed to be enhanced by (a) social and cultural environments that validate students' actions and outcomes; (b) opportunities that are challenging and promote risk-taking and self-confidence; and (c) supportive relationships with teachers (McCaslin, 2009, p. 138).

The role of motivation in identity

McCaslin (2009) explains, "Identity is based, in part, on what we do, why, and our own and others' beliefs about what that means, both now and for the future" (p. 138). Within the model, motivational dynamics that inform identity are framed within the contexts of what McCaslin refers to as *opportunities*, *struggle*, and *negotiation*. Briefly, educational *opportunities* refer to activities (e.g., assignments or tasks) that can be both beneficial to students, as well as activities that "can be disruptive, unwanted, and detrimental" (p. 139). *Struggle* refers to students' responses to opportunities, and encompass both the environmental situations that create a disequilibrium in students' efforts (e.g., if a task is boring, engaging, or too difficult, effort is adjusted accordingly) and the student dispositions that influence the perception of a situation (e.g., perceptions of ability). Struggle in turn elicits *negotiation*, which involves "problem solving and compromise" (p. 139). For example, a student working on a writing assignment (opportunity) that is not challenging (struggle) might decide that the effort required do one's personal best is not worth the outcome, and decides instead to put forth as little effort as necessary (negotiation) to complete the task.

Applied to the present study, the co-regulation of emergent identity model provides a framework wherein differences in the personal characteristics (e.g., perceived scholastic competence and perceived discrimination) between students in disparate educational contexts can be understood at least in part by the way in which their social and cultural contexts have informed personal influences. In consideration of the extant research that has established the importance of affirming students' cultural identity and drawing upon students' backgrounds as an asset (Banks, 1993, 2004; Banks & Banks, 1995; Gay, 2000; González, Moll, & Amanti, 2005; Irvine, 1992; Ladson-Billings, 1994, 1995a, 1995b; Nieto, 1999), I hypothesized that ELLs receiving linguistic support (i.e., a supportive social and cultural context) would have higher scholastic competence, perceptions of educational opportunities, and adaptive motivation. Conversely, the tendency to view native language as an impediment to academic success has been found to be an especially salient negative perception for Hispanic ELLs (e.g., August & Calderon, 2006; Gonzalez & Ayala-Alcantar, 2008; Valencia & Black, 2002). As such, I hypothesized that opportunities and struggles in SEI settings may not be socially and/or culturally supported, and would result in higher perceived discrimination, acculturative stress, and maladaptive motivational coping strategies among ELLs.

Review of the Literature

In the following sections, I present a detailed account of the educational context across the two districts represented in the study, and summarize the extant research that has examined language acquisition effectiveness over the past several decades. I then present a summary of the research that informed the inclusion of the various student-level variables in the present study.

Social Influences: Language Acquisition Models

The failure of ensuring equitable educational opportunities for language minority students has a long history (Crawford, 2000; Deschenes, Cuban, & Tyack, 2001; Leibowitz, 1971; Lyons, 1995; Ricento, 1996; Wiley & Wright, 2004). The first legislation that focused on the rights of language minority students was the Bilingual Education Act of 1968. Although the law did not initially prescribe a specific language acquisition program, federal policy has undergone numerous changes throughout the years. In 1974, the same year the Supreme Court decided that denying students the opportunity to participate fully in their education is a violation of the Civil Rights Act of 1964 (*Lau v. Nichols*, 1974), bilingual education was mentioned explicitly in the Bilingual Education Act. Congress codified the *Lau v. Nichols* decision in the Equal Educational Opportunity Act of 1974 (EEOA), and required that schools take the necessary steps to make education equitable for all students.

Successive reauthorizations of the Bilingual Education Act between 1978 and 1988 have changed the language of the law from mandating the exclusive use of bilingual education strategies to including SEI strategies (see Gándara & Rumberger, 2009, p. 765). The Fifth Circuit Court of Appeals interpreted the provisions of EEOA in *Castañeda v. Pickard* (1981), and required that English acquisition programs be (a) scientifically-based and supported by experts in the field, (b) implemented with adequate resources and personnel, and (c) evaluated for effectiveness.

The lack of specificity in the requirements (e.g., What is “scientifically-based?”) has resulted in a great deal of heterogeneity in the policies undergirding each state’s language acquisition model as well in the ways each state has implemented its approach to instruction of ELLs (Ovando, 2003). Within this context, two broad language acquisition models have emerged: SEI and bilingual education. Each state outlines specific laws addressing the linguistic provisions for instruction of ELLs, resulting in substantial variation across states.

Discussed below are the laws for each of the states represented in the present study, as well as the philosophies undergirding the different language acquisition methods. Although an in-depth discussion of the events leading to the language policies in each state represented in the present study is beyond the scope of the present paper, the rationale behind the language policies in both the U.S. (e.g., Wiley & Wright, 2004) and individual states (i.e., Arizona and Texas) are well-documented. For example, Wright (2005a) provides an analysis of the initiative and campaign that led up to the passing of Proposition 203 in Arizona, as well as the resulting variation in implementation of the SEI model. Others (e.g., Carter, 1970; Crawford, 1989; De León, 1983) have also detailed the political and social contexts that led to bilingual policy in Texas (Acts of the 67th Texas Legislature, 1981). In consideration of the various contributions to the understanding of the ways changes in language policies have become part of educational history, the focus here is on the laws that were salient for the participants of the present study.

Arizona. In 2000, SEI replaced bilingual education in Arizona via Proposition 203 (Arizona Revised Statutes 15-751-755), modeled after California’s Proposition 227 (California Education Code, Section 305-306). *The English for the Children* platform that began in California and influenced

similar policies in Arizona and Massachusetts attributed the poor performance and high dropout rates among ELLs to bilingual education (Rossell, 2002); however, approximately 70% the students who qualified for linguistic support were not receiving it (Gándara, Rumberger, Maxwell-Jolly, & Callahan, 2003).

SEI (also called “English-only instruction”) as implemented in Arizona does not use native language support, but incorporates other methods of structured support due to the federal requirements (*Lau v. Nichols*, 1974). Evidence in favor of SEI is rooted in the documented success of French immersion programs in Canada (Baker & de Kanter, 1983). In the U.S., the main component of SEI involves maximizing instruction in English by using second language acquisition strategies. Clark (2009) delineates the following elements as essential in the successful implementation of SEI: (a) English language learning is the main focus of SEI; (b) explicit teaching of English (e.g., grammar and usage) makes up a significant proportion of the school day; (c) academic content plays a subordinate, albeit supporting role; (d) students are grouped by level of English proficiency so teachers can use English at a level appropriate for the group of students; (e) teachers incorporate instructional strategies used in second language acquisition (i.e., active, direct, explicit instruction about language); and (f) SEI is intended to last one year.

Texas. Before Texas required bilingual education, adherence to English-only instruction was required by laws enacted as early as 1918. The Acts of the 67th Texas Legislature (1981; reauthorization 1997) changed the law, and required Texas school districts to offer bilingual education programs if there are at least 20 ELLs who speak the same language (usually Spanish) in one grade across a school district. If the enrollment of ELLs falls below the stated requirement, English instruction and support in the native language is required (i.e., English as a Second Language, or ESL). In addition to the bilingual education requirement, Texas bilingual programs are required to “help the child develop a positive self-image through an appreciation of his or her cultural heritage” (State Board of Education, 1971).

The theoretical framework undergirding bilingual education is based on Cummins’ (1979) Interdependence Hypothesis. Cummins asserts that second language acquisition among individuals who have not had formal schooling in their native language is fostered by academic instruction in the native language. Academic proficiency in the native language is believed to promote the effective transfer of both content knowledge and second language proficiency given sufficient exposure to the second language.

Although there are various programs under the “bilingual education” umbrella, all programs share the basic premise of providing academic instruction in the student’s native language as they also acquire English. Briefly, transitional early-exit bilingual programs are aimed at achieving English fluency by approximately third grade whereas transitional late-exit bilingual programs incorporate an increasing amount of academic instruction in English until fifth or sixth grade. In contrast to transitional bilingual programs, developmental bilingual programs are aimed at maintaining students’ native language as they acquire English by incorporating students’ native language into instruction throughout compulsory schooling.

Dual immersion (also called two-way dual immersion or bilingual immersion) programs are a more recent approach that have accumulated empirical evidence for improved student learning (e.g., Collier & Thomas, 2004; Gersten & Woodward, 1995). Dual immersion programs serve both language minority and language majority students (ideally comprised of approximately 50% of students from each group), and incorporate instruction in two languages. There is much variation in the different kinds of dual immersion programs; however, the goal across programs is fluency in two languages for both groups of students. Across programs, the approaches are meant to shelter the

environment of the second language being learned and encourage an equitable balance of the two languages (see Lindholm-Leary, 2001).

Prior Research on Language Acquisition Effectiveness

Over the past several decades, numerous researchers have attempted to determine which of the various models of language acquisition is the most effective. Reviews of studies, however, have been inconsistent. For example, Baker and de Kanter (1981) reviewed findings across 28 studies and concluded that there was insufficient support for the effectiveness of bilingual programs, particularly for teaching non-language subjects. A meta-analysis of the studies that had been included in the Baker and de Kanter report, however, indicated that the effects of bilingual education programs were indeed positive (Willig, 1985). Approximately a decade later, Rossell and Baker (1996) conducted a narrative review of 75 studies that compared students in a bilingual program to students in SEI and found that more studies favored SEI. Greene (1998) reviewed the studies that had been included in the Rossell and Baker report and found methodological issues in 11 of the 75 studies. Among the issues Greene found were redundancy (i.e., studies embedded in other studies included in the review), short term effects (i.e., measurement of effects across a period of 10 weeks or less), programmatic issues (i.e., programs labeled as bilingual were not actually bilingual programs), and inadequately controlled differences between groups. Greene conducted a meta-analysis of the remaining studies that had been determined to be methodologically sound and found that the use of native language instruction among ELLs showed moderate benefits when compared to ELLs who were taught only in English.

In a meta-analysis of experimental studies, Rolstad, Mahoney, and Glass (2005) found that K-3 bilingual programs in Arizona were more successful than all-English programs in raising students' test scores resulting in an overall effect size² (ES) of .16 for all outcome measures in English. In a separate meta-analysis, Slavin and Cheung (2003) found that in general, research favors bilingual programs over English immersion programs (ES = .43). Their analysis included studies that consisted of kindergarten through ninth grade bilingual classrooms and control, or SEI groups, matched in terms of student socioeconomic level, language proficiency, and instructional strategies. Control groups had similar instructional strategies in comparison to the bilingual groups, but without regard for the students' native language. Studies that included a pre- and post-test were only included if the treatment had not taken place prior to pre-test administration (i.e., pre-tests were conducted when the participating students were in kindergarten). Slavin and Cheung reported that out of 17 studies qualifying for inclusion in the meta-analysis, 12 were in favor of bilingual education, 5 found no differences between programs, and none of the studies favored SEI.

In a re-analysis of a longitudinal study conducted by Thomas and Collier (1997), Salazar (1998) computed the ES between various language acquisition programs across grades 1 through 11. The language acquisition programs included SEI, early exit bilingual education, late exit bilingual education, and dual immersion. Compared to SEI, the Normal Curve Equivalent (NCE) scores of early exit bilingual students were negligibly higher across grades (average ES = .09); late exit bilingual students had NCE scores that were slightly higher across grades (average ES = .38); and dual language immersion students had NCE scores that were moderately higher across grades (average ES = .53). Interestingly, the differences between the SEI group and the various bilingual education programs were negligible across the early elementary school years (ES = -.14 to .29). By sixth grade,

² The effect size in the review is interpreted in standard deviation units. For example, an ES=.16 is analogous to .16 of a standard deviation.

however, the differences among the different bilingual programs became more pronounced, with late exit (ES = .28 to .85) and dual language immersion (ES=.47 to 1.28) reflecting the highest gains.

Salazar's (1998) analysis is consistent with research suggesting that instruction that brings together language minority and language majority students, supporting the development of two languages simultaneously, may prove to be superior in the long-term. Gersten and Woodward (1995) conducted a longitudinal investigation of transitional bilingual and dual language immersion programs in a Texas school district. Gersten and Woodward's findings revealed that the academic performance of students participating in the dual immersion program increased significantly over four years with a moderate overall improvement from 4th to 7th grade (ES = .47). The transitional bilingual group, however, had a slight overall loss (ES = .14) from 4th to 7th grade.

Personal Influences

Despite warnings against "simple explanations for complex phenomena" (e.g., p. 35, Bracey, 2006), academic outcomes for ELLs have hinged on the effectiveness of language acquisition methods without a consideration of the ways in which context can influence their identity. In the sections that follow, I discuss each of the variables included in the present study that have been determined to be essential in the understanding of achievement outcomes.

Scholastic competence. Scholastic competence is one of the strongest predictors of academic achievement (Dweck, 1989; Eccles, Midgley, & Adler, 1984; Eccles, et al., 1989; Harter, 1982; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Marsh, 1987; Marsh, 1989; Marsh & Shavelson, 1985; Stipek, 1984; Stipek & Mac Iver, 1989; Wigfield et al., 1997; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991; Wigfield & Wagner, 2005). As such, it is a central construct in the examination of student outcomes. Scholastic competence lacks a singular conceptualization (Schunk & Pajares, 2005; Wylie, 1974, 1979, 1989), but at the very least, can be argued to encompass both self-evaluative ([self-efficacy] Bandura, 1977, 1997) and norm-referenced ([self-concept] Marsh & Shavelson, 1985) views of ability. Self-competence is also relatively stable even though domain-specific competencies may vary (Eccles, et al., 1989; Harter, 1982; Marsh, 1989; Marsh & Shavelson, 1985; Wigfield, et al., 1991).

Students' perceptions of their scholastic competence are informed by their environment (Marsh & Shavelson, 1985). Several models outline the dynamics of the internalized beliefs that result from interactions with and reflections of others' perceptions. These include reflected appraisals (Cooley, 1902; Mead, 1934), real- and ideal-self congruence (Rogers, 1961), and reciprocal determinism (Bandura, 1986). Taken together, it can be argued that self-competence is informed by social context, and informs future achievement. In the present study, scholastic competence thus reflects (a) an accumulation of internalized beliefs from parents, teachers, peers, and others, and (b) an indicator of future performance.

Student motivation. Some researchers interested in student motivation assert that students' expectations for success, as well as the value they attach to accomplishments, are fundamental to achievement outcomes as these contribute to effort and persistence (e.g., Eccles, 2005; Wigfield & Eccles, 1992). Others maintain that self-regulatory processes, which include antecedents to achievement such as goal setting, are central to achievement (e.g., Zimmerman & Kitsantas, 2005). Rather than examine motivational processes as distinct from each other, McCaslin (2007) incorporates expectancies, values, and self-regulated processes in a theory of motivational dynamics.

McCaslin (2007) asserts that students who are disengaged from learning are exhibiting a motivational dynamic that results from repeated attempts to engage in learning that lack validation. In contrast, students who are engaged in a given task or struggle but persist in a given task are theorized to have experienced affirmation for their efforts, making continued efforts worthwhile.

The key difference between students who are *engaged* and those who are *struggling but persist* is achievement. The motivational dynamic among students who are engaged in their learning is rooted in sustaining achievements whereas motivation for those who struggle and persist in their efforts is rooted in effort and perseverance that is believed to *lead* to achievement. Thus, in examining motivational dynamics among students, one can understand the processes that have culminated to result in the behavior rather than predict from the behavior alone.

Acculturative stress. Acculturation models have contributed to our understanding of the ways in which minority cultures respond to the dominant culture (Born, 1970; Padilla, 1980; Redfield, Linton, & Herskovitz, 1936; Williams & Berry, 1991). Often, the acculturation process results in conflicts stemming from the minority culture coming into contact with the majority culture. The conflict in turn creates stress (i.e., acculturative stress; Born, 1970), which elicits coping mechanisms to manage the conflicts. One example of acculturative stress involves children language brokering on behalf of their relatives. Weisskirch and Alva (2002) explained that language brokering shifts the hierarchy of power from adult to child as the latter is obligated to mediate adult interactions in which they would otherwise not take part.

Holleran and Jung (2005), who explored the geographical and historical factors contributing to acculturative stress, illustrate another example. Holleran and Jung contend that the proximity of the homeland and the history of border conflicts compound the issues faced by adolescent Mexican immigrants. Cultural conflicts, generational differences, and responsibilities such as translation between the dominant and native language are only a few examples of the many tensions children of Mexican descent may experience, in addition to social stressors including discrimination.

Acculturative stress has been linked to problems with self-concept (Weisskirch & Alva, 2002). Because acculturative stress is compounded by the socioeconomic stressors and barriers to success that are typical among low-income Mexican American youth, it is important to understand how different educational policies may contribute to acculturative stress that, in turn, may perpetuate the academic gap among Mexican American students.

Summary

Taken together, the theoretical model and prior research support the contention that students in disparate educational contexts might differ across achievement-related variables. The present study was designed to examine whether variables related to student outcomes (perceived scholastic competence, student perceptions of educational opportunities, student motivation, acculturative stress, and perceived discrimination) would contribute to the accurate prediction of the academic settings of ELLs receiving disparate language acquisition methods. I expected that students in bilingual education settings would have higher perceptions of scholastic competence, perceptions of educational opportunity, and motivation, but report lower levels of acculturative stress and perceived discrimination. The findings from the present study contribute to the understanding of how different educational contexts can either promote or suppress achievement.

Method

Setting and Participants

Consistent with the assertion that academic achievement among minority students should be examined from a within-group perspective (i.e., abandoning the traditional between-group or deficit model) (Gallimore & Goldenberg, 2001; Meece & Kurtz-Costes, 2001), the present study included only Hispanic ELLs from demographically comparable districts. Given the focus of the study requiring districts with a relatively high number of Hispanic ELLs, the two school districts that were recruited for the present were selected because of geographic location and comparability of student demographics across settings (see Table 1). Specifically, one district implemented bilingual and dual

language models across schools and was located in a Texas city, bordering Mexico. The second district was located in Arizona, approximately 64 miles from the Mexico border. In the Arizona district, SEI was implemented in all schools. The program models for each district are explained in detail below, followed by evidence regarding the implementation of programs and curricular controls across districts.

Arizona District. The participating district's website asserts that the program model for ELLs across all schools is SEI. Students are identified for assessment using the Arizona English Language Learner Assessment (AZELLA) when registration information indicates that the students speak a primary language other than English. Students scoring at proficiency levels *pre-emergent*, *emergent*, *basic*, or *intermediate* on the AZELLA are placed into SEI for a period that is not designed to exceed one year. In the SEI program, students receive 4 hours of daily practice skills in oral communication, reading, writing, and grammar. ELLs also participate in math, science, social studies, and elective or specialist classes (e.g., art) in English. The district also has programs available outside the school day across schools designed to help students develop English skills and make progress toward English proficiency; however, program participation rates were not reported by participating students.

Table 1
School District Demographics

	Arizona %	Texas %
African American	2.1	2.2
Hispanic	87.7	91.2
White	5.6	5.9
Native American	4.1	.5
Asian/Pacific Islander	.5	.3
Economically Disadvantaged	77.1	79.2
English Language Learner	20.5	24.4

Texas District. The participating Texas district's website asserts that it implements two programs designed for ELLs: transitional bilingual education and dual language immersion. All students who enroll in a Texas school must have a Home Language Survey completed. If the survey indicates that a language besides English is spoken at home by the student, the Oral Language Proficiency Test is administered to the student to determine program eligibility. Students whose scores make them eligible for services are placed in a bilingual or dual language immersion program.

The transitional bilingual program provides instruction in children's native language to help them progress academically as they acquire English. Instruction in English increases gradually throughout the elementary grades until the student is ready to transition into a monolingual English setting. The model is defined as: (a) K-1st 90% Spanish and 10% English; (b) 2nd 80% Spanish and 20% English; (c) 3rd 70% Spanish and 30% English; (d) 4th 60% Spanish and 40% English (e) 5th 40% Spanish and 60% English; and (f) 6th 10% Spanish and 90% English.

In contrast, dual language immersion is a program that provides instruction in two languages for English speakers and non-native speakers of English: a portion of the instructional day is taught in English and another portion is taught in Spanish. Given that dual language immersion programs require that native English speakers comprise 50% of the class, with the remainder comprised of native Spanish speakers, only one of the participating schools in Texas implemented dual language

immersion. Sample size precluded a separate analysis between transitional bilingual and dual language immersion settings.

Evidence of Disparate ELL Models Across Districts

Teacher training. One source of evidence regarding the programmatic differences in Arizona and Texas are the guidelines used by each state for teacher training and certification. In one report, Antunez (2002) explains:

... bilingual education programs generally require teachers trained in and competent to teach students through their native language as well as English...and mainstream programs conduct all instruction in English and do not, normally, require teachers to be trained to teach ELLs. (p. 2)

Indeed, teachers in Texas who seek certification to teach ELLs must demonstrate foreign language proficiency in the native language of the students they seek to teach (Texas State Board for Educator Certification). In contrast, there was no requirement that teachers in Arizona be certified to teach ELLs at the time of the study; however, Arizona Administrative Code R7-2-613.J.1 passed in 2006 (House Bill 2064) now requires that teachers have SEI, ESL, or bilingual endorsement. The endorsement can be met by completing 3 semester hours of approved training, but does not require foreign language fluency. Thus, at the very least, teachers in the participating Texas sample were required by the state to be fluent in Spanish, whereas those in Arizona were not.

Operational curriculum. Prior to the legislative changes in 2006 (House Bill 2064), there was much variability and confusion in the implementation of SEI (e.g., Combs et al., 2005). Despite the variation in the degree to which native language was used in the participating Texas schools (e.g., some models used 50% Spanish whereas others used more), the explicit expectation at all schools was that native language serve as the foundation on which second language acquisition was based (A. Acuña, personal communication, October 12, 2007; A. Fraga, personal communication, January 15, 2008; C. Kennedy, personal communication, January 15, 2008; V. Padilla, personal communication, October 9, 2007; V. Perez, personal communication, October 12, 2007; A. Silva, personal communication, October 9, 2007; H. Silva, personal communication, January 17, 2007; C. Vasquez, personal communication, October 11, 2007).

Although the present study did not examine the degree to which language policies are adhered to in classrooms, others have illustrated the relationship between formal policies and the operational curriculum. Stritikus and Garcia (2003), for example, found that whereas English only policies in California served as justification for personal beliefs for some teachers, others circumvented the curriculum to provide students with native language support. Despite the fact that some teachers will deliver instruction that may not be consistent with policies, there is evidence that there was substantial pressure for Arizona teachers to comply with Proposition 203. Wright (2005a), for example, describes the events that led to monitors visiting Arizona schools to report on whether instruction was occurring in English. Others also found that the passing of Proposition 203 in Arizona resulted in an absence of standardized practices across schools (Combs et al., 2005). This resulted not only in inconsistencies regarding the type of certification teachers who taught ELLs had, but also in variability in the ways students were taught. In some cases, students were placed in “mainstream” English classrooms and were pulled out for 30 minutes of instruction once a week.

Recruitment

After all Institutional Review Boards granted permission to conduct the study, all of the schools in the districts selected were contacted (N = 38); fourteen were in Arizona, and 24 were in Texas. School principals were contacted via telephone, email, and regular mail to request their

permission to recruit teachers, parents, and students in their schools for the study. Initially, 11 principals in the Texas school district and 6 principals in the Arizona school district agreed to participate; however, one principal in each school district reconsidered and decided not to participate in the study. The 5 Arizona schools that participated represent 36% of the population of total ELL students in the Arizona district. Approximately 20% of the ELL population in the Arizona district and 35% of the ELL population in the Texas district participated.

A total of 37 teachers and 730 Mexican-descent ELL students ages 9-11³ and their parents were recruited to participate. I obtained informed consent from teachers, parents or legal guardians, and minor assent from students. In the Texas district, 51% ($n = 190$) of the recruited students and parents agreed to participate, and in the Arizona district, 50% ($n = 182$) of the recruited students and parents agreed to participate. Seventy-seven students were not present the day the surveys were proctored resulting in 45% ($n = 166$) of the recruited Texas students participating, and 36% ($n = 129$) of the recruited Arizona students participating. Additionally, 52% of the parents ($N = 178$) did not return the demographic surveys, resulting in 71% ($n = 135$) of the recruited Texas parents participating, and 32% ($n = 59$) of the recruited Arizona parents participating. Overall, 54% of the participants were female. District demographics are presented in Table 1.

Procedure

Student and parent instruments and questionnaires were administered in both English and Spanish. Parents who agreed to participate completed the demographic questionnaires at home, and returned the instrument and questionnaire with their child to school. Students completed the instruments during regularly scheduled classes. I read directions to the students, and answered questions before children began to fill out the instruments.

Measures

Demographic Information. The demographic information instrument was created to obtain background information for students and parents participating in the study, and was provided in both Spanish and English. Most respondents answered that they were the child's biological mother (Texas, 91%; Arizona, 94%). Approximately 70% of Arizona and 89% of Texas parents reported their place of birth as "Mexico." In Arizona, 71.3% of the respondents reported that their child was born in the United States; in Texas, 71.2% reported the same. In Arizona, 77% of the respondents reported that Spanish was the primary language spoken at home whereas 99% of the respondents in Texas reported the same⁴. In Arizona, parents reported having lived in the United States for a median of 13 years; and in Texas, parents reported having lived in the United States for a median of 12 years.

³ Consistent with extant research on student motivation and learning (McCaslin & Burross, 2008), students who are in middle childhood are at the tail end of the "industry versus inferiority" crisis (Erikson, 1968) and as such, provide an ideal window for the study of student achievement in different contexts.

⁴ One of the problems with relying on the self-report data provided by parents/guardians regarding language spoken in the home in the present study is that there may be a socially desirable response bias that resulted in inconsistencies with self-report data provided to schools. Namely, the data reporting that English was spoken at home by 23% of the *responding* Arizona sample is inconsistent with the criteria used by the Arizona school district to identify students who will be assessed for English proficiency (i.e., that Spanish is the primary language spoken at home). Moreover, 68% of participating parents did not answer the question regarding language spoken at home.

The Self-Perception Profile for Children (Harter, 1985). The Self-Perception Profile for Children was developed to assess perceived competence in children across five domains: scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct. For the present study, only the six items from the scholastic competence subscale were used. Harter (1982) constructed the format of the questions to address issues with socially desirable responses, particularly among children. Each question includes two statements (e.g., some kids often *forget* what they learn, and other kids can *remember* things easily). Students are asked to decide which kind of student is most like him or her, and are then asked whether the sentence is really true (1 or 4 on the scale) or sort of true (2 or 3 on the scale) for him or her. A score of 1 indicates low perceived scholastic competence, and a score of 4 indicates high perceived scholastic competence.

Harter granted permission to translate the instrument into Spanish. The Spanish translation was back-translated to English and compared to the original instrument to assess equivalence, and was determined to be an equivalent version of the original instrument (i.e., there are inconsequential, if any, differences between the translated and original English versions). In the present study, internal consistency reliabilities resulted in a coefficient alpha of .70, $M = 13.98$, and $SD = 3.38$ for both samples combined.

The Thing About My School Is... (McCaslin, 2008). The Thing About My School Is... was designed to assess student perceptions of educational opportunities and includes 6 items for each of the following factors: *pride in achieving* (e.g., “Teachers want students to try their best.”), *participation and belonging* (e.g., “I look forward to school each day.”), *rigid and right* (e.g., “There is only one right way to read a book.”), *literacy* (e.g., “I am a good reader.”), and *math* (e.g., “I am good at math.”). Items are scored from 1 to 4, with higher scores indicating increased concordance with each factor.

McCaslin granted permission to translate the instrument to Spanish. The translated instrument was back-translated to English and compared to the original instrument to assess equivalence, and was determined to be an equivalent version of the original instrument. In the present study, the stratified alpha coefficient for both samples combined is .79, $M = 82.76$, and $SD = 13.99$.

How I Am In My Class (McCaslin, 2007). The instrument was used in the present study to assess student motivation (McCaslin, 2007; McCaslin & Burross, 2008). The instrument includes twenty items across four factors: *anxious and withdrawn* (e.g., “My stomach felt funny.”), *engaged learner* (e.g., “I was into it.”), *disengaged* (e.g., “I was looking around.”), and *struggling and persistent* (e.g., “I was getting help.”). The items are self-description sentences; students underline the sentences that describe how they were in class the day of the administration. Each item is scored 0 or 1; higher scores indicate increased concordance with each factor.

McCaslin granted permission to translate the instrument to Spanish. The translated instrument was back-translated to English and compared to the original instrument to assess equivalence, and was determined to be an equivalent version of the original instrument. In the present sample, the stratified alpha coefficient for both samples combined is .72, $M = 11.20$, and $SD = 3.50$.

The Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale for Children (SAFE-C; Chavez, Moran, Reid, & López, 1997). The SAFE-C was designed to assess domains related to acculturative stress and has been validated for use with children between the ages of 8 and 12 years. The instrument is considered a developmentally appropriate version of an abbreviated adaptation of the Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale (Mena, Padilla, & Maldonado, 1987). The SAFE-C has 36 six-point (0-5) Likert items that are scored in three domains: general social stress (e.g., “It’s hard for me to talk to new kids.”), acculturation process-oriented

stress (e.g., “People think I am shy when I really just have trouble speaking English.”), and perception of discrimination (e.g., “Because of the group I am in, I don't get the grades I deserve.”).

Chavez granted permission to translate the instrument to Spanish; the translated instrument was back-translated to English. The resulting English back-translation was determined to be an equivalent version of the original instrument. Internal consistency reliabilities for both samples combined resulted in a coefficient alpha of .83, $M = 77.60$, $SD = 26.45$.

Statistical Analysis

To determine whether group membership in differential educational contexts could be predicted reliably from student perceptions of scholastic competence, student perceptions of their educational opportunities, student motivation, and acculturative stress, I used discriminant function analysis. The primary goals of discriminant function analysis are to find the dimension(s) on which groups differ, and determine classification functions that predict group membership. In the present study, the predictors that were selected after a review of the extant literature were believed to be among those that would be differentially influenced by educational contexts. For the effect size, canonical R^2 was determined. To determine group differences across the predictors, univariate F tests and Fisher's least significant difference post hoc tests were used; Cohen's d (Cohen, 1988) was determined as the effect size measure.

Results

Group Prediction

A two-group linear discriminant analysis was performing using variables measuring student scholastic competence, student perceptions of their educational opportunities, motivation, and acculturative stress as predictors of group membership in Arizona and Texas. All variables were entered simultaneously.

Of the original 295 cases, 7 were dropped from the analysis because at least one of the discriminating variables was missing. Missing data appeared to be scattered randomly across groups and predictors. For the remaining 288 cases, (161 students in Texas and 127 students in Arizona), evaluation of assumptions of linearity, normality, multicollinearity or singularity were satisfactory. The test of the null hypothesis of equal population covariance matrices was not significant ($p = .81$), suggesting that the necessary assumption of non-different covariance matrices is not violated.

The first function (Wilks' λ of .73 with $\chi^2_{13} = 88.07$, $p < .001$) accounted for 53.3% of the variance ($R = .73$) associated with group membership. The group centroids for the first function were $-.69$ (Arizona) and $.54$ (Texas). Table 2 displays the standardized canonical discriminant function coefficients, which are used to compare the relative importance of the independent variables as they reflect the unique, semi-partial contribution of each variable to the discriminant function.

The structure coefficients (pooled within-groups correlations between discriminating variables and the standardized canonical discriminant function) are displayed in Table 3. Structure coefficients are interpreted much like coefficients in a factor analysis, where the correlations are analogous to factor loadings of the variables on each discriminant function.

Classification rates were examined to determine how well the predictors discriminated between groups (see Table 4). Overall, 73.3% of the participants were correctly classified (the expected classification was 56.0% based on the expected hit ratio). To determine whether the variables improved group membership prediction over chance alone, a procedure described by Wiedemann and Fenster (1978) was applied. Wiedemann and Fenster used kappa (κ ; Cohen, 1968) to compute the chance corrected percentage of agreement between actual and predicted group

membership. Thereafter, they calculated the standard error of λ to test the null hypothesis that the discriminant function yields zero improvement in classification ability. In the present study, λ is equal to .49, meaning that the variables improved group membership prediction by 49% over and above chance prediction. The standard error of λ in the present study is .066, which results in a $z = 6.06$, $p < .001$. Thus, the discriminant function improves group classification significantly over chance alone.

Table 2
Standardized Canonical Discriminant Function Coefficients

	Function 1
Student Scholastic Competence Perceptions	.40
Acculturative Stress	-.34
Perceived Discrimination	-.29
Pride in Achieving	.28
Participation and Belonging	.29
Literacy	.12
Rigid and Right	.13
Math	.38
Engaged Learner	-.49
Anxious and Withdrawn	.06
Disengaged	-.21
Struggling and Persistent	-.10

Note: The standardized canonical discriminant function coefficients are used to compare the relative importance of each of the predictors, relative to the model being analyzed.

Table 3
Structure Matrix for Discriminant Analysis

	Function 1
Student Scholastic Competence Perceptions	.46
Perceived Discrimination	-.45
Pride in Achieving	.40
Acculturative Stress	-.38
Math	.36
Disengaged	-.36
Participation and Belonging	.33
Struggling and Persistent	-.30
Engaged Learner	-.24
Literacy	.22
Anxious and Withdrawn	-.18
Rigid and Right	.15

Note: The structure coefficients reflect the strength of the uncontrolled association between each of the predictors with the discriminant function; the sign indicates the direction of the relationship (i.e., negative coefficients predict SEI membership).

Table 4
Classification Results for Discriminant Analysis

		Predicted Group		Total
		Membership		
	Group	Texas	Arizona	
Count	Texas	131	30	161
	Arizona	47	80	127
%	Texas	81.4	18.6	100.0
	Arizona	37.0	63.0	100.0

Group Differences

Based on univariate F tests and Fisher's least significant difference post hoc tests (see Table 5). As hypothesized, ELLs in Texas had moderately higher levels of scholastic self-competence ($d=.54$) and perceptions of their educational opportunities in terms of *pride in achieving* ($d=.47$), *participation and belonging* ($d=.42$), and *math* ($d=.41$); they also had slightly higher perceptions of their educational opportunities in terms of literacy ($d=.26$). Also consistent with the hypotheses, ELLs in Arizona had moderately higher acculturative stress ($d=.47$) and perceived discrimination ($d=.53$), as well as higher maladaptive motivation in terms of *disengagement* ($d=.47$); however, inconsistent with the hypotheses, they also had slightly higher levels of adaptive motivation in terms of *struggling and persistent* ($d=.36$) and *engaged learner* ($d=.28$).

Table 5
Tests of Equality of Group Means: Texas Sample in Discriminant Analysis

	Wilks' Lambda	F	p	TX $M(SD)$	AZ $M(SD)$
Scholastic Self-Competence	.93	22.4	<.001	2.95(.63)	2.58(.68)
Student Perceptions of Opportunity					
Pride in Achieving	.95	16.5	<.001	3.53(.49)	3.24(.71)
Participation and Belonging	.96	11.5	.001	3.00(.91)	2.63(.91)
Literacy	.98	5.0	.026	2.84(1.36)	2.50(1.17)
Math	.96	13.7	<.001	3.38(1.05)	2.90(1.15)
Rigid and Right Motivation	.99	2.4	.127	2.09(.62)	1.96(.87)
Engaged Learner	.98	5.9	.019	.59(.31)	.68(.27)
Anxious and Withdrawn	.99	3.4	.084	.14(.24)	.20(.25)
Disengaged	.96	13.5	<.001	.33(.29)	.46(.30)
Struggling and Persistent	.97	9.4	.002	.22(.27)	.33(.33)
Acculturative Stress					
Acculturative Stress	.95	15.6	<.001	1.88(.81)	2.25(.73)
Perceived Discrimination	.93	21.0	<.001	1.40(1.07)	1.99(1.11)

Discussion

In the sections that follow, I discuss the findings for each of the student-level variables within the context of the theoretical framework. I then discuss evidence that can assist in eliminating potential competing hypotheses, and conclude with limitations and suggestions for future research.

Scholastic Competence

Given that scholastic competence incorporates both self-evaluative (Bandura, 1977, 1997) and norm-referenced (Marsh & Shavelson, 1985) views of ability, it appears that ELLs in the Texas district consider themselves to be more efficacious (e.g., “I am a good student”), as well as more competent relative to peers, than ELLs in the Arizona district. One of the sources that inform scholastic competence is the educational context. The most notable difference between the two districts that participated in the present study was the difference in language acquisition approaches; however, both the curriculum and pedagogy may also have differentially informed students’ scholastic competence. These, as well as other, competing hypotheses are addressed in the section *Alternative Hypotheses* section.

In addition to providing insight in terms of the degree to which students consider themselves academically competent, the stability of scholastic competence (e.g., Eccles, et al., 1989) contributes to its usefulness as an indicator of future performance. For ELLs in the Texas district, moderately higher perceptions of scholastic competence suggest that their social context (e.g., parents, peers, and teachers) has contributed to perceptions that are more conducive to achievement when compared to Arizona ELLs—and that these differences can be expected to predict later achievement. There are indeed differences between the graduation rates of Hispanic students across the two states represented in the present study.

According to the most recent (2005-2006) U.S. Department of Education data from the Common Core of Data, 8.2% ($\square = 2.27$) of Hispanic students drop out between 9th and 12th grade in Arizona compared to 5.9% ($\square = 1.75$) in Texas, resulting in a moderate difference of $b=.51^5$. It is important to note that the rate of Hispanic students who drop out reported by the state departments of education for Arizona and Texas are lower than the rates available from the U.S. Department of Education (6.1% in Arizona and 5.2% in Texas), and markedly lower than the national Hispanic dropout rate of 22% (U.S. Department of Education, 2008). Data, however, are not disaggregated by ethnicity *and* ELL status by the U.S. Department of Education, the Texas Education Agency, or the Arizona Department of Education. Indeed, states are currently under scrutiny for the absence of reporting accurate dropout rates for ELLs (Zehr, 2009), and must do so by the 2011-2012 school year. Nevertheless, a report published by the Pew Hispanic Center estimates that approximately 59% Hispanic ELLs drop out of school (Fry, 2003).

Although the lack of transparency in reporting disaggregated graduation rates makes the interpretation of just how “at-risk” Hispanic ELLs are difficult, what is not contested is that Hispanic ELLs are indeed among the most at risk for academic failure, and that at least at the middle elementary school level across two districts with similar demographics, ELLs who are in a bilingual or dual language program have moderately higher perceptions of both their scholastic competence and their perceptions of opportunity in school.

⁵ To test whether two proportions are different, the arcsine transformation is applied (\square); the difference between the two arcsine transformations is calculated, resulting in the effect size index b . The effect size index b is interpreted similarly to the standardized mean difference, d (see pp. 179-213, Cohen, 1988)

Motivation

The moderately higher student motivation scores for Arizona ELLs on *disengaged* would suggest that the educational context is void of validation based on motivational theories (McCaslin, 2007); however, means for *engaged learner* and *struggling and persistent* were slightly higher for ELLs in Arizona than for ELLs in Texas. The simultaneous presence of positive student motivational dynamics suggest that the higher scores for *disengaged* may be evidence of a lack of validation for students' efforts, but perhaps only in certain contexts (e.g., language-based difficulties).

For some Hispanic groups, the tendency to view native language as an impediment to academic success may be an especially salient negative perception (e.g., August & Calderon, 2006; Gonzalez & Ayala-Alcantar, 2008; Valencia & Black, 2002). Moreover, the method of instruction for ELLs in Arizona (i.e., no native language support) may present a situation wherein students do not have the opportunity to engage in higher-level language (Cummins, 1979) despite their efforts, which may have contributed to their higher scores on *disengaged*. ELLs in Arizona, however, also scored higher on *engaged learner* and *struggling and persistent* suggesting that although they may have limited opportunities to engage in higher level language (Cummins, 1979), they may have also been provided with situations that increase effort.

McClelland (1985) explained that situational manipulations—namely, feedback on failure—could result in increased motive strength. There is no reason to believe that individual differences in terms of the *need* for achievement would differ across samples in the present study. Thus, the higher means on *struggling and persistent* and *engaged learner* for Arizona ELLs suggest that experiences of lower academic achievement may actually increase motivation. That is, the *struggling and persistent* variable is evidence of resilience that with the appropriate support can “teach students how to reach for the not-yet-attainable, risk failure, and develop self-confidence” (McCaslin, 2009, p. 139). It is important to note, however, that the prolonged effort without validation may eventually result in *disengaged* (i.e., dropping out of school) among students who have had their motives influenced by prolonged failure, which may be the case when students are taught by teachers holding subtractive theories (Stritikus & Garcia, 2003).

Additive theories

Stritikus and Garcia (2003) documented the ways in which teachers' beliefs mediated the ways in which they responded to the implementation of English-only policies in their classroom. They found that teachers espousing *additive theories* wherein language and culture were seen as complementary to educational goals “played a significant role in the actions [they] took in and out of their classroom contexts.” These teachers enhanced their students' educational experience by the types of interactions that took place in classrooms. In contrast, teachers who espoused *subtractive theories* and viewed education as a means of assimilating students were found to contribute to “punitive rules for students who used Spanish,” and that their views were legitimized by English-only policies. In these settings, students were found to be resistant, which served to strengthen teachers' beliefs in a scripted, skills based pedagogy.

In terms of the theoretical model applied to the present study, if teachers in the SEI settings adhere to additive theories, they may create an environment that increasingly validates students' efforts while promoting risk-taking and a supportive relationship. In the absence of culturally-supportive influences, however, the resilience found in the Arizona sample may possibly fade or be replaced with a less optimal solution (i.e., something other than academic achievement).

Acculturative stress and perceived discrimination

ELLs in Arizona displayed higher levels of acculturative stress and perceived discrimination. Because acculturative stress is compounded by the socioeconomic stressors and barriers to success that are typical among low-income Mexican American youth, it is important to understand how educational practices may contribute to the amelioration of acculturative stress that, in turn, may influence achievement among Mexican American students.

For Texas ELLs in the study, bilingual education involves the use of native language for the acquisition of academic knowledge, and all of the principals and teachers of the participating Texas schools are native Spanish speakers. Additionally, the mission statement for the participating district in Texas includes “fluency in two or more languages.” Bilingualism is an explicit expectation in the mission statement and program philosophy, and is modeled by teachers and principals—and this is reflected in the differential acculturative stress findings in the present study.

Alternative Hypotheses

Although attempts were made to ensure all variables that could be controlled (e.g., similarity of districts from which students, parents, and teachers were recruited) were controlled, the different political climates across jurisdictions may have influenced participation (or lack thereof). Namely, there was more attrition in the Arizona sample than in the Texas sample. The Legal Arizona Workers Act (2008), which potentially affected many of the families in the Arizona sample, went into effect *after* parents and students had agreed to participate, but *before* data were collected. This selection artifact may have contributed to the reduced sample size in Arizona when compared to the sample in Texas.

As difficulty in getting a sample to participate increases, so too does the potential of competing hypotheses contributing to the observed findings. In the case of the present study, the sample in Arizona was much more difficult to recruit than the sample in Texas—possibly because of factors relating to political climate regarding students of Mexican descent. This is a threat that needs to be considered carefully in the interpretation of the substantive hypotheses, since any effects that might appear to be attributable to bilingual education might be a result of the differential participation of ELLs in Arizona. That is, characteristics may contribute to the differentiation between ELLs in Arizona who participate and those who do not, and this must be taken into account in the interpretation. In careful consideration of the issues contributing to less participation in the Arizona sample, however, it is possible that the differences between students in the present study would have been larger than they were found to be.

The study was designed with a *within-group perspective* wherein academic achievement among minority students was not examined using the traditional between-group (non-ELL/non-minority) or deficit model (Gallimore & Goldenberg, 2001; Meece & Kurtz-Costes, 2001). Despite the emphasis on a within-groups examination, one of the most robust ways to examine whether the magnitude of the differences between two groups can be attributable to a treatment (i.e., language acquisition model) is to include a control group (e.g., non-ELL participants in each district). Both participating districts, however, were comprised of predominantly Hispanic students, with approximately 5% of students being non-minority, non-ELL (at least in the district; at the school level in Texas, non-minority, non-ELL students made up only approximately 1% of the total student population). Considering district demographics, the sample size necessary for a control sample would have reduced the available resources to recruit the target samples, further limiting inferences that may be drawn from the results. Moreover, including non-ELL data to address an alternative hypothesis (i.e., the effects were due to another programmatic issue and not ELL policy) would be

ideal only if there were no reason to believe that ELL policies do not affect non-ELLs; however, in the section entitled *Sense of Belonging*, I present evidence that ELL policies have been found to affect Hispanic *non*-ELLs as well as Hispanic ELLs, thus limiting the control of competing hypotheses by including non-ELLs in the study (relative to the proportion of students who are non-ELLs in the participating districts, who are overwhelmingly Hispanic). In consideration of López & McEneaney's (2009) findings, it is likely that having included non-ELLs in the present study would have resulted in differences across the two states consistent with those found between ELLs, leading one to potentially—and perhaps mistakenly—believe that it is *not* ELL policies, but another issue, influencing the scores for the variables included in the study. Thus, including non-ELLs as a control would only be effective if one could be certain ELL policies do not affect them. Seeing as there is evidence that they do, it is necessary to turn to other ways to address competing hypotheses.

Curriculum. One way to address the potential limitations given the absence of programmatic controls is to examine extraneous variables that can influence the results of the present study. One such influence is the curriculum, which may be different across states. As presented in earlier sections, however, there is evidence that the differences across states are not due to the curriculum: NAEP scores are the same for non-minority, non-ELLs across both states, and the drop-out rates of students who are not ELL is the same across both states. Moreover, despite the documented issues with the Arizona Instrument to Measure Standards (Wright, 2005b), there were no differences in the proportion of non-ELL students in each state who met proficiency standards in their respective state assessment. Yet another potential influence on the curriculum may be teacher quality; however, this variable appears to be substantially *higher* in Arizona than in Texas (see Menken & Antunez, 2001).

Ethnicity and Achievement. Another way to address the lack of quasi-control is to examine evidence of effects resulting from policies directed toward specific groups. Two variables included in the present study that suggest that the differences between groups are based on programmatic differences that hinge on ethnicity (i.e., language) are the *perceived discrimination* and *acculturative stress* variables. Both *perceived discrimination* and *acculturative stress* are associated with the social and political context of an individual's experiences. A search of any other policies that could have resulted in the higher scores for Arizona students results in a paucity of evidence. For example, although there were Minutemen who patrolled the Arizona/Mexico border during the time data were collected for the present study (which may have contributed to student perceptions given the immigration tensions of the area), the same dynamics were observed on the Texas/Mexico border. Indeed, the proximity of the border in Texas was substantially closer to students in the Texas sample than those in Arizona, potentially making the immigration issues even more pervasive.

Language has traditionally been viewed as a pivotal variable in the degree to which individuals have assimilated/acculturated to majority culture. Given the alignment of ELL policy to language (i.e., explicit bans versus explicit incorporation), and the consistency between the differences between Texas and Arizona students on variables related to language (perceived discrimination and acculturative stress) and the ELL policy of each state, the absence of a quasi-control seems insufficient to discredit the cumulative evidence from the review of the literature and the otherwise consistent programmatic issues across states. In sum, whereas a quasi-control may have appeared to address a competing hypothesis, the evidence from numerous sources suggests that the contribution of a control (at least in terms of the available controls) would have been minimal, at best—and may have resulted in inaccurate inferences.

Sense of belonging. The resiliency of Mexican American students has been studied before. In a secondary analysis of an existing dataset, González and Padilla (1997) examined the role of family, teachers, peers, and the school environment on academic achievement among Mexican American

high school students in California. González and Padilla found that the only variable that significantly predicted grades was a sense of belonging. Consistent with González and Padilla's findings, the Texas ELLs in the present study also had a higher sense of belonging (as measured by the perceptions of opportunity variable, *participation and belonging*). Considered together, it appears that a sense of belonging is a necessary component to achievement—one that was indeed lower for ELLs in SEI schools.

In González and Padilla's analysis, a sense of belonging referred to both peer relationships and positive ties to school; however, other studies have suggested that a sense of belonging can also be influenced by larger entities such as state laws. López and McEneaney (2009) examined state laws on language acquisition across states with the highest numbers of Hispanic students and Hispanic student performance on the 2005 and 2007 Reading National Assessment of Educational Progress (NAEP). López and McEneaney found that the stringency with which bilingual education laws were mandated⁶ was related to higher scores among Hispanic ELLs. Interestingly, the effects held for Hispanic non-ELLs. López and McEneaney asserted that a possible explanation for the increase in NAEP scores among non-ELL Hispanics can at least in part be explained by a stereotype-threat phenomenon, which has been found to be sensitive to priming effects (Steele & Aronson, 1995; McKown & Weinstein, 2003). Namely, children's awareness of broadly held stereotypes can influence outcomes in stereotype-laden situations such as standardized testing conditions. Given that the SEI was promulgated on a platform that was based on the low performance of Hispanic ELLs, López and McEneaney explain that Hispanic students' performance on NAEP in those states may have been at least in part suppressed by the comparative nature of NAEP. In contrast, bilingual education is believed to foster students' social and cultural knowledge (Trueba, Guthrie, & Au, 1981) and as such, "may promote a school culture beyond specific classroom services that is supportive of academic achievement for all Hispanic students" (p. 33, López & McEneaney, 2009).

Linguistic support. Although bilingual education policies can influence educational contexts for both ELLs and non-ELLs, linguistic support is particularly salient for those who are non-native English speakers. In a separate secondary analysis, Padilla and Gonzalez (2001) found that students who had received some ESL/bilingual education had higher grades than students who did not receive linguistic support, regardless of their immigrant status (i.e., born outside of the United States, second-, or third-generation). Taken together, research appears to support the notion that English acquisition cannot be the only focus in addressing the needs of ELLs (Gándara & Rumberger, 2009) if we are interested in long term achievement.

Achievement context. Another potential competing hypothesis that may have contributed to the findings in the present study is the disparate achievement between ELLs in Arizona and Texas on the state achievement tests, the Arizona Instrument to Measure Skills (AIMS) and the Texas Assessment of Knowledge and Skills (TAKS). Substantially more 4th grade ELLs in Texas (66%; $\eta^2 = 1.90$) met academic expectations on the 2007 English state assessment in Reading than in Arizona (20%; $\eta^2 = .93$), resulting in $b = .97$. The TAKS, however, has arguably been considered a less stringent state assessment because of the content, which is selected on the criteria of minimum skills. Indeed, NAEP (2007) researchers found a strong negative correlation (-0.88) between the proportion of students who meet proficiency standards on their state's standards-based assessment and their respective mapped NAEP score equivalents.

⁶ López and McEneaney (2009) conducted a review of published work that indicated that there was no extant ranking of the degree to which states emphasize a bilingual education approach; they developed a ranking for the various laws that ranged from 5 (bilingual education is mandatory in all schools) to 0 (bilingual education is not allowed; waivers for bilingual education are permitted only for students who are fluent in English).

Moreover, AIMS is provided only in English to all students. Assessment results of students who have not achieved English fluency are confounded by language, and often may not reflect actual content-knowledge. Thus, it is possible that the higher scholastic competence among Texas ELLs is spurious, influenced in part by emphasis on a basic skills test that may not reflect higher content knowledge.

To determine whether the higher rates of achievement for Texas ELLs was a result of a less-stringent state assessment, López (2008) examined the difference between Arizona and Texas ELLs and non-ELLs (to control for curricular effects) on the 4th grade Reading NAEP. López found that although Texas ELLs scored substantially higher on the NAEP than Arizona ELLs, there was a negligible difference in the scores of non-ELLs across both states. The results suggest that Texas students did not have a broader and/or deeper curriculum that prepared them for NAEP, whereas ELLs in Texas did have an advantage over their Arizona counterparts. Although some may suspect validity issues in comparing students across states on NAEP when the language of instruction may differ, it is important to consider that NAEP was designed to compare group scores across jurisdictions and does not provide linguistic accommodations in Reading.

Conclusion

Intended or Unintended Consequences?

Many have presented evidence that language policies transcend the language acquisition debate and are indeed a means of social stratification (e.g., Combs et al., 2005; Wiley & Wright, 2004; Wright, 2005b). Blanton (2004), for instance, includes accounts of how immersion policies were used to segregate Spanish speaking students until the Bilingual Education Act of 1968 and *Lau v. Nichols*. Moreover, Wright (2005b) explains that Arizona's language policy was a *restricted-oriented policy* that was formulated to restrict explicitly the use of minority language. Thus, although an in-depth analysis of the intended consequences of language policies in Arizona and Texas is beyond the scope of the study, the outcomes of the study and literature detailing the intended consequences of language policy (e.g., Wiley & Wright, 2004; Wright, 2005b) suggest that some of the outcomes of the study may be indeed be an intentional consequence.

In Arizona, policymakers blamed bilingual education for the lower achievement of Hispanic ELLs (Gándara et al, 2003; Wiley & Wright, 2004). Cumulatively, however, scholars have demonstrated that the argument against native language instruction for Hispanic ELLs has limited empirical support (e.g., Rolstad, Mahoney, & Glass, 2005; Salazar, 1998; Slavin & Cheung, 2003; Thomas & Collier, 1997). Indeed, some have argued that language policies have been influenced more by politics than best practices for ELLs (e.g., Gándara et al., 2003; Gándara & Rumberger, 2009; Stritikus & Garcia, 2003; Wiley & Wright, 2004). Considering the numerous studies that suggest that bilingual education contributes to student achievement with the findings in the present study, it is paramount that policymakers revisit Proposition 203 to ensure SEI has not interfered with students' educational opportunities.

Castañeda v. Pickard (1981) requires language acquisition programs to be evaluated for effectiveness. Comparisons of achievement scores for ELLs in Arizona (i.e., NAEP) prior to and after the implementation of SEI suggest that the program is not ameliorating performance gaps as policymakers promulgated (López, 2008). Moreover, findings in the present study suggest that student-level variables are not what they should be if the language acquisition model is indeed superior to models that incorporate students' native language. Cumulatively, researchers have addressed the mandatory component of *Castañeda v. Pickard*; however, policymakers in Arizona have

not. As such, they should be held accountable for the failure of SEI to promote academic achievement among Hispanic ELLs.

Recommendations

If policy makers are genuinely interested in raising student achievement and English proficiency, there are two key issues that they must consider: interdisciplinary evidence regarding the language acquisition outcomes and factors beyond language acquisition that contribute to achievement.

At the forefront, those who oppose bilingual education have suggested that SEI promotes English acquisition faster than bilingual education (e.g., Rossell, 2002); however, SEI remains contested as the most effective way for all ELLs to acquire English not only in randomized trials (e.g., Barnett, Yarosz, Thomas, Jung, & Blanco, 2007), but also in the fields of psycholinguistics (e.g., Genesee, 1983), cognitive psychology (e.g., Padilla & Sung, 1992), and sociolinguistics (e.g., Galindo, 1993). Moreover, student achievement is not a unidimensional construct, but a result of numerous, interrelated factors. Indeed, if achievement were simply a matter of exposure to English, students at-risk of school failure would include only those who have not been exposed to English. This, however, is not the case; both student identity and motivation have been established as variables that are of great consequence in student achievement. To ignore a student's sense of identity and motivation is to ignore the decades of research that have informed current policies on teacher quality and effective classroom practices that contribute to student achievement (e.g., see Brophy & Good, 2007). Thus, even if policy makers are uninterested in raising a sense of identity and motivation among students, if they are interested in raising student achievement, they must consider the unintended consequences of policies that can impact achievement beyond language acquisition alone.

References

- Acts of the 67th Texas Legislature (1981).
- Antunez, B. (2002). The preparation and professional development of teachers of English language learners. ERIC Clearinghouse on Teaching and Teacher Education. Publication no. ED477724.
- Arizona Revised Statutes § 15-751 (2000).
- August, D., & Calderón, M. (2006). Teacher beliefs and professional development. In D. August & T. Shanahan (Eds.). *Developing literacy in second-language learners: Report of the national literacy panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum Associate, Publishers.
- Baker, K. A., & de Kanter, A. A. (1981). *Effectiveness of bilingual education: A review of the literature*. Washington, D.C.: U.S. Department of Education, Office of Planning, Budget and Evaluation.
- Baker, K., & de Kanter, A. (1983). An answer from research on bilingual education. *American Education*, 56, 157-169.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 181-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Upper Saddle River, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

- Banks, J. A. (1993). Chapter 1: Multicultural education: Historical development, dimensions, and practice. *Review of Research in Education*, 19, 3-49.
- Banks, J. A. (2004). Multicultural education: Historical development, dimensions, and practice expectancies. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research of multicultural education* (pp. 3-24), San Francisco, CA: Jossey-Bass.
- Banks, C., & Banks, J. (1995). Equity pedagogy: An essential component of multicultural education. *Theory Into Practice*, 34, 152-158.
- Barnett, S. W., Yarosz, D. J., Thomas, J., Jung, K., & Blanco, D. (2007). Two-way and monolingual English immersion in preschool education: An experimental comparison. *Early Childhood Research Quarterly*, 22, 277-293.
- Bilingual Education Act. P. L. 90-247, (Jan. 2, 1968), 81 Stat. 816, 20 U.S.C.A. 880(b).
- Blanton, C. K. (2004). *The strange career of bilingual education in Texas, 1836-1981*. College Station, TX: Texas A&M University Press.
- Born, D. O. (1970). Psychological adaptation and development under acculturative stress: Toward a general model. *Social Science and Medicine*, 3, 529-547.
- Bracey, G. W. (2006). *Reading educational research: How to avoid getting statistically snookered*. Portsmouth, NH: Heinemann.
- Brophy, J., & Good, T. L. (2007). *Looking in classrooms* (10th ed.). New York: Allyn & Bacon.
- California Education Code §§ 300-340 (1998)
- Carter, T. P. (1970). *Mexican Americans in school: A history of educational neglect*. New York: College Entrance Examination Board.
- Castañeda v. Pickard*, 648 F.2d 989 (5th Cir. 1981).
- Chávez, D. V., Moran, V. R., Reid, S. L., & López, M. (1997). Acculturative stress in children: A modification of the SAFE scale. *Hispanic Journal of Behavioral Sciences*, 19, 34-44.
- Clark, K. (2009). The case for structured English immersion. *Educational Leadership*, 66, 42-46.
- Cohen, J. (1968). Weighted kappa: Nominal scale agreement with provision for scaled disagreement or partial credit. *Psychological Bulletin*, 70, 213-219.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd edition). Hillsdale, NJ: Erlbaum.
- Collier, V. P., & Thomas, W. P. (2004). The astounding effectiveness of dual language education for all. *NABE Journal of Research and Practice*, 2, 1-20.
- Combs, M. C., Evans, C., Fletcher, T., Parra, E., & Jiménez, A. (2005). Bilingualism for the children: Implementing a dual-language program in an English-only state. *Educational Policy*, 19, 701-728.
- Cooley, C. H. (1902). *Human Nature and the social order*. New York: Scribner's.
- Crawford, J. (2000). Anatomy of the English-only movement. In J. Crawford (Ed.), *At war with diversity: U.S. language policy in an age of anxiety* (pp. 4-30). Clevedon, UK: Multilingual Matters.
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, 49, 222-251.
- DeGarmo, D. S., & Martinez, C. R. (2006). A culturally informed model of academic well-being for Latino youth: The importance of discriminatory experiences and social support. *Family Relations*, 55, 267-278.
- De León, A. (1983). *They called them greasers: Anglo attitudes toward Mexicans in Texas, 1821-1900*. Austin, TX: University of Texas Press.
- Deschenes, S., Cuban, L., & Tyack, D. B. (2001). Mismatch: Historical perspectives on schools and students who don't fit them. *Teachers College Record*, 102, 525-547.

- Dweck, C. S. (1989). Motivation. In A. Lesgold & R. Glaser (Eds.), *Foundations for a psychology of education* (pp. 87-136). Hillsdale, NJ: Erlbaum.
- Eccles, J. S. (2005). Subjective task value and the Eccles et al. model of achievement-related choices. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105-121). New York: Guilford Press.
- Eccles, J., Midgley, C., & Adler, T. (1984). Grade-related changes in the school environment: Effects on achievement motivation. In J. G. Nicholls (Ed.), *The development of achievement motivation* (pp. 283-331). Greenwich, CT: JAI.
- Eccles, J. S., Wigfield, A., Flanagan, C. A., Miller, C., Reuman, D. A., & Yee, D. (1989). Self-concepts, domain values, and self-esteem: Relations and changes at early adolescence. *Journal of Personality*, 57, 283-310.
- Equal Education Opportunity Act. 20 U.S.C. Sec. 1703.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.
- Fry, R. (2003). Hispanic youth dropping out of U. S. schools: Measuring the challenge. Pew Hispanic Center Report. Retrieved from <http://pewhispanic.org/files/reports/19.pdf>
- Galindo, L. D. (1993). Bilingualism and language variation among Chicanos in the Southwest. In A. W. Glowka & D. M. Lance (Eds.), *Language variation in North American English: Research and teaching* (pp. 199-218). New York: Modern Language Association.
- Gallimore, R., & Goldenberg, C. (2001). Analyzing cultural models and settings to connect minority achievement and school improvement research. *Educational Psychologist*, 36, 45-56.
- Gándara, P., & Rumberger, R. (2009). Immigration, language, and education: How does language policy structure opportunity? *Teachers College Record*, 111, 750-782.
- Gándara, P., Rumberger, R., Maxwell-Jolly, J., & Callahan, R. (2003). English learners in California schools: Unequal resources, unequal outcomes. *Education Policy Analysis Archives*, 11. Retrieved from <http://epaa.asu.edu/epaa/v11n36/>.
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53, 106-116.
- Genesee, F. (1983). Bilingual education of majority-language children: The immersion experiments in review. *Applied Psycholinguistics*, 4, 1-46.
- Gersten, R., & Woodward, J. (1995). A longitudinal study of transitional and immersion bilingual education programs in one district. *Elementary School Journal*, 95, 223-240.
- González, N., Moll, L. C., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. New York: Routledge.
- Gonzalez, R., & Ayala-Alcantar, C. U. (2008). Critical caring: Dispelling Latino stereotypes among preservice teachers. *Journal of Latinos and Education*, 7, 129-143.
- González, R., & Padilla, A. M. (1997). The academic resilience of Mexican American high school students. *Hispanic Journal of Behavioral Sciences*, 19, 301-317.
- Greene, J. (1998). A meta-analysis of the effectiveness the Rossell & Baker review of bilingual education research. *Bilingual Research Journal*, 21, 102-122.
- Harter, S. (1982). The perceived competence scale for children. *Child Development*, 53, 87-97.
- Harter, S. (1985). *The Self-Perception Profile for Children*. Unpublished manuscript.
- Holleran, L. K., & Jung, S. (2005). Acculturative stress, violence, and resilience in the lives of Mexican-American youth. *Stress, Trauma, and Crisis*, 8, 107-130.
- Irvine, J. J. (1992). Making teacher education culturally responsive. In M. E. Dilworth (Ed.), *Diversity in teacher education: New expectations* (pp. 79-82). San Francisco, CA: Jossey-Bass.

- Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in children's self-competence and values: Gender and domain differences across grades one through twelve. *Child Development*, 73, 509-527.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. (1995a). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32, 465-491.
- Ladson-Billings, G. (1995b). But that's just good teaching! The case for culturally relevant pedagogy. *Theory Into Practice*, 34, 159-165.
- Lau v. Nichols, 414 U.S. 563 (1974).
- Leibowitz, A. H. (1971). *Educational policy and political acceptance: The imposition of English as the language of instruction in American schools*. Washington, DC: Center for Applied Linguistics. (Eric Document Reproduction Service No. 047321)
- Lindolm-Leary, K. J. (2001). *Dual language education*. Tonawanda, NY: Multilingual Matters Ltd.
- López, F. (2008, March 28). *Educational policy and English language learner performance: NAEP and state assessments*. Paper presented at the annual meeting of the American Psychological Association, Boston, MA.
- López, F., & McEneaney, E. (2009). *English language learners and state implementation of language acquisition policies*. Manuscript submitted for publication (copy on file with author).
- Lyons, J. (1995). The past and future directions of federal bilingual education policy. In C. Baker (Ed.), *Policy and practice in bilingual education: Extending the foundations* (pp. 1-15). Clevedon, UK: Multilingual Matters.
- Marsh, H. W. (1987). The big-fish-little-pond effect on academic self-concept. *Journal of Educational Psychology*, 79, 280-295.
- Marsh, H. W. (1989). Age and sex effects in multiple dimensions of self-concept: Preadolescence to early adulthood. *Journal of Educational Psychology*, 82, 417-430.
- Marsh, H. W., & Shavelson, R. (1985). Self-concept: It's multifaceted hierarchical structure. *Educational Psychologist*, 20, 107-123.
- McCaslin, M. (2007). *Construct analyses of student disposition toward school: Technical report*. University of Arizona: Tucson, AZ.
- McCaslin, M. (2008). Learning motivation: The role of opportunity. *Teachers College Record*, 110, 2408-2422.
- McCaslin, M. (2009). Co-regulation of student motivation and emergent identity. *Educational Psychologist*, 44, 137-146.
- McCaslin, M., & Burross, H. (2008). Student motivational dynamics. *Teachers College Record*, 110, 9-9.
- McClelland, D. C. (1985). How motives, skills, and values determine what people do. *American Psychologist*, 40, 812-825.
- McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development*, 74, 498-515.
- Mead, G. H. (1934). *Mind, self, and society from the standpoint of a social behaviorist*. Chicago, IL: University of Chicago Press.
- Meece, J. L., & Kurtz-Costes, B. (2001). Introduction: the schooling of ethnic minority children and youth. *Educational Psychologist*, 36, 1-7.

- Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Science*, 9, 207-225.
- Menken, K., & Antunez, B. (2001). An overview of the preparation and certification of teachers working with limited English proficient (LEP) students. National Clearinghouse for Bilingual Education. Publication No. ED-99-CO-0007.
- National Assessment of Educational Progress (NAEP). (2007). Mapping 2005 state proficiency standards onto the NAEP scales. U.S. Department of Education, Institute of Education Sciences. NCES 2007-482. Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/studies/2007482.pdf>
- National Center for Education Statistics. (2008). The Condition of Education 2008 (NCES 2008-031), Indicator 23.
- Nieto, S. (1999). *The light in their eyes*. New York: Teachers College Press.
- No Child Left Behind Act of 2001 (NCLB), Pub. L. No. 107-110.
- Ovando, C. (2003). Bilingual education in the United States: Historical development and current issues. *Bilingual Research Journal*, 27, 1-25
- Padilla, A. M. (1980). The role of cultural awareness and ethnic loyalty in acculturation. In A. M. Padilla (Ed.), *Acculturation: Theory, models and some new findings* (pp. 47-84). Boulder, CO: Westview.
- Padilla, A. M., & Gonzalez, R. (2001). Academic performance of immigrant and U.S.-born Mexican heritage students: Effects of schooling in Mexico and Bilingual/English language instruction. *American Educational Research Journal*, 38, 727-742.
- Padilla, A. M., & Sung, H. (1992). A theoretical and pedagogical framework for bilingual education based on principles from cognitive psychology. In R. V. Padilla & A. H. Benavides (Eds.), *Critical Perspectives on Bilingual Education*. Arizona: Bilingual Press.
- Proposition 203, Arizona Revised Statutes § 15-751 (2000).
- Redfield, R. Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, 38, 149 - 152.
- Ricento, T. (1996). The courts, the legislator and society: The shaping of federal language policy in the United States. In D. Kibee (Ed.), *Language legislation and linguistic rights* (pp. 123-141). Philadelphia: John Benjamins.
- Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston, MA: Houghton Mifflin.
- Rolstad, K., Mahoney, K., & Glass, G. (2005). The big picture: A meta-analysis of program effectiveness research on English language learners. *Educational Policy*, 19, 572-594.
- Rossell, C. (2002). *Dismantling bilingual education implementing English immersion: The California initiative*. San Francisco, CA: Public Policy Institute of California.
- Rossell, C., & Baker, K. (1996). The educational effectiveness of bilingual education. *Research in the Teaching of English*, 30, 7-69.
- Salazar, J. J. (1998). A longitudinal model for interpreting thirty years of bilingual education research. *Bilingual Research Journal*, 22, 1-12.
- Schunk, D. H., & Pajares, F. (2005). Competence perceptions and academic functioning. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 85-104). New York: Guilford Press.
- Sirin, S. (2005). Socioeconomic status and student achievement: A meta-analytic review of research. *Review of Educational Research*, 75, 417-453.

- Slavin, R. E., & Cheung, A. (2003). A synthesis of research on language of reading: Instruction for English language learners. *Review of Educational Research*, 15, 247-284.
- State Board of Education. (1971, June). *Statewide Design for Bilingual Education*. Agenda: June 5, 1971. Austin, TX: Texas Education Agency. Retrieved from <http://www.tea.state.tx.us/research/prr10/lepdev.html>
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Stipek, D. J. (1984). Young children's performance expectations: Logical analysis or wishful thinking? In J. G. Nicholls & M. L. Maehr (Eds.) *Advances in motivation and achievement* (Vol. 3, pp. 33-56). Greenwich, CT: JAI Press.
- Stipek, D. J., & Mac Iver, D. (1989). Developmental change in children's assessment of intellectual competence. *Child Development*, 60, 521-538.
- Stritikus, T. T., & Garcia, E. (2003). The role of theory and policy in the educational treatment of language minority students: Competitive structures in California. *Education Policy Analysis Archives*, 11. Retrieved from <http://epaa.asu.edu/epaa/v11n26/>
- Texas State Board for Educator Certification. Retrieved at <http://www.sbec.state.tx.us/SBECOnline/standtest/edstancertfieldlevl.asp>
- Thomas, W. P., & Collier, V. (1997). *School Effectiveness for Language Minority Students*. Washington, DC: National Clearinghouse for Bilingual Education.
- Trueba, H. T., Guthrie, G. P., & Au, K. H. (1981). *Culture and the bilingual classroom: Studies in classroom ethnography*. Rowley, Massachusetts: Newbury House Publishers.
- U.S. Department of Education. Common core of data. Retrieved from <http://nces.ed.gov/ccd/>
- Valencia, R. R., & Black, M. S. (2002). Mexican-Americans don't value education! On the basis of the myth, mythmaking, and debunking. *Journal of Latinos and Education*, 1, 81-103.
- Weisskirch, R. S., & Alva, S. A. (2002). Language brokering and the acculturation of Latino children. *Hispanic Journal of Behavioral Sciences*, 24, 369-381.
- Wiedemann, C. F., & Fenster, C. A. (1978). The use of chance corrected percentage of agreement to interpret the results of a discriminant analysis. *Educational and Psychological Measurement*, 38, 29-35.
- Wigfield, A., & Eccles, J. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review*, 12, 265-310.
- Wigfield, A., Eccles, J., Mac Iver, D., Reuman, D., & Midgley, C. (1991). Transitions at early adolescence: Changes in children's domain-specific self-perceptions and general self-esteem across the transition to junior high school. *Developmental Psychology*, 27, 552-565.
- Wigfield A., Eccles, J. S., Yoon, K. S., Harold, R. D., Freedman-Doan, C., & Blumenfeld, P. C. (1997). Change in children's competence beliefs and subjective task values across the elementary school years: A 3-year study. *Journal of Educational Psychology*, 89, 451-469.
- Wigfield, A., & Wagner, A. L. (2005). Competence, motivation, and identity development during adolescence. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 85-104). New York: Guilford Press.
- Wiley, T. G., & Wright, W. E. (2004). Against the undertow: Language-minority education policy and politics in the "age of accountability." *Educational Policy*, 18, 142-168.
- Williams, C. L., & Berry, J. W. (1991). Primary prevention of acculturative stress among refugees: Application of psychological theory and practice. *American Psychologist*, 46, 632-641.

- Willig, A. C. (1985). A meta-analysis of selected studies on the effectiveness of bilingual education. *Review of Educational Research*, 55, 269-317.
- Wright, W. E. (2005a). The political spectacle of Arizona's Proposition 203. *Educational Policy*, 19, 662-700.
- Wright, W. E. (2005b). English language learners left behind in Arizona: The nullification of accommodations in the intersection of federal and state policies. *Bilingual Research Journal*, 29, 2-29.
- Wylie, R. C. (1974). *The self-concept* (Vol. 1). Lincoln: University of Nebraska Press.
- Wylie, R. C. (1979). *The self-concept* (Vol. 2). Lincoln: University of Nebraska Press.
- Wylie, R. C. (1989). *Measures of the self-concept*. Lincoln: University of Nebraska Press.
- Zehr, M. A. (2009). Graduation rates on ELLs a mystery. *Education Week*, Retrieved from www.edweek.org/ew/articles/2009/09/04/03ellgrads.h29.html
- Zimmerman, B. J., & Kitsantas, A. (2005). The hidden dimension of personal competence: Self-regulated learning and practice. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 509-526). New York: Guilford Press.

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