Advancing School Readiness for Young Hispanic Children Through Universal Prekindergarten

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Abstract

Hispanics account for over one-fifth of newborns in the United States. Hispanic children, on average, achieve at lower levels from kindergarten forward than the non-Hispanic White majority and Asian Americans. Increasing the percentage of Hispanic children who enter kindergarten "ready" for school constitutes one of the nation's most important current agenda items in education. Given that it is believed that the early childhood years provide the best window for improving academic trajectories for Hispanic children, this article describes current findings and offers recommendations to expand high-quality universal prekindergarten (UPK) programs for Hispanics in the United States.

Introduction

Young Hispanic children (from birth to age eight) are currently the largest and fastest growing racial and ethnic minority subpopulation in the United States. In 2002, there were nearly 13 million Hispanic children and youth in the United States, about 18 percent of the nation's under-eighteen population (Census Bureau

2003b). Hispanics were an even larger share of the very young that year. Of the four million babies born in the United States in 2002, nearly 877,000 were Hispanic, about 22 percent of the total—up from 16 percent of the births a decade earlier (Martin et al. 2005). It is anticipated the under-eighteen Hispanic population will grow to over seventeen million by 2020 (Census Bureau 2003a).

Despite extensive efforts over the past few decades to raise academic achievement among educationally and economically disadvantaged elementary and secondary school students, including low socioeconomic status (SES) Hispanics, progress has been slow (NCES 2003c; NCES 2001a). It has been especially difficult to raise achievement levels in high school, a problem of increasing concern to policy makers (Olson 2005).

Promisingly, there is a growing body of evidence that high-quality UPK programs (those for three- and four-year-olds) can have a positive impact on the school careers of many children, particularly those from low SES families (Bowman, Donovan, and Burns 2001; Gormley, Gayer, and Dawson 2005; Heckman and Masterov 2004; Reynolds 2003). There also are some promising approaches to nurturing the cognitive development of infants and toddlers from disadvantaged circumstances (Love et al. 2002). In addition, some elementary school improvement strategies seem to be producing meaningful academic achievement benefits for low SES students (Borman and Hewes 2001). As a result, there is reason to believe that the period from birth through age eight currently constitutes the best window of opportunity for making improvements in the educational trajectories of disadvantaged children, including Hispanics, in the United States.

Parties who advocate for voluntary UPK should be precise regarding its capacity to produce developmental and academic achievement gains. Such gains are optimized when the progress of structural, curricular, and instructional approaches are informed by sound theory and rigorous research. For Hispanic youths, research suggests that the most effective UPK programs directly address language and culture, providing sound instruction in both Spanish and English. In this article, we discuss several demographic attributes of young Hispanic children, their current early education profile in terms of access and achievement, and how increased access to high-quality UPK programs constitutes a promising approach to improve their educational opportunities. We end by offering a number of recommendations from the research literature to ensure the high quality of UPK programs for young Hispanics.

Demographic Attributes

Children of Hispanic heritage in the United States are not a homogenous group but embody diverse social, cultural, and linguistic backgrounds (Montemayor and Mendoza 2004; Census Bureau 2003b). Hispanic children represent, for example, long-term native-born populations to the United States along with various countries of origin, each of which is associated with a unique combination of histories, cultural practices, perspectives, and traditions. Recent growth in the young Hispanic population in the United States has been driven to a high degree by immigration patterns from Latin America (Census Bureau 2003b). In 2000, one in

five children from birth to age eight in the United States were Hispanic (Hernandez 2006). Of these children, over 64 percent were born into immigrant families in which at least one parent was born outside the United States. A large majority of young Hispanic children are of Mexican origin (68 percent), but substantial proportions have origins in Puerto Rico (9 percent), Central America (7 percent), South America (6 percent), or are Cuban or Dominican (3 percent each) (Hernandez 2006). Two-thirds of young Mexican-origin and Cuban-origin children live in immigrant families, and this rises to about nine in ten for those with origins in the Dominican Republic and Central or South America. Especially important is that the vast majority of young Hispanic children are, themselves, U.S. citizens: 85 percent for those with South American origins, 88 percent for those with Mexican origins, and 91–92 percent for those with origins in the Dominican Republic and Central or South America (Capps et al. 2004; Hernandez 2006).

Compared to the Whites and other racial and ethnic groups, Hispanic children and families demonstrate a number of favorable demographic attributes. In an analysis of census data, Hernandez (2006) found that a large proportion of Hispanic children live in two-parent households. Indeed, 77 percent of young Hispanic children (from birth to age eight) lived with two parents in 2000. The proportion rises to 81–86 percent for young children in immigrant families from Mexico, Central and South America, and Cuba. These proportions decrease, however, in native families from these regions as well as those from the Dominican Republic and Puerto Rico.

Young Hispanic children, on average, live in families with a strong work ethic and desire to succeed (Hernandez 2006). Ninety-three percent of these children have fathers who worked during the year previous to the 2000 census survey. The proportion is the same in both native-born and immigrant families. Moreover, Hispanic children are approximately three times more likely to live with three or more adults (including their parents) who participate in the workforce.

Despite low socioeconomic circumstances, Hispanic families demonstrate various positive physical health outcomes. Studies have consistently found that Hispanics have lower infant morality rates, better birth outcomes, healthier diets, and lower rates of obesity compared to Whites (Escarce, Morales, and Rumbaut 2006). Variations on these domains have been found between national-origin groups and by immigrant generation status. Hispanics of Puerto Rican descent, for example, tend to have worse health status indicators than other national-origin groups while Hispanics of Mexican and Central American origin often exhibit the most favorable health outcomes despite their poverty status.

Survey data has also highlighted that Hispanic parents demonstrate a positive attitude toward education and the schooling of their children. Although parents of young Hispanics, on average, do not have high levels of formal education attainment, they have high educational aspirations for their children (NCES 1998). Parents express interest in enrolling their children in early education programs and supporting them through postsecondary schooling. A survey conducted by the Tomás Rivera Policy Institute found that over 90 percent of Hispanic parents feel that it is very important or somewhat important for children to attend preschool (Perez and Zarate 2006).

Young Hispanic children live in a variety of home language environments. In general, Spanish dominates such environments with access to English as a significant factor. Because early language development is strongly associated with cognitive development and academic success (Risley and Hart 2006), it is important to understand the intersection of Spanish and English for these children and how the native language can be leveraged to increase school achievement. Some young Hispanics acquire English as their first language and maintain only monolingual proficiency throughout their life. Others speak Spanish as their first language, and learn English as they enter public schooling. The proportional size of the latter subpopulation has been growing rapidly over the past few decades. Indeed, the percentage of the overall child population in the United States whose native language was not English rose from 6 percent in 1979 to 14 percent in 1999. The National Clearinghouse for English Language Acquisition (2006) reported that enrollment from kindergarten to twelfth grade for English language learners (ELL) grew over 65 percent between the 1993–1994 and the 2003–2004 school years while the total population from kindergarten to twelfth grade grew less than 7 percent. The majority of this growth is attributable to increases in populations of Latin American origin. In 2000, Spanish accounted for 76 percent of all ELL students from preschool to fifth grade.

Using data from a national sample of children born between December 2001 and January 2002, López, Barrueco, and Miles (2006) describe the home language environments of Hispanic infants. The largest group (34 percent) of Hispanic infants lived in homes in which Spanish was the primary language. Twenty-two percent lived in a home in which English was the primary language spoken, with some Spanish; 21 percent lived in English-only homes; and 19 percent in Spanish-only homes. In sum, it was found that approximately three out of four Hispanic infants were exposed to some level of Spanish in the home.

The positive attributes which Hispanic children and families demonstrate, e.g., two-parent households, strong work ethic, physical health, positive attitude toward school and education, tend to decrease the negative effects of poverty and low parental education (Shields and Behrman 2004). However, these attributes are not generally sufficient to sustain Hispanic students on a trajectory of educational success over time. Robust early interventions are necessary and have proven successful to increase school readiness and decrease pervasive achievement gaps.

Early Education

Currently, Hispanics lag behind their White and Asian American peers at all proficiency levels of reading and mathematics (at least a half of a standard deviation) at the beginning and throughout schooling from kindergarten to twelfth grade (García et al. 2005; NCES 2003a; NCES 2003b; Reardon and Galindo 2006). Educational achievement patterns of virtually all racial and ethnic groups are established during the early years of school and change little thereafter (García et al. 2005). Although some of the differences between racial and ethnic groups are accounted for by socioeconomic differences between groups (on average Hispanics have lower SES than Whites and Asian Americans), much of it is not (Reardon and Galindo 2006). Using data from the Early Childhood Longitudinal

Study, Kindergarten Cohort (ECLS-K; see NCES 2001b), Reardon and Galindo (2006) found that Hispanic children scored from 0.3 to 0.5 of a standard deviation lower in mathematics and reading than their White peers within all five SES quintiles (SES in ECLS-K is a composite of household income and parents' level of education and occupation) from kindergarten to fifth grade. Hence, race and ethnicity had a substantial effect on early achievement over and above SES. In a separate analysis of ECLS-K data, Reardon (2003) noted that these achievement differences by SES and race and ethnicity from kindergarten to first grade were attributable to processes within, between, and out of schools. That is, practices in the home and school bear meaningful influences on racial and ethnic and SES achievement gaps in early education (García, Jensen, and Cuéllar 2006).

Because academic achievement during the early elementary grades is strongly associated with sustained success throughout secondary and postsecondary schooling (Gilliam and Zigler 2004; Magnuson and Waldfogel 2005), Hispanic children are especially positioned to benefit from involvement in high-quality UPK programs. While no extensive study exists regarding the longitudinal impacts of Hispanic participation in prekindergarten across the country, current evidence suggests that Hispanics—and children in general—who attend prekindergarten programs learn language, social skills, and practical skills that are related with enhanced achievement in the future. Indeed, an evaluation of the UPK program in Tulsa, OK, revealed several benefits for young Hispanics (Gormley, Gayer, and Dawson 2005). In this study authors estimated the impact of prekindergarten on achievement—letter/word identification, spelling, and applied problems. The sample consisted of 1,567 children enrolled in prekindergarten and 1,461 kindergarten children who had just completed prekindergarten. As shown in Figure 1, gains for Hispanic students in this program were especially impressive. Hispanics experienced a 79 percent gain in letter/word identification, a 39 percent gain in spelling, and a 54 percent gain in applied problem solving. This progress outpaces gains which naturally would have occurred during one year of a child's development.

Momentum is currently building in the United States at all levels of government to make substantial investments and commitments to UPK programs. The provision of high-quality educational access for young children in the country is motivated not only by research in child development but also in economics. In terms of child development, neuropsychological research shows that the brains of very young children are extremely malleable during the early years of life (Ramey and Ramey 1998; Shonkoff and Phillips 2000). Indeed, a key characteristic of early childhood (from birth to age three) is the remarkably rapid brain development that occurs during this period. In many ways, these early years provide the foundation for the brain's lifelong capacity for growth and change. A strong neurological groundwork is established in early childhood through rich experiences that allow the brain to develop to the point of being able to process, encode, and interact with the environment (Kagan and Kauerz 2006). High-quality early education programs are able to provide the necessary scaffolding and facilitate this development.

With regards to the financial investment in early education programs, economists Heckman and Masterov (2004) found that "enriched prekindergarten programs

available to disadvantaged children on a voluntary basis . . . have [a] strong track record of promoting achievement for disadvantaged children, improving their labor market outcomes, and reducing involvement in crime." Moreover, educational policies that stress financial investment in early educational development are much cheaper than those that seek to remedy early educational deficits at the middle school and high school levels. Simply stated, the later in life that attempts are made to repair early deficits, the costlier remediation becomes (Ramey and Ramey 1998; Reynolds and Temple 2005; Reynolds 2003).

Given the size, rapid growth, and comparatively low achievement levels of young Hispanic children in the United States, these children are particularly situated to benefit from high-quality prekindergarten programs (García and González 2006). However, although enrollments among Hispanics are on the rise, these children are less likely than their White, Asian American, and African American peers to attend any sort of prekindergarten program (García et al. 2005). Currently, only 40 percent of three- to five-year-old Hispanics attend a prekindergarten program compared to about 60 percent of Whites and African Americans (NCES 2002). The low enrollment of Hispanic children in these programs is often misinterpreted as a function of the reluctance of Hispanic families to place their children in a center-based program. However, availability of high-quality and publicly funded programs is frequently limited in Hispanic communities, which reduces access and, therefore, enrollment (Fuller, Bridges, and Livas 2006).

Addressing UPK Quality

When they do enroll in prekindergarten, Hispanic children are more likely than their peers to attend low-quality programs: those with less-prepared teachers, fewer resources, higher teacher-to-student ratios, and larger class sizes. Moreover, even when high-quality programs exist within communities, many parents are unaware that services are available due to a lack of community outreach. Language can also be a barrier to enrollment. Parents need to be able to communicate with the center, understand the enrollment paperwork, and engage meaningfully with the children's teachers.

Targeted preschool programs such as Head Start and some prekindergarten programs are often associated with low quality and do not always reach eligible children. Head Start, for example, reaches only about 35 percent of eligible children (Currie 2001). Arizona, California, and Texas offer targeted prekindergarten programs but these only meet four of the ten quality benchmarks identified by the National Institute of Early Education Research (Barnett et al. 2005). Thus, because Hispanic children from all socioeconomic levels have shown to benefit cognitively from enrollment in high-quality preschool, best evidence suggests that providing state-funded UPK programs constitutes a viable approach to early education delivery.

Research evidence also suggests that the success of UPK programs for Hispanics depends on the extent to which language and culture are incorporated into the center, classroom, and instruction. Because approximately 75 percent of young Hispanics are exposed to Spanish in the home (López, Barrueco, and Miles 2006), the integration of Spanish and culturally relevant content is essential. A trademark

of high-quality prekindergarten programs for young Hispanic children is the provision of dual-language content and instruction by school staff who are bilingual and culturally competent (Barnett et al. 2006; Borman et al. 2006). This approach validates the child's cognitive and linguistic abilities while bridging home/school cultural differences—establishing an environment in which parents feel comfortable and are able to express themselves to teachers.

In their study, Barnett et al. (2006) compared the effects of a dual language program to a monolingual English program within the same school district. Children in the study were from Spanish- and English-language backgrounds. Programs were compared on measures of children's growth in language, emergent literacy, and mathematics. Among the native Spanish speakers, those enrolled in the dual-language program demonstrated greater gains in Spanish vocabulary and in phonological awareness in both English and Spanish. Authors of this study concluded, therefore, that those programs built around valuing and teaching relevant culture and traditions and addressing language differences and needs directly are among the most effective. This is consistent with research by Borman et al. (2006), who conducted a meta-analysis of the research on the achievement effects of the nationally disseminated school improvement programs known as "comprehensive" school reforms implemented in predominantly Hispanic elementary school contexts.

Recommendations

The following recommendations are offered to improve educational opportunities for young Hispanics in the United States. They emphasize the need for policy and practice in early education to directly address language, and for curriculum and instruction to reflect relevant culture and traditions. Findings from the available research literature on schooling, language, and policy highlight the need for expanded UPK access and for these programs to have rich language environments, dual-language programs, and high-quality teachers and staff. These recommendations are directed to parties who influence early education policy and practice at the federal, state, and local levels, including governments, private foundations, not-for-profit organizations, and parents.

Universal prekindergarten: Young Hispanic children ages three and four should be given access to free, state-funded preschool whose enrollment is done on a volunteer basis—universal prekindergarten. Evidence suggests that high-quality UPK programs improve school readiness for young Hispanic children and decrease achievement differences between racial and ethnic groups at kindergarten entry. These programs should have bilingual and culturally competent staff to effectively engage students and to develop sustainable relationships with family members.

Moreover, states would be wise to adopt prekindergarten curricula in both Spanish and English. States and local communities should work together to offer high-quality educational experiences with a variety of schedule options. In states where access to state-funded prekindergarten is not yet universal, i.e., available to all children, policy makers and program administrators should expand definitions of eligibility to include children with limited English proficiency. This should be

an intermediate step, intended to increase Hispanic enrollments and serve more at-risk children until the larger goal of universal access is attained.

Rich language environments: UPK environments of young Hispanic children should be rich in language. Richness is defined through frequency and quality. In terms of frequency, research on cognitive development, language, and early experiences shows that the amount of talk and conversational exchanges between adults and young children are strongly associated with school readiness and academic success in formal schooling. Teachers, aides, and other school personnel should engage young Hispanic students in casual talk as much as possible and, where feasible, encourage parents to do the same. Quality refers to language systems and culture. Young Hispanics should be exposed to English and Spanish in the classroom and provided with many opportunities to speak and express themselves in either language—allowing for linguistic exploration and mixtures. For young children managing more than one language, academic skills are much more likely to develop and therefore transfer between languages when environments allow access to knowledge through all language systems, in culturally relevant ways (August and Shanahan 2006). Otherwise, cognitive development is stifled.

Rich language environments that integrate Spanish and English on an ongoing basis will also facilitate important parent/school associations. Spanish-speaking parents are more likely to involve themselves in schools and classrooms in which Spanish is used on a regular basis.

Dual-language programs: Young Hispanic children should have access to high-quality dual-language programs (i.e., two-way immersion), which teach English and Spanish language skills through content. Integrating native English and Spanish speakers in the same classroom, thereby fostering linguistic and ethnic equity among students, dual-language programs have been shown to support literacy development in English for Hispanic students without compromising Spanish skills. Moreover, research shows that academic achievement levels of young Spanish-speaking Hispanics as well as their native English-speaking peers enrolled in dual-language programs are equivalent or, in many cases, superior to outcomes of students in mainstream classrooms.

Dual-language programs should be strategically structured to promote and sustain the development of students enrolled. Researchers at the Center for Applied Linguistics (CAL 2005) have provided a set of principles to help school personnel establish and maintain high-quality programs. These principles suggest that the program: (1) create and maintain an infrastructure that supports an accountability process, (2) use a curriculum that promotes and maintains the development of bilingual, biliterate, and multicultural competencies for all students, (3) use student-centered instructional strategies derived from research-based principles of dual-language education, (4) recruit and retain high-quality dual-language staff, (5) have knowledgeable leadership who promote equity among groups and support the goals of additive bilingualism, biliteracy, and cross-cultural competence, (6) have a responsive infrastructure for positive, ongoing relations with students' families and the community, and (7) be adequately funded and supported by school staff, families, and the community.

High-quality teachers: The provision of rich language environments and high-quality UPK programs necessitates high-quality teachers. This means teachers are bilingual and knowledgeable regarding the cultural and linguistic circumstances of Hispanic families, particularly the educational strengths and needs of their children. Indeed, research shows that the transfer of academic skills between languages is heightened and early achievement outcomes increased for young bilingual and emergent bilingual students when teachers use Spanish (in addition to English) in classroom instruction. The most successful teachers are fluent in both languages, understand learning patterns associated with second-language acquisition, have a mastery of appropriate instructional strategies (i.e., cooperative learning, sheltered instruction, differentiated instruction, and strategic teaching), and have strong organizational and communication skills. These skills will allow teachers to interact with Hispanic parents appropriately in order to encourage them to engage in literacy activities with their children at home. Such interactions will help teachers find out as much detail as possible about the linguistics backgrounds of their students, and develop creative and accurate assessments of each child's linguistic ability and development.

The optimal situation is for lead teachers and school staff, in general, to be proficient in both languages and familiar with students' cultures. However, when this is not possible, it is recommended that a language specialist be provided. Language specialists are bilingual professionals who serve as consultants to teachers and aides in the classroom to help ELL Hispanic students learn and achieve, recognizing and leveraging existent strengths. Having a language specialist in the classroom will also help monolingual teachers make essential links with Spanish-speaking parents.

Conclusion

Success of the abovementioned recommendations is contingent upon the development of educational policies that target the needs of young Hispanic children. Specific policies at all levels of government should strive to provide rich language environments and high-quality dual-language and prekindergarten programs, and to support efforts to recruit and prepare highly qualified teachers. In addition, it is recommended that educational policies support the expansion of state-funded prekindergarten, increase Hispanic enrollments in these programs, develop parent outreach initiatives, and improve assessment procedures and accountability measures.

Regarding teacher quality, it is recommended that state governments fund programs to increase the number of prekindergarten teachers in their states who are proficient in Spanish, and that the federal government develop strategic programs designed to this end. Teachers should receive training in second-language acquisition and how content learning intersects with the process of managing two language systems. States may consider aggressively recruiting teachers within Hispanic communities as a way to increase the body of linguistically and culturally competent teachers. Colleges and universities should be engaged as partners to ensure that bilingual teachers are recruited to the field of early education and that teachers receive appropriate training.

State governments should continue to expand their state-funded prekindergarten initiatives with the objective of creating voluntary UPK systems within the next ten to twenty years. For Hispanic children, expansion should be accompanied with curriculum development and instructional approaches that integrate both Spanish and English. In addition, educational policy should seek to increase enrollment rates of Hispanics in these programs—to fund extensive local efforts to provide information to Hispanic parents on the availability of prekindergarten programs in their communities.

Educational policies should allot local education agencies with the necessary supports to develop dual-language programs. These programs should be developed based on empirical evidence and strategies shown to be successful (CAL 2005). Such programs should constantly be assessed and, where and when necessary, modified to optimize learning, language development, and general academic performance of Hispanic children.

Finally, actions should be taken to improve assessment practices geared at evaluating the academic progress of young Hispanic students. Accountability is an important way of measuring progress and evaluating program effectiveness. The fundamental purpose of assessment tools and procedures should be to improve learning outcomes and service provision for these children. In order to accurately determine language and cognitive competency of young Hispanic students, appropriate tests and testing procedures are necessary.

Many of these specific reform initiatives have been aimed at linguistically and culturally diverse students for several decades. These have generated some movement at the policy, practice, and achievement levels. However, reform, as it has been implemented to date, has not produced the robust changes in early educational performance that are needed. These reforms have ignored what counts for the academic success of young Hispanic students. New educational practices that have the following characteristics are beginning to demonstrate significant promise for young Hispanic students:

- Strategies that begin with the linguistic and cultural attributes of the students and build from there; they respect and engage previous knowledge bases regarding the student and cultural conceptualizations of academic content areas
- Strategies that are directly responsive to the utilization of the linguistic background of the student that bridges to high levels of vocabulary, concept, and repertoires in English
- Strategies that asses in various ways development and learning, and which are utilized for changes in instructional architectures and delivery
- Strategies that utilize multiple resources—human, fiscal, physical, temporal, and technological—to address instruction
- Strategies that invest in early development of linguistic and cognitive development, building on the child's existing competencies

Thinking differently about these students involves viewing them and our education system in new ways that may contradict conventional notions. This change in thinking allows us to come to a new set of realizations about the value and importance of schooling experiences and is leading us toward the direction of innovation in education versus reform.

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