KEY DEMOGRAPHICS & PRACTICE RECOMMENDATIONS FOR YOUNG ENGLISH LEARNERS

TASK 5.3.1: SHORT TURNAROUND REPORT
SUBMITTED: JANUARY 28, 2011

NCELA
National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs

Demographics: Who are young English learners?

How many young ELs are there?

There are no precise estimates of the size of this population; however, the number and proportion of young ELs is clearly rising.

Preschoolers: 3- and 4-year olds

Estimates of school-aged English learners are derived from national counts of children enrolled in school. There is no precise analogue for preschool children, and hence there is no exact nationwide count of this population of children. The number of 3- and 4-year old children enrolled in center-based care is rising, and some center-based programs do track participants by home language status.

Type	Description	Demographic data on young ELs
Head Start & Early Head Start	Federally funded early childhood care and education provider	315,987 children, approximately 30% of participants are young ELs. (Office of Head Start, n.d.)
State funded preschool	Early childhood care and education funded by state governments	Of 38 states with state-funded preK, 24 disaggregate preK data for young ELs. (Barnett et al., 2009; Epstein, 2010)
District funded preschool	Early childhood care and education funded by districts	OCR estimates 117,059, or 11.4% of children served, are young ELs. (U.S. Department of Education, Office for Civil Rights, n.d.)
Proprietary care centers	Early childhood care and education in a for-profit setting	Data are not collected systematically
Children cared for and educated exclusively in the home	Child not in center-based care	Data are not collected systematically

Sources of information

Office of Head Start (n.d.) *Primary Language-by Head Start Region: Number of Children and Percentages*. Table excerpted from the 2009 Head Start Program Information Report. Retrieved August 25, 2010 from http://eclkc.ohs.acf.hhs.gov/hslc/Dual%20Language%20Learners/DLL_%20Resources/Primary%20Language_33110.pdf
Provides numbers and proportions of young ELs in Head Start and Early Head Start, by region. Breaks down young ELs by Spanish and "other" language backgrounds.

U.S. Department of Education, Office for Civil Rights. (n.d.). *2006 Civil Rights Data Collection: Projected Values for the Nation*. Washington, DC: Author. Available from http://ocrdata.ed.gov/Projections_2006.aspx
USDE OCR estimates of numbers of children in specific categories of concern to OCR, by ethnicity, EL status and disability status.

Barnett, W.S., Epstein, D.J., Friedman, A.H., Sansanelli, R.A., & Hustedt, J.T. (2009). *The State of Preschool 2009: State Preschool Yearbook*. New Brunswick, NJ: The National Institute for Early Education Research. Retrieved August 27, 2010 from http://nieer.org/yearbook/.
An annual snapshot of key indicators of preschool, the Yearbook contains state-by-state profiles of the preschool population.

Epstein, D.J. (2010). *Does State Pre-K Effectively Serve English Language Learners*? Preschool Matters Today! National Institute for Early Education Research. http://preschoolmatters.org/2010/06/04/does-state-pre-k-effectively-serve-english-language-learners/
Summarizes *The State of Preschool 2009* findings on numbers of young ELs in state-funded preschool.

School-aged young ELs: K–2

- CSPR question 1.6.3.4.4 asks states to report the numbers of LEP students in non-AYP grades; subpart 1 asks for the number of LEP students in K–2. This question was last asked in 2006–07. It was not asked for 2007–08 or 2008–09.
- For school year 2006–07, states reported 1,947,401 English learners in grades K–2.

Extrapolated Characteristics of the young EL population

Although there are no systematic nationwide counts of the young EL population, extrapolating from (i) the Head Start population, (ii) young children in immigrant families, and (iii) young children in Hispanic families can provide an estimation of current trends.

The number of young ELs is increasing

- In 2001, 25% of Head Start participants were ELs; in 2009, the proportion was 30%.
- The population of young children in immigrant families is growing. In 1990, 4.3 million children had one immigrant parent. In 2008, 8.7 million children had one immigrant parent.

Sources of information

Fortuny, K., Hernandez, D.J., & Chaudry, A. (2010). *Young Children of Immigrants: The Leading Edge of America's Future*. Brief No. 3. Washington, DC: The Urban Institute. http://www.urban.org/UploadedPDF/412203-young-children.pdf
Data profile of young children in immigrant families, including demographics, origins, rates of preschool attendance, EL status, and family statistics.

Hernandez, D.J., Denton, N.A., & Macartney, S.E. (2007). *Children in immigrant families: The U.S. and 50 states: National origins, language, and early education* (Publication No. 2007-11). Washington, DC: Child Trends.
An analysis of the proportion, dispersion, national origins, language, and early education of children in the United States with at least one foreign-born parent, based on Census 2000 data.

Young ELs are more likely than other children to be living in poverty

- In 2008, 44% of children lived in families where the family income was less than twice the federal poverty level.
- For Hispanic children, this figure was 62%.
- For children in immigrant families, this figure was 62%

Source of information

Wight, V.R. & Chau, M. (2009.) *Basic facts about low-income children, 2008: Children under age 3*. Columbia University, NY: National Center for Children in Poverty. Retrieved September 22, 2010, from http://www.nccp.org/publications/pdf/text_894.pdf.

Young ELs are less likely than other children to be in high-quality preschools

- Of all children under the age of six years old, almost 30% are enrolled in center-based care; for Hispanic children, the figure drops to 22%. This figure is lower than for any other ethnic group.

- In households where both parents speak English, 37% of children birth—6 are cared for exclusively in the home by a parent. If one of two parents speak English, the proportion is 63%, and if no parent speaks English, the proportion is 58%.

Sources of information

Magnuson, K.A. & Waldfogel, J. (2005). Early childhood care and education: Effects on ethnic and racial gaps in school readiness. *Future of Children, 15*(1), 169-96.
Analysis of data from the Census Bureau's Survey of Income and Program Participation (SIPP).

Iruka, I.U. & Carver, P.R. (2006). *Initial Results from the 2005 NHES Early Childhood Program Participation Survey* (NCES 2006-075). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
Analysis of data from the National Household Education Surveys (NHES) on settings of early childhood care & education.

Young ELs face obstacles in accessing preschool, but stand to gain greatly from attendance

- There is a wealth of research showing that attendance in high-quality preschool has lasting effects into K–12 schooling and the adult years, including increasing future earnings of participants and decreasing costs associated with abuse and neglect, crime, welfare, and healthcare.
- Participation in high-quality preschool reduces the achievement gap in later school years—and **attendance in high-quality preschool has a greater effect on reducing the achievement gap for Hispanic students than for any other ethnic group**.
- Although Hispanic children are less likely than other children to attend high-quality preschool, the research indicates that this may be because parents are not aware of high-quality free programs in their communities.

Sources of information

Barnett, W.S. & Yarosz, D.J. (2007). *Who goes to preschool and why does it matter? Preschool Policy Brief*. Rutgers, NJ: National Institute for Early Education Research.

Gormley, W.T. & Gayer, T. (2004). Promoting school readiness in Oklahoma: An evaluation of Tulsa's pre-K program. *Journal of Human Resources, 15*(3), 533-58.

Laosa, L.M. & Ainsworth, P. (2007). Is public pre-K preparing Hispanic children to succeed in school? *National Institute for Early Education Research Policy Brief, 13*.

Pérez, P. & Zarate, M.E. (2006). *Latino public opinion survey of pre-kindergarten programs: Knowledge, preferences, and public support*. Los Angeles: Tómas Rivera Public Policy Institute, University of Southern California.

Matthews, H. & Ewan, D. (2006) *Reaching all children? Understanding early care and education participation among immigrant families*. Washington, DC: Center for Law and Social Policy.
http://www.clasp.org/admin/site/publications/files/0267.pdf
Outlines four potential factors why children from immigrant families are less likely to use center-based care.

Practice Recommendations

The practice recommendations below represent some, but not all, of the strategies and practices supported by researchers and practitioners—this is not an exhaustive list but rather a guide to common themes in the literature.

Practice Recommendation: Understand the Communities and Cultures of Young Children

Almost one-third of children in Head Start are ELs. In recent years, Head Start has produced a number of practical materials to support practitioners in community outreach efforts, including those listed below.

Office of Head Start (2009a) *Revisiting and Updating the Multicultural Principles for Head Start Programs Serving Children Ages Birth to Five. Addressing Culture and Home Languages in Head Start Program Systems & Services*. Washington DC: Author. http://eclkc.ohs.acf.hhs.gov/hslc/resources/ECLKC_Bookstore/PDFs/Revisiting%20Multicultural%20Principles%20for%20Head%20Start_English.pdf
Ten principles for practice in multicultural Head Start settings are updated with a brief research review, examples of policies and/or practices from Head Start programs, and reflective questions and activities. This resource provides useful information and guidance to all Head Start, Early Head Start, American Indian/ Alaska Native, and Migrant and Seasonal programs as they respond to changing demographics and as they improve their service delivery.

Office of Head Start (2009b) *Program preparedness checklist: Serving dual language learners and their families*. Washington DC: Author. http://eclkc.ohs.acf.hhs.gov/hslc/Dual%20Language%20Learners/DLL_%20Resources/ProgramPreparednessChecklistVersion3.1.pdf
Checklist for Head Start programs to increase their ability to provide appropriate services to multicultural families. The checklist is organized into broad indicators: Program Governance; Planning; Communication; Human Resources; Self-Assessment; Environments; Teacher/Child Interactions; Curriculum; Disabilities; Assessment; Health and Nutrition; Family Partnerships; and Community Partnerships.

Office of Head Start (2007) Five steps to community assessment: A workbook for Head Start and Early Head Start programs serving Hispanic and other emerging populations. Washington DC: Author. http://eclkc.ohs.acf.hhs.gov/hslc/Program%20Design%20and%20Management/Management%20and%20Administration/Community%20Assessment/Community%20Assessment%20Process/CA%20Workbook_v1_final%20PDF.pdf
A “how to” workbook on conducting a community assessment, “The Community Assessment (CA) is the collection and analysis of information on the needs and characteristics of Head Start and Early Head Start eligible children and families in the grantee service area. It identifies program and community resources available to meet their needs and specifies where there are gaps.” Head Start and Early Head Start programs are periodically required to collect demographic and other information about their service community and to respond to emerging needs. This document provides a step-by-step process for meeting this requirement.

Practice Recommendation: Support the Home Language (to Encourage Literacy)

Home language support, biliteracy, and English language literacy are interwoven themes throughout the young EL research base.

- Educators should understand that young children can and will learn a second language in a supportive social setting and that they do not have to give up their first language in order to learn a second language.

- Literacy practices in the home correlate with later reading ability. This is true even when the language of reading at home differs from the language of reading at school.
- Preliteracy skills are transferrable from language to language.
- The most comprehensive exploration of preliteracy skills transfer is in the domain of phonological awareness (perhaps because this domain readily lends itself to measurement). Children who have learned to "sound out" words in their home language quickly transfer this skill to their second language.

Sources of information

Tabors, P. (1997). *One child, two languages: A guide for preschool educators of children learning English as a second language*. Baltimore, MD: Paul H. Brookes.
Stresses the importance of support for the home language and ensuring that all educators have an understanding of bilingualism and biliteracy.

Reese, L., Garnier, H., Gallimore, R. & Goldenberg, C. (2000). Longitudinal analysis of the antecedents of emergent Spanish literacy and middle-school English reading achievement of Spanish-speaking students. *American Educational Research Journal, 37*(3), 633-62.
Longitudinal study assessing the predictive effects of selected characteristics of Spanish-speaking kindergarteners on later English reading ability. Characteristics considered included family literacy practices, parental education, SES, and prekindergarten attendance. Key findings: "time spent on literacy activity in the native language ... is not time lost with respect to English reading acquisition." "Emergent Spanish literacy at the beginning of kindergarten is a significant predictor of English reading ability eight years later."

Durgunoglu, A., Nagy, W., & Hancin-Bhatt, B. (1993). Cross-language transfer of phonological awareness. *Journal of Educational Psychology, 85*(3), 453-65.

Terrasi, S. (2000). *Phonemic awareness skills in kindergarten students from English and non-English speaking homes*. (ERIC Document Reproduction Services No. ED 441 220).

Roberts, T. & Corbett, C. (1997). *Efficacy of explicit English instruction in phonemic awareness and the alphabetic principle for English learners and English proficient kindergarten children in relationship to oral language proficiency, primary language, and verbal memory*. (ERIC Document Reproduction Services No. ED 417 403).
Three studies each of which demonstrates that phonological awareness can "transfer" from one language to another.

Practice Recommendation: Foster Social and Emotional Development

Children from minority language backgrounds who enter classrooms where the majority of other children and educational personnel speak the majority language often encounter reduced opportunities for social interaction.

Sources of information

Tabors, P. (1997). *One child, two languages: A guide for preschool educators of children learning English as a second language*. Baltimore, MD: Paul H. Brookes.
Early chapter includes vignettes drawn from the author's experience of observing young EL children encountering obstacles to socializing with English-only children.

Chang, F., Crawford, G., Early, D., Bryant, D., Howes, C., Burchinal, M., Barbarin, O., Clifford, R., & Pianta, R. (2007). Spanish speaking children's social and language development in pre-kindergarten classrooms. *Journal of Early Education and Development*, *18*(2), 243-269.
Participant observation study which recorded children's and teachers' language use in classrooms. Stresses the importance of the teacher or authority figure assigning more or less value to children's home languages. Findings include that for Spanish-speaking children, the

amount of Spanish used by the teacher in the classroom correlates with a reduced experience of bullying.

Santos, R.M. & Ostrosky, M.M. (n.d.*). Understanding the Impact of Language Differences on Classroom Behavior*. What Works Brief #2. Vanderbilt University: Center on the Social and Emotional Foundations for Early Learning. http://csefel.vanderbilt.edu/briefs/wwb2.pdf
Guide for classroom educators on typical behavioral patterns of young English learners, with suggestions on how teachers can foster the social engagement of language minority students and support home languages.

Practice Recommendation: Assess with Caution

Assessment of young children can be problematic, and researchers recommend that younger children be assessed using a combination of measures across several occasions to gain a nuanced picture of the child. Annual high-stakes assessments are generally not viewed as appropriate for preschool-aged children, whose performance tends to be highly variable.

In addition to these concerns which apply to all children, researchers recommend that

- The screener or assessment in use should be the right measure for the intended purpose.
- Assessors should have an understanding of second language acquisition and the cultural backgrounds of the children being assessed.
- Assessment, whenever practicable, should include assessment in the home language.
- Parents and family should be included in the assessment process.
- Classroom assessment should be frequent and ongoing to build as accurate as possible a picture of the child's abilities.
- Assessment information should be frequently shared and reviewed by center personnel and instructional activities should be adjusted.
- Vocabulary testing should take into account the fact that children are building vocabulary across two languages and should not be compared to monolingual norms.

Sources of information

Epstein, A.S., Schweinhart, L.J., DeBruin-Parecki, A., & Robin, K.B. (2004). *Preschool assessment: A guide to developing a balanced approach*. New Brunswick, NJ: National Institute for Early Education Research. http://nieer.org/resources/policybriefs/7.pdf

Espinosa, L. (2010). *Getting it right for young children from diverse backgrounds: Applying research to improve practice*. Boston, MA: Pearson Learning Solutions and the National Association for the Education of Young Children.

Espinosa, L.M. (2005). Curriculum and assessment considerations for young children from culturally, linguistically, and economically diverse backgrounds *Psychology in the Schools, 42*(8), 837-853.
A review of research on effective teaching and assessment practices for young children from diverse backgrounds, including recommendations for school personnel in managing cultural and linguistic discrepancies between students and teachers.

Espinosa, L.M. & Lopez, M. (2007). *Assessment considerations for young English language learners across different levels of accountability*. Philadelphia, PA: National Early Childhood Accountability Task Force
A discussion of considerations and recommendations for assessing young English language learners in programs with different levels of accountability and an overview of current assessment measurements and strategies for English language learners.

National Association for the Education of Young Children (NAEYC). (2009). *Where we stand: On assessing young English language learners*. Washington DC: Author.
http://www.naeyc.org/files/naeyc/file/positions/WWSEnglishLanguageLearnersWeb.pdf

The Bilingual Brain: Research

Recent research in cognitive science and neuroscience has focused on some of the cognitive advantages of bilingualism.

- Bilingual children who were exposed to their two languages early in life (in the age window 0-3) often have a reading advantage over monolinguals; further this "may afford such a powerful positive impact on reading and language development that it may possibly ameliorate the negative effect of low SES on literacy" (Kovelman, Baker & Petitto, 2008).
- Bilinguals on average have higher metalinguistic awareness than monolinguals, perform better than monolinguals on some aspects of literacy, and are often better second language learners at a later age.
- Bilinguals' ability to selectively attend to relevant information, inhibit distraction, and shift between tasks (executive control system) is generally better than in monolinguals.
- Additionally, bilingualism may provide a defense against the decline of general processing functions in older adults.

Sources of information

Bialystok, E. (2010a). Bilingualism. *WIREs Cognitive Science, 1*, 559–572
http://onlinelibrary.wiley.com/doi/10.1002/wcs.43/pdf
The paper discusses how cognitive and linguistic processes involved in the acquisition and use of two languages are systematically different from those processes engaged in monolingual language use, leading to detectable changes in language and cognitive outcomes for bilinguals. While measures of linguistic proficiency and processing are often poorer in bilinguals than in monolinguals (bilingual children have a smaller vocabulary in each language than comparable monolingual children in that language and bilingual adults take longer to retrieve specific words than monolinguals), measures of nonverbal executive control, including the ability to selectively attend to relevant information, inhibit distraction, and shift between tasks, is generally better in bilinguals than in monolinguals. Furthermore, their understanding of linguistic structure, called metalinguistic awareness, is at least as good as, and often better than, that of comparable monolinguals. The paper underscores the enduring benefits that experience of learning and using two languages has for the most fundamental aspects of cognitive and linguistic processing.

Bialystok, E. (2010b) Global-local and trail-making tasks by monolingual and bilingual children: beyond inhibition. *Developmental Psychology*, 46, 93–105.
In 3 experiments, a total of 151 monolingual and bilingual 6-year-old children, who spoke different non-English languages, performed similarly on measures of language and cognitive ability; however, the bilinguals solved the global-local and trail-making tasks more rapidly than monolinguals. The study extends previously reported advantages in performance by bilinguals to two new tasks and demonstrates a bilingual advantage in processing complex stimuli in tasks that require executive processing components for conflict resolution, including switching and updating, even when no inhibition appears to be involved.

Bialystok, E. (2008). Second-language acquisition and bilingualism at an early age and the impact on early cognitive development. Rev ed. In: Tremblay, R.E., Barr, R.G., & Peters, R.DeV., eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development, 1-4. Available at:
http://www.child-encyclopedia.com/documents/BialystokANGxp_rev.pdf

The paper discusses studies of bilingual children, the results of which demonstrate that childhood bilingualism is a significant experience that has the power to influence the course and efficiency of children's development. The most surprising finding is that these influences are not confined to the linguistic domain, but extend as well to non-verbal cognitive abilities. In most cases, the child's degree of involvement with a second language, defined as the difference between bilingualism and second-language acquisition, is an important variable that determines both the degree and type of influence that is found. Three patterns of influence were noted in these studies. One outcome is that bilingualism makes no difference, and monolingual and bilingual children develop in the same way and at the same rate. This was found for cognitive problems such as memory-span development and language problems such as phonological awareness. The second is that bilingualism disadvantages children in some way. The primary example of this is in the development of vocabulary in each language. The third pattern, and the most prevalent in the studies, is that bilingualism is a positive force that enhances children's cognitive and linguistic development, improving access to literacy if the two writing systems correspond and development of general executive processes for all bilingual children solving a wide range of non-verbal problems requiring attention and control. These executive control abilities are at the centre of intelligent thought.

Carlson, S. M. & Meltzoff, A. N. (2008). Bilingual experience and executive functioning in young children. *Developmental Science, 11*(2), 282–298
http://ilabs.washington.edu/meltzoff/pdf/08Carlson_Meltzoff_Bilingualism.pdf
The study examined inhibitory control skills in native bilinguals (Spanish-English), monolinguals (English), and English speakers enrolled in second-language immersion kindergarten using multiple measures of executive function. Despite having significantly lower verbal scores and parent education/income level, Spanish-English bilingual children's raw scores did not differ from their peers. After statistically controlling for these factors and age, native bilingual children performed significantly better on the executive function battery than both other groups. Importantly, the relative advantage was significant for tasks that appear to call for managing conflicting attentional demands.

Kovelman, I., Baker, S.A. & Petitto, L.-A. (2008). Age of first bilingual language exposure as a new window into bilingual reading development. *Bilingualism: Language and Cognition 11* (2), 203–223
http://www.utsc.utoronto.ca/~petitto/img_upload/posters-for-media/005-BLC2008.pdf
The paper addresses the issues of whether age of first bilingual language exposure affects reading development in children learning to read in both of their languages and whether there is a reading advantage for monolingual English children who are educated in bilingual schools. An early age of first bilingual language exposure had a positive effect on reading, phonological awareness, and language competence in both languages: early bilinguals (age of first exposure 0–3 years) outperformed other bilingual groups (age of first exposure 3–6 years). Remarkably, schooling in two languages afforded children from monolingual English homes an advantage in phoneme awareness skills. Early bilingual exposure is best for dual language reading development, and it may afford such a powerful positive impact on reading and language development that it may possibly ameliorate the negative effect of low SES on literacy. Further, age of first bilingual exposure is identified as a new tool for evaluating whether a young bilingual has a reading problem versus whether he or she is a typically-developing dual language learner.

Petitto, L.-A. (2009). *New Discoveries from the Bilingual Brain and Mind Across the Life Span: Implications for Education. Mind, Brain, and Education, 3*(4).
http://www.utsc.utoronto.ca/~petitto/img_upload/posters-for-media/001-IMBES-2009.pdf
The paper discusses how the typical maturational timing milestones in bilingual language acquisition provide educators with a tool for differentiating a bilingual child experiencing language and reading delay versus deviance. Further, early schooling in two languages simultaneously affords young bilingual children a reading advantage and may also ameliorate the negative effect of low socioeconomic status on literacy. Using powerful brain imaging technology (functional Near Infrared Spectroscopy), it is shown that the age of first bilingual exposure is a vital predictor of bilingual language and reading mastery. The findings do not

support accounts that promote later dual language and reading instruction, or those that assert that human brain development is unrelated to bilingual language mastery.

Kovelman, I., Shalinsky, M.H., White, K., Schmitt, S.N., Berens, M.S., Paymer, N., & Petitto, L.-A. (2009). Dual language use in sign-speech bimodal bilinguals: fNIRS brain-imaging evidence. *Brain & Language*, 109, 112–123 http://www.utsc.utoronto.ca/~petitto/img_upload/posters-for-media/003-B&L2009.pdf
The paper addresses the involvement of language-specific versus cognitive-general brain mechanisms for bilingual language processing and examines bimodal bilinguals proficient in signed and spoken languages, using an innovative brain-imaging technology, functional Near-Infrared Spectroscopy. Bilinguals showed highly accurate performance when speaking or signing in one language at a time (Monolingual mode), or when using both of their languages in rapid alternation or simultaneously (Bilingual mode). Neuro-imaging results revealed that bilinguals in Bilingual mode showed greater signal intensity within posterior temporal regions (''Wernicke's area") than in Monolingual mode. The findings demonstrate that bilinguals' ability to use two languages effortlessly and without confusion and offer novel insights into the nature of human language ability, especially pertaining to the neural mechanisms that underlie bilingual language use.

Kovelman, I., Baker, S.A., & Petitto, L.-A. (2008). Bilingual and Monolingual Brains Compared: A Functional Magnetic Resonance Imaging Investigation of Syntactic Processing and a Possible ''Neural Signature'' of Bilingualism. *Journal of Cognitive Neuroscience 20*(1), pp. 153–169 http://www.utsc.utoronto.ca/~petitto/img_upload/posters-for-media/006-JCN2008.pdf
The paper compares how bilinguals and monolinguals recruit classic language brain areas in response to a language task and examines whether there is a ''neural signature'' of bilingualism. Results show that behaviorally, in English, bilinguals and monolinguals had the same speed and accuracy, yet, as predicted from the Spanish–English structural differences, bilinguals had a different pattern of performance in Spanish. Analyses revealed that both monolinguals (in one language) and bilinguals (in each language) showed predicted increases in activation in classic language areas (e.g., left inferior frontal cortex, LIFC), with any neural differences between the bilingual's two languages being principled and predictable based on the morphosyntactic differences between Spanish and English. However, an important difference was that bilinguals had a significantly greater increase in the blood oxygenation level-dependent signal in the LIFC (BA 45) when processing English than the English monolinguals. The results provide insight into the decades-old question about the degree of separation of bilinguals' dual language representation. The differential activation for bilinguals and monolinguals opens the question as to whether there may possibly be a ''neural signature'' of bilingualism. Differential activation may further provide a fascinating window into the language processing potential not recruited in monolingual brains and reveal the biological extent of the neural architecture underlying all human language.

A note on terminology

Among educators of EL students, a number of terms are in common currency, dependent both on regional norms and on the specific needs and practices of the individual. Nationwide the terms *English learner* (EL) and *English language learner* (ELL) are widely understood. Federal personnel use *limited English proficient* (LEP) when speaking of statutory language or federal data collections. Other terms in use include *culturally and linguistically diverse* (CLD) and *linguistically and culturally diverse* (LCD) student.

Early childhood educators and researchers are increasingly using the term ***dual language learner*** or DLL to refer to young ELs. The Office of Head Start defines the term DLL:

> Children who are Dual Language Learners acquire two or more languages simultaneously, as well as learn a second language while continuing to develop their first language. The term "dual language

> learners" encompasses other terms frequently used, such as Limited English Proficient (LEP), bilingual, English language learners (ELL), English learners, and children who speak a language other than English (LOTE).
> OHS Definition of Dual Language Learners (http://eclkc.ohs.acf.hhs.gov/hslc/Dual%20Language%20Learners/DLL_%20Resources/OHS Definitionof.htm)

Head Start's use of this term reflects:

- the "strength-based, family focused" perspective of Head Start,
- a recognition that the home language (as well as its connection to culture) is a protective factor for the well-being of young children,
- an understanding that first language acquisition proceeds throughout the early childhood years and that this process must be supported,
- an attitude that communication within the family is central to family-child relationships and in turn linked to the development and learning of young children,
- the increased use of the term in research, and
- consultation with the field. [1]

A key insight which motivates the use of the term DLL is that **all** young children are in the process of acquiring at least one language. Although linguists typically have not investigated when first language acquisition processes end, there is ample evidence that first language acquisition continues throughout the elementary school years and even into high school (e.g. Nippold, 1998). For young ELs, English is not the only language that they are learning.

This is true of both young children viewed as simultaneous bilinguals (often understood to mean those who acquire a second language before age 3) and those categorized as sequential bilinguals (acquiring the second language after age 3).

Dual language learner is then a *child-centered* term which seeks to recognize the totality of young children's early language learning experiences, rather than focusing merely on instructional input in a formal school setting.

The term aims to be broad enough to capture the diversity of experiences and backgrounds of young ELs. These children may arrive at preschool or school with strong skills in their home language but little experience with English, or they may have practice in using both languages before they come into a formal early care or schooling environment. They may be educated in programs where they have peers who speak their home language, or they may be the only child from a particular cultural background in their classroom. Similarly, they may find cultural similarities or differences from the adults in their programs. Finally, they may be educated in programs where bilingualism and biliteracy are a central educational goal, or alternately their educational program focus only English language acquisition and literacy.

Nippold, M. A. (1998). *Later language development: The school-age and adolescent years*. Austin, TX: Pro-Ed.

[1] Many thanks to Sharon Yandian, Early Language Specialist, Educational Development and Partnership Division, Office of Head Start, for her reflections on the evolution of this term within OHS.

Research in Progress: Head Start University Partnerships-English Language Learners

These Head Start-funded projects bring researchers into Head Start and Early Head Start classrooms, and are funded from 2007-2010—hence research results from this work is imminent, if not already published. The projects address interventions, assessments, and expansion of the knowledge base regarding culture and school readiness of English Language Learners. A list of projects follows, with publications where relevant.

Arizona State University-Speech and Hearing Science: Teaching Emergent Literacy and Language Around the Classroom: The TELLAC Model

Arizona State University-School of Social and Family Dynamics: Bilingualism and School Readiness: The Relations of Language Development to Academic Skills, and Social Competence in Spanish-Speaking Head Start Students

Harvard University Graduate School of Education: Validating Measures for Tracking Vocabulary Development of English Language Learners

Banu Vagh, S., Alexander Pan, B., & Mancilla-Martinez, J. (2009). Measuring Growth in Bilingual and Monolingual Children's English Productive Vocabulary Development: The Utility of Combining Parent and Teacher Report. *Child Development*, 80(5), 1545–1563 http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01350.x/pdf
Assesses English productive vocabulary differences between bilingual and monolingual children, and between English-dominant and Spanish-dominant bilingual children.

New York University: Developing a Parent-Derived Measure of Latino Family Involvement: A Mixed-Methods Approach with English-Learning Children and Their Families

Temple University: Promoting the Emergent Literacy Development of English Language Learners: A Culturally Informed Approach

Hammer, C.S., Jia, G., & Uchikoshi, Y. (in press). Language and Literacy Development of Dual Language Learners Growing Up in the United States: A Call for Research. Child Development Perspectives.

Hammer, C.S., Farkas, G., & Maczuga, S. (2010). The language and literacy development of Head Start children: A study using the Family and Child Experiences Survey Database. *Language, Speech and Hearing Services in Schools, 41,* 70-83.

Hammer, C.S., Davison, M.D., Lawrence, F.R., & Miccio, A.W. (2009). The effect of maternal language on bilingual children's vocabulary and emergent literacy development during Head Start and kindergarten. *Scientific Studies of Reading - Special Issue, 13* (2), 99-121.

San Diego State University Research Foundation: Vocabulary, Oral Language, and Academic Readiness (VOLAR): A Language Intervention for Latino Preschool English Language Learners and Head Start Partnership

Gutiérrez-Clellen, V.F. & Simon-Cereijido, G. (2010). Using Nonword Repetition Tasks for the Identification of Language Impairment in Spanish-English-Speaking Children: Does the Language of Assessment Matter? *Learning Disabilities Research & Practice*. 25(1): 48-58.
Study examines whether the language of assessment is a key variable in providing accurate results for a specific measure of language impairment. The findings do not support a monolingual approach to the assessment of bilingual children with nonword repetition tasks, even if children appear fluent speakers in the language of testing.

Gutiérrez-Clellen, V.F. & Simon-Cereijido, G. (2009). Using language sampling in clinical assessments with bilingual children: Challenges and future directions. *Seminars in Speech and Language*. 30: 234-245.
Provides evidence for the utility of using language samples obtained in more than one language for the purpose of assessing potential disabilities in bilingual children.

University of North Carolina-Greensboro: Adaptation and Evaluation of a Parenting Intervention with Families of English Language

University of South Florida: Florida English Language Learners Attending Head Start (FELLA-HS): A Cultural and Academic Analysis

López, L.M. (2010). Assessing Dual Language Learners' School Readiness. *AccELLerate!* 3(1), 10-12. http://www.ncela.gwu.edu/files/uploads/17/Accellerate_3_1.pdf
Provides further evidence for using two languages in assessment.

Additional Resources

The resources below represent additional resources on the topic which have been identified but not reviewed by NCELA staff. These avenues can be pursued as directed.

Preschool education programs

Barnett, W.S., 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*(3), 277-293.
A comparison of the effects of dual language versus monolingual English immersion preschool education programs on children's learning, comparing data from 20 classrooms taught in both English and Spanish, and 16 classrooms taught only in English.

Durána, L.K., Cary J.R., & Hoffman, P. (2010). An experimental study comparing English-only and Transitional Bilingual Education on Spanish-speaking preschoolers' early literacy development. *Early Childhood Research Quarterly, 25*, 207–217.
A longitudinal, experimental–control design was used to test the hypothesis that native language instruction enhances English language learners' (ELLs') native language and literacy development without significant cost to English development. In this study, 31 Spanish-speaking preschoolers (aged 38–48 months) were randomly assigned to two Head Start classrooms differing only in the language of instruction (English and Spanish). Results showed that Spanish language instruction resulted in significantly higher growth on both Spanish oral vocabulary and letter–word identification measures. There were no significant differences between classrooms on these same measures in English. Results extend previous work by showing that Transitional Bilingual Education may be a viable alternative to traditional English-only models. Implications for theory, future research, and early childhood practice are discussed.

Home Language, Literacy & Biliteracy

Bernhard, J.K., Cummins, J., Campoy, F.I., Ada, A.F., Winsler, A., & Bleiker, C. (2006). Identity texts and literacy development among preschool English language learners: Enhancing learning opportunities for children at risk for learning disabilities. *Teachers College Record, 108*(11), 2380-2405.
A description and evaluation of the implementation of the Early Authors Program (EAP), an early language intervention designed to aid in the development of emergent literacy skills of bilingual preschool children at risk for learning disabilities.

Dickinson, D.K., McCabe, A., Clark-Chiarelli, N., & Wolf, A. (2004). Cross-language transfer of phonological awareness in low-income Spanish and English bilingual preschool children. *Applied Psycholinguistics, 25*(3), 323-347.
An examination of the pattern of phonological awareness development in preschool children from Spanish-speaking homes and an investigation of the extent to which phonological awareness development in one language is transferred to a second language and how it affects emergent literacy.

Espinosa, L.M. (2008). Early literacy for English language learners In Bruin-Parecki, A. (Ed). *Effective early literacy practice: Here's how, here's why,* pp. 71-86. Baltimore: Paul H. Brookes Pub. Co.; [Ypsilanti, Mich.]: High/Scope.
An overview of research on language and literacy development in young English language learners (ELLs), and a discussion of effective classroom strategies to nurture bilingualism in young children who speak languages other than English at home.

Hammer, C.S. (2006). Early language and reading development of bilingual preschoolers from low-income families. *Topics in Language Disorders, 26*(4), 322-337.
A review of studies discussing factors known to affect early language and emergent literacy skills and the effects of poverty and home literacy environments on bilingual preschool children's phonological awareness and letter knowledge.

Lesaux, N.K. & Siegel, L.S. (2003). The development of reading in children who speak English as a second language. *Developmental Psychology, 39*(6), 1005-1019.
A longitudinal study comparing the development of reading patterns in children who speak English as a second language to reading patterns in native English speaking children.

Manza, P.H., Hughesa, C., Barnabasa, E., Bracaliello, C., & Ginsburg-Block, M. (2010). A descriptive review and meta-analysis of family-based emergent literacy interventions: To what extent is the research applicable to low-income, ethnic-minority or linguistically-diverse young children? *Early Childhood Research Quarterly 25* , 409–431.
The comprehensive literature review involved both a descriptive review and a meta-analysis based on 31 selected published articles that investigate the acquisition of emergent literacy by young EL children between the ages of two to six years. The meta-analysis demonstrates significant limitations in the generalizability of this literature to these important groups of children. Future directions for advancing intervention development are presented.

Paez, M.M., Tabors, P.O., & Lopez, L.M. (2007). Dual language and literacy development of Spanish-speaking preschool children. *Journal of Applied Developmental Psychology, 28*(2), 85-102.
An examination of bilingual preschool children's oral language and emergent literacy skills as compared with the skills of a sample of monolingual, Spanish-speaking preschool children in Puerto Rico.

Proctor, C.P., Carlo, M., August, D., & Snow, C. (2005). Native Spanish-speaking children reading in English: Toward a model of comprehension. *Journal of Educational Psychology, 97*(2), 246-256.
A research-based structural equation model of second language (English) reading comprehension was applied to bilingual fourth-graders whose first language was Spanish.

Tabors, P.O. & Snow, C. (2001). Young bilingual children and early literacy development. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research,* Vol. 1, pp. 159-178. New York: Guilford.
A discussion of the early literacy development of bilingual children during three periods (ages 0 to 3, 3 to 5, and 5 to 8) in the United States.

Vaughn, S., Linan-Thompson, S., Pollard-Durodola, S.D., Mathes, P.G., & Hagan, E.C. (2006). Effective interventions for English language learners (Spanish-English) at risk for reading difficulties. In D. K. Dickinson & S. B. Neuman (Eds.), *Handbook of early literacy research,* Vol. 2, pp. 185-197. New York: Guilford.

An overview of studies on intervention strategies, conducted in English and Spanish, to improve English language literacy for bilingual kindergarten through third grade students at risk for reading difficulties.

Yesil-Dagli, U. (2011). Predicting ELL students' beginning first grade English oral reading fluency from initial kindergarten vocabulary, letter naming, and phonological awareness skills. *Early Childhood Research Quarterly*, *26*(1), 15-29.
The study investigated the precursors of early English reading success among ELLs using English letter naming fluency, initial sound fluency, and vocabulary skills at the time of kindergarten entry for first grade English oral reading fluency and examined the variability in language and literacy skills of ELL students by their demographic characteristics.

Promising educational practices

Buysse, V. & Aytch, L.S. (2007). *Early school success: Equity and access for diverse learners: Executive summary*. Chapel Hill, NC: FPG Child Development Institute.
A summary of papers presented at a symposium dedicated to effective and promising educational practices for diverse learners from prekindergarten to third grade.

Buysse, V., Castro, D.C., & Peisner-Feinberg, E. (2010). Effects of a professional development program on classroom practices and outcomes for Latino dual language learners. *Early Childhood Research Quarterly, 25*, 194–206.
A randomized, controlled study was conducted to assess the effects of the *Nuestros Niños* professional development program on classroom practices and child outcomes related to language development and early literacy skills in both English and Spanish. The results showed that the intervention led to measurable improvements in both the overall quality of teachers' language and literacy practices as well as those specific to working with Latino DLLs, and greater gains in children's phonological awareness skills in their primary language.

Espinosa, L.M. (2007). English-language learners as they enter school. In Pianta, R. C., Cox M. J., & Snow K. L. (Eds). *School readiness and the transition to kindergarten in the age of accountability*, pp. 175-195. Baltimore: Paul H. Brookes.
An overview of the developmental profiles of English language learners (ELLs) at kindergarten entry, and examples of successful preschool programs and instructional approaches linked with positive long-term educational outcomes for ELLs.

Dual language development

Espinosa, L.M. (2008). Challenging common myths about young English language learners. *FCD Policy Brief Advancing PK-3*, No. 8. New York: Foundation for Child Development.
A discussion of research findings that dispel common myths about dual language development and educational approaches to dual language learning for children ages three to eight.

Garcia, E.E. (2009). Early educational opportunities for children of Hispanic origins Social Policy Report, 23(2), 1-20. http://www.srcd.org/spr.html
A discussion, with commentaries, of the demographic characteristics of, unique linguistic profile of, and empirical evidence supporting certain interventions for three- to eight-year-old Hispanic children, with policy recommendations for improving educational opportunities for these children.

Tabors, P.O., Aceves, C., Bartolome, L., Paez, M.M., & Wolf, A. (2000). Language development of linguistically diverse children in Head Start classrooms: Three ethnographic portraits. *NHSA Dialog, 3*(3), 409-440.
An ethnographic inquiry into the acquisition of language skills by English-speaking, Spanish-speaking, and bilingual children, based on observations of children from three Head Start classrooms in the Boston metro-area, assessed using the revised Peabody Picture Vocabulary Test (PPVT-R)