Postsecondary Transition and English Learners with Disabilities: 
Data from the Second National Longitudinal Transition Study

WCER Working Paper No. 2014-4
August 2014

Audrey A. Trainor and Hyejung Kim
Wisconsin Center for Education Research
University of Wisconsin–Madison
aatrainor@wisc.edu

Angela Murray
University of Kansas

Postsecondary Transition and English Language Learners with Disabilities: Data from the Second National Longitudinal Transition Study

Audrey A. Trainor, Angela Murray, and Hyejung Kim

English learners (EL)\(^1\) with disabilities are simultaneously members of two groups of U.S. students who face multiple obstacles to achieving the benchmarks of postschool success such as college enrollment, degree completion, and employment. Identifying and providing access to appropriate educational opportunities and positive postsecondary outcomes for adolescents identified as both ELs and students with disabilities (ELSWD) are complex endeavors, further complicated by limited knowledge about the diverse sociodemographic, linguistic, and disability characteristics of members of this group (Artiles & Klingner, 2006). Research about ELSWD is sparse, reflected in the dearth of studies about their secondary education experiences, including access to general education, transition planning and instruction, and postschool outcomes. This descriptive study is an initial examination of a nationally representative group of ELSWD, including the population’s characteristics, high school experiences, and postschool outcomes, in alignment with special education transition education framework. To accomplish this exploratory step, we conducted a secondary analysis of data from the second National Longitudinal Transition Study (NLTS2).

Identifying the Population of ELSWD

The growing diversity of the school-aged U.S. population includes an increased number of EL, who are themselves a diverse group (Artiles, Rueda, Salazar, & Higareda, 2005). Approximately 21% of public school students, or about 11.2 million, speak languages other than English at home (Aud et al., 2011). Not all multilingual students, however, need language assistance at school. Approximately 9% of U.S. public school students receive English language services at school (Kena et al., 2014). Similarly, 9% of students who receive special education are dually identified as EL (National Center on Educational Outcomes, 2011). Fifty-five percent of all U.S. public schools serve at least one EL student, and 89% serve at least one student with an individualized education program (IEP), but less is known about schools that must meet the needs of ELSWD (U.S. Department of Education & National Center for Education Statistics, July, 2009).

Given the geographic concentrations of EL, the percentage also receiving special education (i.e., ELSWD) varies widely. Regionally, southwestern and eastern shoreline states have the greatest concentration of school-aged populations of EL (Kena et al., 2014). Eight western and southwestern states, plus Alaska, and Hawaii, enroll more than 10% of students who are EL. In California, the state with the largest population of EL public school students, enrollment is 23%. Twelve additional states have between 6% and 10% EL enrollment, including

---

\(^1\) We use three identification terms to describe student populations in this paper. The term \(EL\), the current, preferred term (Linquanti & Cook, 2013), is used to refer to the general population of students who are English learners, speak languages other than English, and have an educational goal of English language proficiency. In instances where the referent group is ELs who have been identified as having disabilities, the acronym \(ELSWD\) is used. The abbreviated \(SWD\) is used to refer to all students who have been identified as having disabilities regardless of linguistic background or English language proficiency.
Illinois, Minnesota, New York, and North Carolina. The population is constantly shifting, however, with Hawaii experiencing the greatest recent influx (a nearly 7% increase), and Arizona experiencing the greatest decrease, serving 8% fewer EL than in previous years (Kena, 2014). Although many EL have moved away from large U.S. city centers, this population remains concentrated in urban areas ranging from 11% to 18% of the total student enrollments in schools in small and large cities respectively. Suburban EL enrollment approaches the low end of the urban enrollment range at 7% to 10%. Enrollment of EL in towns and rural areas is between 2% and 4%, relative to proximity and size of nearby cities (Kena et al., 2014).

Typically, EL are considered to be students who speak languages other than English in their homes and receive various language instructional services in public schools, including English as a second language (ESL), bilingual education, or language immersion programs. A broader interpretation, however, includes bilingual students who enter U.S. schools as English proficient, or who have been exited (also called reclassification or redesignation) from language programs based on criteria such as English proficiency and parental permission (Linquanti & Cook, 2013; Young et al., 2010). Members of this broad EL student population are from a variety of socioeconomic, racial/ethnic, and linguistic backgrounds. Students who share the EL identification may or may not have immigrated to the United States, are from and live in various language communities, and attend schools in states that are positioned on a continuum of English language education policies spanning from emphases on English-only to bilingual proficiency instructional approaches. Despite the diversity within the EL population, two thirds are from families with income levels nearing or at the threshold for poverty (Aud et al., 2011).

Identification and service provision for ELSWD are susceptible to the challenges to accuracy and appropriateness that have resulted in disproportionate representation in special education, primarily documented in the high-incidence disability categories such as learning (LD), emotional and behavioral (EBD), and intellectual disabilities (ID; Artiles & Klingner, 2006). Based a systematic review of the extant literature, Sullivan (2011) identified several reasons for EL special education disproportionality, including teachers’ hesitancy to refer students who are learning English for disability identification; insufficient access to EL services in school districts; poorly understood educational needs; a lack of nondiscriminatory, reliable, and valid assessment tools and practices specific to this population; and similarities in the presentation of linguistic difference and disability. This complex set of factors has resulted in both under- and over-representation of ELSWD in high-incidence disability categories (Harry & Klingner, 2006; Losen & Orfield, 2002; Skiba et al., 2008; Sullivan, 2011). Additionally, many EL are members of historically marginalized racial groups and/or are from low socioeconomic backgrounds, notable because race and class have long been identified as key factors in disproportionately high identification in special education, disproportionately limited access to inclusive school services and programs, and disproportionately poor postschool outcomes (Artiles, Klingner, & Tate, 2006; Arzubiaga, Artiles, King, & Harris-Murri, 2008; Blanchett, 2006; Skiba et al., 2008). Hence, ELSWD who receive special education may represent a group of youth with a wide range of disability- and/or linguistic-related needs and imprecise disability identification.
Transition to Adulthood for ELSWD

All SWD are eligible to receive individualized transition planning and education. Special education transition education includes futures planning, student development, family involvement, school programming, and interagency collaboration (Kohler, 1996). Indicators of postschool success also encompass a range of domains, including but not limited to, high school completion, postsecondary education, and employment. Of the handful of studies addressing the education of ELSWD most focused on disproportionality and family involvement in education; we found no studies that focused analysis on describing the population, transition program access, and postschool outcomes of the national population of high school ELSWD and the transition to adulthood.

Both EL and students with disabilities simultaneously experience some of the lowest rates of high school completion, predictive of other postschool outcomes and reflective of a potentially greater risk to those who are dually identified (i.e., ELSWD). Approximately 7% of U.S. students leave high school before receiving a diploma, but the dropout rate for students born outside the country, many of whom are EL, is 16% (Kena et al., 2014). School completion rates vary across the 13 disability categories now recognized in the Individuals with Disabilities Education Improvement Act of 2004 (IDEA). For example, young adults who are blind and those who are deaf (90% and 95% respectively) are far more likely than their peers with LD (75%), EBD (56%) and ID (72%) to complete high school (Wagner, Newman, Cameto, Garza, & Levine, 2005). Based on 2012 data, dropout rates for the U.S. students with and without disabilities varied by race/ethnicity, illustrating a continued historical pattern; 8% of African Americans and 13% of Latinos leave high school without diplomas, whereas European Americans (i.e., Whites; terms used interchangeably herein) drop out at rates of 4% (Kena, 2014; comparable, disaggregate data was not available for Asians or Native Americans). Regardless of linguistic background, school completion for European and African Americans with disabilities is 74% and 78%, respectively, whereas for Latinos with disabilities the rate is 60% (Wagner et al., 2005).

Enrollment in postsecondary education and employment are two postschool outcomes indicating positive transitions to adulthood. Approximately 45% of young adults with disabilities, irrespective of linguistic background, enroll in vocational, 2- or 4-year postsecondary education program after high school (Newman, Wagner, Cameto, & Knokey, 2009). Enrollment varies by disability in ways that are similar to dropout rates; individuals with high-incidence disabilities such as LD, EBD, and ID are among the least likely to go on to postsecondary education, a problem that is magnified for those who did not complete high school. Postsecondary education enrollment varies across racial/ethnic groups by institutional setting. For instance, 15% of European Americans and Latinos enrolled in 4-year institutions, while the same was true for 5% of African American; however, the overall postsecondary enrollment across all three groups is not statistically significant (Newman et al., 2009). Within 4 years of high school, 58% of young adults with disabilities obtain postschool employment with a great degree of variation in duration and intensity of work, wages and benefits, and opportunities for promotion (Newman et al., 2009). Augmenting our understanding of ELSWD characteristics and their secondary experiences that potentially contribute to high school completion is much needed.
Transition planning and education constitutes a concerted effort to improve secondary experiences and postschool outcomes for all high school students with disabilities. Planning is individualized, yet evidence-based practices and postschool outcome predictors have been identified through systematic reviews of correlational, experimental, and quasi-experimental research (Test, Fowler, et al., 2009; Test, Mazzotti, et al., 2009). Evidence-based practices include student-focused planning practices such as teaching daily living skills and self-determination, providing transition information to families, and providing community-based instruction. Test, Mazzotti, and colleagues (2009) also identified predictors of a range of postschool education and employment outcomes, including career awareness and instruction in the general education classroom, work experience, and enrollment in academic and occupational courses. While some studies have focused on populations that may overlap with ELSWD (e.g., Gil Kashiwabara’s et al. [2007] study of transition planning with Latinas and Trainor’s [2005, 2007] studies on self-determination and diverse students with LD), no published studies examine a nationally representative of ELSWD characteristics, experiences, and outcomes, thus there is a critical need for this research.

Method

This study is a secondary analysis of the NLTS2, a publically available, nationally representative dataset comprising secondary and outcome data on students with disabilities (SWD). Its use requires federal permission and institutional human subjects review, both of which we obtained prior to conducting this research. (See www.nlts2.org for complete information about the dataset and permissions.) The NLTS2 was funded by the Institute of Education Sciences (IES) in the U.S. Department of Education. Data collection, which occurred in a series of five waves from 2001 to 2009, included parent and youth surveys, teacher and administrator school and program surveys, direct assessments of students, and course transcripts. In 2000 when the sample was selected, approximately 11,000 adolescents with disabilities, ages 13 to 16, participated in the study. Participants were identified with at least one disability from the then 12 IDEA-recognized categories. The dataset includes more than 40,000 variables and data is weighted across waves and instruments. This complex, randomly selected sample reflects primary selection by geographic representation of local education agencies and is weighted to be representative of disability and race/ethnicity.

The following research questions guided this secondary analysis of the NLTS2 data:

1. What are the disability, language, and other sociodemographic characteristics of transition-aged ELSWD in high school?
2. What are the high school education and transition program characteristics of transition-aged ELSWD?
3. What are the postschool outcomes in postsecondary education and employment for ELSWD?

Sample

To identify the sample from the larger NLTS2 dataset, we used three extant variables that met the criteria of EL designation. We used variables that indicated school-identified bilingual,
limited English proficient, or non-English speaking students; students with transcript included ESL courses; or, students whose school program included bilingual or ESL instruction during NLTS2 Waves 1 or 2. Transcript data for all years of high school had a response rate of approximately 81% (Newman et al., 2011). The school program surveys collected in Waves 1 and 2 had respective response rates of 48% and 50% (Javitz & Wagner, 2005). Identification resulted in an unweighted sample of 800 EL participants, rounded to the nearest 10 in compliance with IES rules for using restricted data sets. The sample represents approximately 6.5% of the weighted NLTS2 sample. By Wave 4, 100% of the EL sample was over age 18.

Data Sources and Variable Selection

The NLTS2 dataset is longitudinal and comprises variables from multiple data collection instruments, each having complex skip logic and varied response rates. Sociodemographic variables for the home language, household income, and education levels of parents/heads of household were gleaned from parent/youth surveys conducted in Spanish and English in Wave 1. Participants’ school characteristics including type of school (regular, special for students with disabilities, magnet, etc.); description of school community (rural, urban, etc.); and, percentage of enrolled students by race/ethnicity and eligibility for free/reduce-price meals also came from the Waves 1 and 2 dataset.

Variables related to transition planning, participation in planning, and educational programming, were selected from Waves 1 and 2 datasets. Variables from the school programs surveys, completed by school personnel, included information about transition planning received, postschool transition goals in postsecondary education and employment, and adult and student participation in individualized planning meetings. Additional variables from the parent/youth surveys about their participation in transition planning were selected. In the absence of Wave 2 data, Wave 1 data were used. Because data were longitudinal and collected over multiple waves, a collapsed variable reflected transition services received at any point during high school for most students. Transcript data across waves were used to find the average number of days participants were absent, dropout status, and type of high school diploma if attained. Additionally, the extent to which ELSWD accessed the general education setting; core academic courses such as English, math, and vocational education; and, learning supports courses were examined. Variables from Waves 4 and 5 parent/youth surveys were used to examine postschool employment and postsecondary education.

Analysis

We used SPSS 20.0 Complex Samples Module to calculate descriptive means and/or percentages. This module allows for the calculation of estimated standard errors associated with a weighted and stratified sample characteristic of the NLTS2, resulting in estimates that are representative of the national population of ELSWD. Because this analysis included multiple waves and instruments the cross-waves, cross-instrument weight constructed for such analyses was used. We used the subsample of NLTS2 of SWD who was not EL as a comparison group. We also recoded the 12 disability categories into two disability groups: high-incidence disabilities and other, lower incidence disabilities for some analyses, allowing us to compare transition experiences between these two groups. High-incidence disabilities, as described earlier included LD, ID, EBD, and speech/language impairment (SLI). We used the standard
significance level of \( p < .01 \) to identify significant differences between groups because we examined multiple comparisons.

**Results**

In the presentation of results, recall that the entire NLTS2 sample comprises students with disabilities. The focal population of this study, *ELSWD*, refers secondary students with disabilities who are dually identified as English learners. The comparison group here is *SWD*, or, secondary students with disabilities who are not EL.

**Sociodemographic Characteristics**

**ELSWD population.** Approximately 72% (SE 4.4) of ELSWD included in the NLTS2 identified as Latinos, constituting the largest racial/ethnic group. An additional 14% (SE 3.5) identified as White, 6% (SE 1.5) as Black, and 8% (SE 2.1) as multiracial/other (which included American Indians and Asians). Males comprised 68% (SE 3.3) of the sample, and the four disabilities with the highest prevalence included LD, ID, SLI, and EBD. Table 1 contains disability prevalence rates. The EBD category was the only disability in which a significant difference was noted: 5% (SE 1.2) of ELSWD were EBD, a significantly lower rate (\( p < .01 \)) than EBD in the SWD population (11%; SE 0.6).

**Table 1. Identified Disabilities of Transition-Aged ELSWD and SWD**

<table>
<thead>
<tr>
<th>NLTS2 question</th>
<th><strong>ELSWD</strong> (( N^a=750 ))</th>
<th><strong>SWD</strong> (( N^a=8200 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Disability</td>
<td>67.9 (SE 4.3)</td>
<td>62.1 (SE 1.2)</td>
</tr>
<tr>
<td>Intellectual Disability</td>
<td>12.8 (SE 2.4)</td>
<td>12.4 (SE 0.7)</td>
</tr>
<tr>
<td>Emotional Disturbance*</td>
<td>4.8 (SE 1.2)</td>
<td>11.0 (SE 0.6)</td>
</tr>
<tr>
<td>Speech Impairment</td>
<td>4.5 (SE 0.9)</td>
<td>3.8 (SE 0.4)</td>
</tr>
<tr>
<td>Other Health Impairment</td>
<td>3.1 (SE 0.8)</td>
<td>4.8 (SE 0.4)</td>
</tr>
<tr>
<td>Multiple Disabilities</td>
<td>2.0 (SE 0.4)</td>
<td>1.7 (SE 0.2)</td>
</tr>
<tr>
<td>Hearing Impairment</td>
<td>1.6 (SE 0.4)</td>
<td>1.3 (SE 0.1)</td>
</tr>
<tr>
<td>Orthopedic Impairment</td>
<td>1.2 (SE 0.2)</td>
<td>1.2 (SE 0.1)</td>
</tr>
<tr>
<td>Autism</td>
<td>0.9 (SE 0.1)</td>
<td>0.6 (SE 0.0)</td>
</tr>
<tr>
<td>Visual Impairment</td>
<td>0.6 (SE 0.1)</td>
<td>0.5 (SE 0.0)</td>
</tr>
<tr>
<td>Deaf/Blindness</td>
<td>0.4 (SE 0.1)</td>
<td>0.1 (SE 0.0)</td>
</tr>
<tr>
<td>Traumatic Brain Injury</td>
<td>0.2 (SE 0.1)</td>
<td>0.3 (SE 0.0)</td>
</tr>
</tbody>
</table>

NLTS2 = National Longitudinal Transition Study-2.

\(^a\)Unweighted, rounded to nearest 10 in compliance with IES requirements.

\(^*\)Statistically significant difference between ELL and non-ELL groups at \( a = .01 \)

Exploring potential disproportionality of secondary ELSWD is essential to understanding their secondary experiences and outcomes, and it is warranted given the confusion around identification of some disabilities (e.g., LD) for this population (Klingner, Artiles, & Barletta, 2006). To address the intersectionality of disability and race/ethnicity for ELSWD, we constructed a high-incidence disabilities group (i.e., participants with LD, ID, SLI, and EBD) and another, lower incidence disabilities group (i.e., participants with identified with the remaining IDEA disability categories: other health impairments, multiple disabilities, hearing impairments, orthopedic impairments, autism, visual impairments, deaf/blindness, and traumatic
brain injuries). These data show that Latinos comprised 75% of the high-incidence ELSWD group, while only 45% of other disabilities among ELSWD, significantly lower at the $p < .01$ level. Also significantly different at the $p < .01$ level, 12% of ELSWD with high-incidence disabilities were White, in comparison to 37% of ELSWD with other, lower incidence disabilities. Table 2 illustrates the intersection of race/ethnicity and disability.

Table 2. Race/Ethnicity Characteristics of Transition-Aged ELSWD and SWD by Disability Type

<table>
<thead>
<tr>
<th></th>
<th>ELSWD</th>
<th></th>
<th>SWD</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High-Incidence</td>
<td>Other Disabilities</td>
<td>High-Incidence</td>
<td>Other Disabilities</td>
</tr>
<tr>
<td></td>
<td>(LD,MR,SLI,EBD)</td>
<td>(N=250)</td>
<td>(N=500)</td>
<td>(LD,MR,SLI,EBD)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>75.2%</td>
<td>4.3%</td>
<td>45.1%</td>
<td>4.8%</td>
</tr>
<tr>
<td>White</td>
<td>11.9%</td>
<td>3.5%</td>
<td>36.5%</td>
<td>4.9%</td>
</tr>
<tr>
<td>African-American</td>
<td>5.6%</td>
<td>1.6%</td>
<td>9.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Multi/Other</td>
<td>7.4%</td>
<td>2.2%</td>
<td>9.2%</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

NLTS2=National Longitudinal Transition Study-2.
\textsuperscript{a}Unweighted, rounded to nearest 10 in compliance with IES requirements.
\textsuperscript{+}Statistically significant difference between disability groups at $a = .01$.

Participants identified more than 25 languages spoken at home. Approximately 42% ($SE \ 8.0$) of participants spoke Spanish as a primary language at home, making it the most commonly spoken language other than English. Slightly over 4% ($SE \ 1.5$) of the sample spoke East Asian languages, including Vietnamese, Chinese, Japanese, Hmong, or Korean, as a primary language at home, consisting of the second largest linguistic group. Recall that Asians represented a part of the nearly 8% of the racial/ethnic group of “multiracial/other” (see Table 1).

A majority of ELSWD (65%, $SE \ 4.9$) were from families whose annual household income was equal to or less than $25,000, significantly higher ($p < .01$) than SWD (35%, $SE \ 2.1$). Additionally, only 13%, of ELSWD ($SE \ 3.9$) lived in households where the annual household income was more than $50,000. When these results were compared to SWD, ELSWD were almost twice as likely to live in households in the lowest income bracket. Close to half (42%, $SE \ 3.7$) of ELSWD lived with a parent who had not completed high school, more than twice the rate for SWD (20%, $SE \ 1.4$). An additional 32% ($SE \ 5.6$) of ELSWD parents had obtained a high school diploma or GED, leaving only about 26% ($SE \ 3.0 - 4.8$) who reported lived with parent who had any college experience. These data illustrate a difference between ELSWD and SWD, the latter group being less skewed toward low income and low educational attainment.

Communities and schools. ELSWD attended schools ($n = 690$) in predominantly urban communities (44%, $SE \ 3.8-9.3$), and only 11% ($SE \ 3.2$) in rural locales. The total number of schools with observable data fluctuated in the school survey dataset. Of the 690 schools with observable data attended by ELSWD, 88% ($SE \ 2.7$) were considered regular schools, while the remaining schools were in special or alternative schools such as disability-focused (3%, $SE \ 0.9$), magnet (6%, $SE \ 1.1$), and other such as vocational, charter, and juvenile justice settings (3%, $SE \ 2.2$). Magnet school attendance for ELSWD was significantly higher than for non-EL students with disabilities likely due to EL attending schools in large communities. Compared to SWD, ELSWD were also significantly more likely to attend schools with high EL populations.
comprising 20% or more of the total student population (13%, $SE$ 4.0) than were SWD (2%, $SE$ .4). Similarly, 54% ($SE$ 6.4) of ELSWD attended schools where European American students comprised less than 25% of the total student population, significantly higher than SWD (11%, $SE$ 2.5). Although differences in the rate of total school population eligibility for free/reduced-price meals, as compared to SWD were not statistically significant at $p < .01$ using the complex sampling procedure, ELSWD were less likely to attend schools with a low proportion of students receiving free/reduced-price meals.

**Education and Transition Program Characteristics**

**Transition plans.** According to results from the school program survey, school personnel reported that 93% ($SE$ 1.8) of ELSWD ($n = 700$) received transition planning during Waves 1 and/or 2. This is consistent with the 94% ($SE$ 0.7) of SWD ($n = 5430$). School personnel also reported that of the 76% ($SE$ 4.7) of ELSWD who received transition planning, 80% ($SE$ 4.3) received instruction that was in alignment with their postsecondary goals and were enrolled in a course of study that reflected their postsecondary transition plans. These results are similar to SWD. The most common transition goals were in the areas of employment, independent living, and postsecondary education. Employment goals varied according to settings and necessary supports. For example, 58% ($SE$ 3.2) of ELSWD had competitive employment goals, while 10% ($SE$ 2.2) had sheltered employment goals, and 13% ($SE$ 2.4) had supported employment goals. Independent living goals on IEPs were also documented for 54% ($SE$ 3.6) of ELSWD, as were functional independence goals (23%, $SE$ 4.3). Approximately 32% ($SE$ 5.1) of ELSWD had IEPs with goals that addressed improving interpersonal relationships. Postsecondary education goals included vocational training (45%, $SE$ 4.1) and college attendance (42%, $SE$ 7.9) at similar levels. School program surveys in Waves 1 and/or 2 (i.e., completed by school personnel) noted which stakeholders were actively involved in transition planning for ELSWD, summarized in Table 3. As the data illustrate, similar patterns of individuals participated in the transition-related IEP meetings for ELSWD and SWD.

**Table 3. Active Participants in Transition Planning of Transition-Aged ELSWD and SWD**

<table>
<thead>
<tr>
<th>IEP team member</th>
<th>ELSWD Either Wave 1 or Wave 2 ($N^a=640$)</th>
<th>SWD Either Wave 1 or Wave 2 ($N^a=4790$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>$SE$</td>
</tr>
<tr>
<td>General education academic teacher</td>
<td>75.8</td>
<td>4.7</td>
</tr>
<tr>
<td>General education vocational teacher</td>
<td>41.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Special education teacher</td>
<td>96.8</td>
<td>0.8</td>
</tr>
<tr>
<td>School administrator</td>
<td>54.9</td>
<td>4.5</td>
</tr>
<tr>
<td>School counselor</td>
<td>66.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Related services personnel</td>
<td>28.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Parent/guardians</td>
<td>81.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Student</td>
<td>86.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Vocational rehabilitation counselor</td>
<td>19.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Staff of another agency</td>
<td>5.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>6.5</td>
<td>3.6</td>
</tr>
</tbody>
</table>

*NLTS2 = National Longitudinal Transition Study-2.*

*Unweighted, rounded to nearest 10 in compliance with IES requirements.*
Courses and educational settings. Across disability categories, course-taking patterns for ELSWD included courses in both general and special education settings. According to transcript data, ELSWD \((n = 530)\) received instruction in general education settings for at least one of the following core instructional subjects during high school: English, 83\% \((SE 3.3)\); math, 74\% \((SE 4.0)\); science, 76\% \((SE 4.6)\); and social studies, 79\% \((SE 4.3)\). Rates of instruction in special education settings for at least one course in each of these core instructional subjects were as follows: English, 67\% \((SE 4.0)\); math, 49\% \((SE 5.4)\); science, 39\% \((SE 5.5)\); and social studies, 42\% \((SE 7.1)\). Also noted was that 60\% of ELSWD studied a foreign language in general education and 5\% in special education settings, but it was not clear whether these settings included ESL/English instruction or a third language. See Table 4 for compared enrollments of ELSWD and SWD in vocational and transition courses, and in courses associated with academic supports, illustrating little measurable difference. Interestingly, ELSWD had a higher mean for Carnegie units earned in academic courses \((14.35, SE .49)\) than SWD \((12.59, SE .18)\) and this was statistically significant at the \(p < .01\) level.

<table>
<thead>
<tr>
<th>Table 4. Educational Settings of Courses Taken by ELSWD and SWD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELSWD ((N=530))</strong></td>
</tr>
<tr>
<td><strong>Transcript</strong></td>
</tr>
<tr>
<td>General Education Courses</td>
</tr>
<tr>
<td>Vocational Courses</td>
</tr>
<tr>
<td>Occupational Vocational Courses</td>
</tr>
<tr>
<td>Work Study</td>
</tr>
<tr>
<td>Prevocational</td>
</tr>
<tr>
<td>Life Skills Courses</td>
</tr>
<tr>
<td>Learning Supports Courses</td>
</tr>
<tr>
<td>Special Education Courses</td>
</tr>
<tr>
<td>Vocational Courses</td>
</tr>
<tr>
<td>Occupational Vocational Courses</td>
</tr>
<tr>
<td>Work Study</td>
</tr>
<tr>
<td>Prevocational</td>
</tr>
<tr>
<td>Life Skills Courses</td>
</tr>
<tr>
<td>Learning Supports Courses</td>
</tr>
</tbody>
</table>

*Note.* NLTS2 = National Longitudinal Transition Study-2.

*Unweighted, rounded to nearest 10 in compliance with IES requirements.

Postschool Outcomes in Education and Employment

In the NLTS2, school completers included both those who earned diploma and those who aged out without a regular diploma (i.e., earned a special diploma or certificate of completion). Of the 66\% \((n = 680; SE 5.9)\) of ELSWD who graduated, 61\% \((n =430; SE 10.6)\) earned a regular diploma, 38\% \((SE 10.8)\) earned a special education diploma, and 2\% \((SE .07)\) earned a certificate of completion or vocational education diploma. The dropout rate for ELSWD was 15\% \((SE 3.2)\). An additional 3\% \((SE 1.0)\) aged out of special education eligibility, and another 4\% \((SE 1.7)\) reportedly moved out of districts and follow-up was not possible. School completion data were unknown for 11\% of ELSWD \((SE 3.3)\). Table 5 illustrates completion rates associated with high- and low- incidence disabilities, with no significant difference noted.
Postsecondary Transition and ELs with Disabilities

Postschool outcomes for ELSWD included securing competitive postschool employment, enrolling in higher education, or both. Of the observable data \((n = 370)\), nearly 80\% \((SE 2.8)\) of ELSWD had some employment since leaving high school by Wave 5, but the nature of that employment (e.g., competitive, supported, sheltered) remains unknown. The postschool employment rate of ELSWD was significantly lower than for SWD, but postsecondary education attendance was very similar. Sixty-one percent attended some postsecondary education, including 2- and 4-year colleges and universities \((36\% \ [SE 5.6] \text{ and } 14\% \ [SE 3.9], \text{ respectively})\) and vocational programs \((39\%, SE 5.8)\).

### Table 5. High School Completion of Transition-aged ELSWD and SWD by Disability Type

<table>
<thead>
<tr>
<th></th>
<th>ELSWD High-Incidence (LD, MR, SLI, EBD) ((N=240))</th>
<th>ELSWD Other Disabilities ((N=440))</th>
<th>SWD High-Incidence (LD, MR, SLI, EBD) ((N=3130))</th>
<th>SWD Other Disabilities ((N=5070))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final transcript status</td>
<td>% (SE)</td>
<td>% (SE)</td>
<td>% (SE)</td>
<td>% (SE)</td>
</tr>
<tr>
<td>Graduated</td>
<td>65.4 (6.4)</td>
<td>72.3 (3.7)</td>
<td>67.8 (1.7)</td>
<td>67.8 (1.3)</td>
</tr>
<tr>
<td>Dropped out</td>
<td>15.9 (3.5)</td>
<td>10.5 (2.9)</td>
<td>20.7 (1.3)</td>
<td>16.4 (1.1)</td>
</tr>
<tr>
<td>Aged out</td>
<td>3.3 (1.1)</td>
<td>4.0 (1.4)</td>
<td>1.7 (0.3)</td>
<td>3.7 (0.5)</td>
</tr>
<tr>
<td>Moved</td>
<td>4.3 (1.9)</td>
<td>2.4 (1.0)</td>
<td>4.8 (0.7)</td>
<td>4.3 (0.4)</td>
</tr>
<tr>
<td>Unknown</td>
<td>11.1 (3.6)</td>
<td>10.7 (2.1)</td>
<td>4.9 (0.9)</td>
<td>7.7 (0.7)</td>
</tr>
</tbody>
</table>

*Note.* NLTS2 = National Longitudinal Transition Study-2.

*Unweighted, rounded to nearest 10 in compliance with IES requirements.

### Discussion

As Wagner et al. (2003) reported, secondary ELSWD are a growing subpopulation, increasing nearly 11\%, from 3\% in 1987 to 14\% in 2001. This is one of the first studies to examine the secondary and postsecondary characteristics and transition experiences of ELSWD. Because limited knowledge about ELSWD contributes to ineffective education policies and practices, and thus to continued marginalization and unequal access to education (Artiles & Klingner, 2006), beginning to fill this knowledge gap is an important contribution.

Results of this investigation reflect the NLTS2 data available for secondary analysis. None of the questions posed in this study was the primary focus of NLTS2 data collection. Further, ELSWD share some experiences with student populations with increased school mobility (Herbers, Reynolds, & Chen, 2013), which presents challenges to longitudinal examination. Missing data for some variables of interest, particularly school-provided data, exceeded 50\%. School program surveys detailing access to transition education had some of the lowest responses rates overall, and this was exacerbated for ELSWD, limiting the analysis.

Despite these limitations, this study provides valuable knowledge about secondary ELSWD. Its contribution focused on discrete transition outcomes such as postsecondary education and employment, historical criteria for successful transition to adulthood and one of the strongest subset of observable data available in the NLTS2. We agree with the seminal work of Halpern (1985) that successful adult transitions also involve community engagement, independence, and financial security, moving beyond the dichotomous variable of employed/not.
employed (e.g., wages/salary, benefits, opportunities for advancement). One general implication for further study, including for the forthcoming third national study of transition (named, the \textit{NLTS 2012}; U.S. Department of Education, \url{http://ies.ed.gov/ncee/nlts/}) is to both incentivize and oversample difficult to reach, highly mobile ELSWD. Oversampling for disability was employed in the NLTS2, however, with highly mobile populations such new immigrants or migrants, further oversampling and more sophisticated follow up strategies may reduce missing data.

**Identifying Secondary ELSWD**

Sociodemographically, ELSWD are racially/ethnically and linguistically similar to EL without disabilities, the largest subgroup of which is Spanish-speaking, Latino adolescents (Aud et al., 2011). Examining subgroups of high- and low-incidence disabilities and the distribution of disability categories indicates potential misidentification of ELSWD. Nationally representative data on EL may illuminate the issue. Parents who identified their children as EL who have difficulty speaking English point to language of origin, citizenship status, and poverty status as factors affecting acquisition and proficiency (Aud et al., 2011). For example, 4% of U.S.-born EL experienced difficulty speaking English, but the same was true for 35% of those born outside the United States. Similarly, 10% of EL living in poverty faced difficulty speaking English, true for just 3% who did not live in poverty. These factors may contribute to EL special education referrals (Artiles & Klingner, 2006; Klingner et al., 2006). Unlike native speakers with high-incidence disabilities (e.g., LD, SLI) who are typically identified in elementary grades, immigration and English learning occurs across grades, necessitating the collaborative involvement of secondary educators and ESL/bilingual educators. Accurate special education referrals require ESL/bilingual teachers who understand EL characteristics and oft-conflated challenges of learning English, immigration stress, and disability manifestations (Ortiz et al., 2011).

Latino ELSWD were significantly more likely to be identified with high-incidence disabilities, despite disproportionately low representation of the total ELSWD sample in the EBD category, and European American ELSWD were significantly more likely to be identified with low-incidence disabilities, indications that disability identification for EL continues to be imprecise (Klingner et al., 2006) and contributes to disproportionality (Sullivan, 2011). Also, low numbers of Asian ELSWD who, as a group, comprised the third largest language family after English and Spanish, are not well tracked in this dataset, potentially reifying or re-enforced by Asian underrepresentation and model minority stereotypes across some disability categories (Hui-Michael & Garcia, 2009). Nevertheless, simultaneously examining the sample’s race/ethnicity, SES, and disability underscores diversity within diversity (Artiles et al., 2005).

One puzzling finding was that English was the most frequently reported primary language used at home. Home language was gleaned from the parent/youth surveys; it is possible that perceptions about the importance of English and its relationship to academic success and immigrant status influenced responses, or that English was used at home in an effort to assimilate. Home language is pertinent to dual language development particularly in the early grades when dual proficiencies shift and respond to multiple linguistic environments (Collins, O’Connor, Suarez-Orozco, Nieto-Castañon, & Toppleberg, 2014). The relationship between home language and transition-related issues of school achievement, employment, and enrollment in postsecondary education specific to disability has not been the subject of intense research.
Postsecondary Transition and ELs with Disabilities

From an ecological perspective, both community and family factors warrant consideration for ELSWD transition; intergenerational immigration experiences, linguistic backgrounds, and expectations of the future impact postsecondary education, employment, and community engagement (Crosnoe & Turley, 2011; Lui, Chung, Wallace, & Aneshensel, 2014).

Providing Transition Education to ELSWD

This study confirms that the many ELSWD are faced with the challenges of living in poverty and attending schools in large urban communities where the majority of students are eligible for free/reduced-price meals and members of historically marginalized racial/ethnic groups. Membership in linguistic minority communities may magnify identified risks associating poverty and SWD (Oswald, Coutinho, & Best, 2002), and positioning ELSWD at risk for diminished access to quality general education characterized by inadequate access to appropriate curricula and materials, subpar physical space and resources, and less experienced general education teachers (Anyon, 2005; Blanchett, Mumford, & Beachum, 2005; Ladson-Billings, 2006). Poverty status may also increase vulnerability of ELSWD to further marginalization associated with disproportionate special education identification, service provision, and disciplinary procedures in noninclusive settings (Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz, & Chung, 2005). Poverty has been also considered an important influencing factor specifically for SWD and postsecondary education enrollment and degree attainment (Maddaus, Grigal, & Hughes, 2014). While these obstacles seem beyond educators’ direct and immediate reach, schools remain responsible for educating adolescents equitably. Surprisingly, this data show that nearly all of ELSWD had both transition planning and plan alignment with their course of study, two broad indicators associated with effective transition planning. Interestingly, other studies have not documented similar findings for SWD (Grigal, Hart, & Migliore, 2011).

Course-taking patterns of secondary ELSWD are of particular interest because access to rigorous academics is associated with postsecondary success. Unfortunately, these descriptive data are difficult to interpret. First, transcript data do not provide in-depth information about the characteristics of the teacher, the curriculum, the setting, or the composition of students. Second, outcomes (e.g., grades) associated with general education classes in core and transition-related subjects remains unknown. For example, we do not know whether students performed more competently, or learned more, in general versus special education English courses, or what, if any, English language supports were delivered in either setting. Third, inclusion variables for courses and learning settings remain unknown. For example, modifications and accommodations cannot be tracked to courses or subjects. Although we found no significant differences in general and special education course enrollment between ELSWD and SWD, the number of academic Carnegie units earned by ELSWD was significantly higher than SWD. This might indicate inaccuracies in disability identification. The availability of ESL/bilingual educators in core academic subjects is unknown, as is the extent to which general and special educators collaborated. Because much of the extant knowledge base about ELSWD has focused on disability identification, little is known about program characteristics, instructional delivery, and shared roles and responsibilities of ESL/bilingual, special, and general educators. For SWD generally, however, access to the general education curriculum, inclusive education, and individualized planning influence successful transitions to adulthood in the domains of postsecondary education and employment (Test, Mazzotti, et al., 2009; Wehmeyer, 2002), making these variables of interest for ELSWD.
Graduation rates of ELSWD are commensurate with those of SWD. Similarly, additional comparisons between high-incidence and low-incidence disability groups did not evidence significant differences in graduation. As Wagner et al. (2005) noted for SWD generally, high school completion rates for ELSWD have much room for improvement and such improvement potentially improves outcomes such as postsecondary enrollment and employment. No significant differences in postsecondary education enrollment existed between ELSWD and SWD, yet the paths available to postsecondary education for ELSWD were not discernible. Unfortunately, ELSWD were significantly less likely than SWD to have been employed at some point since high school and prior to the fifth wave of data collection, at which point the youngest ELSWD would have been 19 years old and eligible for fulltime employment. Other important factors, such as self-determination and knowledge of employment-related disability rights, that help shape SWD successful transitions to employment (Madaus, Gerber, & Price, 2008) are conceivably impactful for ELSWD but, as culturally laden constructs, necessitate in-depth data for understanding their relationship to these employment data (Trainor, 2005, 2007). Lower rates of transition to employment may also indicate citizenship documentation difficulties for some ELSWD.

Implications for Research and Practice

The NLTS2 provides an important first glance at the characteristics, education experiences, and postschool outcomes for ELSWD, but much remains to be explored. More precise information about disability identification in relation to other ELSWD sociodemographic characteristics should be examined to further disaggregate the diversity within this group. This would include variables immigration histories, when appropriate, and community, home, and student language experiences and environments, such as EL status and decision making, reclassification and/or long-term EL status. Also, to better understand differences in high- and low-incidence disability identification, collecting in-depth data on the processes and reasons that influence identification decisions is critical. Previous research has focused on referral processes and sorting out the differences between English acquisition and disability (Klingner & Harry, 2006; Ortiz, Wilkinson, Robertson-Courtney, & Kushner, 2006), but further study at the secondary level is necessary. Finally, ELSWD underrepresentation in the category of EBD needs further exploration as well.

Resiliency in the context of poverty may also illuminate the ELSWD knowledge base. While this is an expansive area of research for adolescents without disabilities, recent work linking individuals’ resiliency with academic task engagement, academic achievement and school attendance (Fantuzzo, LeBoeuf, Rouse, & Chen, 2012), self-determination and positive racial identities (Goodkind, Hess, Gorman, & Parker, 2012; Schilling, 2008), and positive relationships with peers and teachers (Zolkoski & Bullock, 2012), indicate that these factors may also be relevant to ELSWD transitioning to postsecondary education and employment.

Specific to transition, both predictors of postschool outcomes and evidence-based practices in planning, secondary programming, and intervention have been identified through the examination of experimental and quasi-experimental research for SWD (Test, Fowler, et al., 2009; Test, Mazzotti, et al., 2009). Researchers need to replicate this body of work with an ELSWD sample, or disaggregate results relevant to subgroups of the population to ascertain the efficacy of evidence-based practices or predictive validity for this group (Trainor & Bal, 2014).
Because group experimental research demands randomization and large numbers of participants, it is important to fully consider a more complete knowledge base that includes focused, small-scale studies with methodological tools to examine perceptions, decision-making processes, and other how/why questions.

There are few studies of course-taking patterns of secondary students in special education despite policy and research emphasis on the importance of access to the general education curriculum. Specific to transition education, access to both the general and vocational education curricula is associated with successful achievement of postschool goals. Further, access to these curricula may differ according to disability and should be individualized. Additional research is needed to contextualize access in terms of special and general education settings, curricula and approaches to instruction, and educator roles.

Missing data in the NLTS2 for this highly mobile population was an issue in this exploration. Increasing the capacity to examine and respond to the intersectionality of race/ethnicity, disability, SES, and language is needed to better understand the range of outcomes and experiences of a diverse group of young adults that comprise the ELSWD subpopulation, highlighting complex identities and macro-contexts (Arzubiaga et al., 2008; Connor, 2009; Garcia, Ortiz, & Sorrells, 2012). Future efforts address this by applying oversampling strategies appropriate for large-scale studies and relational research designs associated with smaller, qualitative studies. Moreover, establishing an effective set of interventions requires culturally responsive research design, implementation, and analyses that are disaggregated by salient learner and context characteristics (Trainor & Bal, 2014). Both require researchers to engage in reflexive and responsive practices, recognizing that the study of people who face marginalization on multiple fronts (e.g., via racial and linguistic stereotyping and biases, anti-immigrant sentiment and policy, lack of access to high quality schools, and, in some cases, historical unethical research practices) may not readily participate in research (Arzubiaga et al., 2008; Ashing-Giwa, 2005; Pope-Davis, Liu, Toporek, & Brittan-Powell, 2001).

For educators, distinguishing between English acquisition and disability, prereferral processes should be followed closely. Teachers need to understand and respond to nuanced cultural and linguistic diversity (e.g., immigration experiences, language assessment challenges) when individualizing instructional approaches (Ortiz et al., 2011; Ortiz et al., 2006). Transition educators must also be aware of the range of challenges associated with ELSWD status, immigration, and education at the secondary level as related to postschool outcomes and their positive predictors. Multifaceted explanations of the challenges faced by ELSWD may help to raise expectations for their achievement. Additionally, collaboration across special and general education, including ESL/bilingual education and language support services is essential.

Educators should consider students’ curricula individually; for EL this means paying careful attention to resources and needs associated with second language learning, disability, and postsecondary goals in both education and employment. Doing so will likely introduce competing demands for courses and challenging scheduling issues. Ongoing assessment in transition and language proficiency is necessary for educational decision making. Transition educators should employ transition education and planning practices associated with positive postschool outcomes as identified by Test, Fowler, et al. (2009) and Test, Mazzotti, et al. (2009),
proceeding with the understanding that culturally responsive approaches should overlay their implementation.

Further, transition educators should be prepared to use culturally responsive methods for community-based transition education and family involvement. Culturally responsiveness requires that teachers form relationships with families and understand individual characteristics so that stereotyping is avoided, biases explored, and trust built. Further, empirical data from qualitative studies should be used to contextualize predictors and outcomes relevant to ELSWD. For example, parents’ involvement has been identified as an important factor in transition planning and education with considerations for preferences, strengths, and needs associated with parents from historically marginalized groups (Povenmire-Kirk et al., 2010; Rueda et al., 2005; Trainor, 2005, 2007).

Exploring transition for this nationally representative sample of secondary ELSWD illustrates notable patterns that inform how we research and educate adolescents. This preliminary examination also highlights questions that remain unanswered. As this population continues to grow, the need for a more precise understanding of special education transition for ELSWD is underscored in order to effectively provide equitable access and positive outcomes.
Postsecondary Transition and ELs with Disabilities

References


Postsecondary Transition and ELs with Disabilities


