

Running head: TRENDS IN SPECIAL EDUCATION

Abstract

In this study, the researchers conducted a secondary data analysis of: disability, secondary programs, and postschool outcomes of special education exiters from data collected by a Great Lakes state in compliance with the Indicator 14 reporting requirements of the IDEA of 2004. The purpose of this study was to examine whether there were significant trends in these data for the period of 2006-2015. The authors conducted an analysis of more than 9,600 exit and one-year follow up surveys conducted by special education teachers. These data were examined using descriptive statistics and logistic regression analysis. The researchers used the year of exit for special education students as the independent variable; and disability rates, secondary programs, and postschool outcomes as dependent variables. The authors included female and African-American status as controlling variables, because these have been found to have a high degree of co-variance with the dependent variables. For disability rates, the authors found significant increases over time for the disability categories of autism and other health impairments and significant decreases over time in intellectual disabilities. For secondary programs, they found significant decreases in work study participation and for postschool outcomes they found significant decreases in postschool work and postsecondary education outcomes for students with intellectual and multiple disabilities. The authors suggest that the decline in postschool outcomes for students with intellectual and multiple disabilities may be related to declining emphasis on work study and their slower recovery from the economic recession. The authors suggest that these findings imply a need for infusion of socially valid transition experiences in the general curriculum and better alignment between secondary services and postschool goals for students with intellectual and multiple disabilities.

Trends in Special Education

Disability populations, policy, services, and outcomes have seen dramatic changes since the Education of All Handicapped Act (EHA) mandated a Free Appropriate Public Education for children with disabilities in 1975. First, the enrollment of students with disabilities climbed from 8.3% to 12.9% of total enrollment between 1976-77 and 2011-12 with some disability categories showing dramatic growth while others showed decline (U.S. Department of Education, 2013). Second, policy has moved from an emphasis on specially-designed special education services to an emphasis on services provided within the general curriculum (IDEA 1997). Third, special education transition services shifted away from a focus on employment after high school (Will, 1984) to a focus on college and tech-prep (IDEA, 2004). Finally, special education outcomes have been dramatically impacted by economic issues including skyrocketing postsecondary education costs and the lingering effects of the recession of 2009. This manuscript will examine these national trends in the context of secondary and postschool outcome data collected in a Great Lakes state between 2005 and 2015.

Changing disability populations

Between 1977 and 2011, the population of special education students has grown mainly due to increases in the number categorized as having learning disabilities and other health impairments (U.S. Department of Education, 2013). Much of this increase was due to growth in the populations of students with learning disabilities and other health impairments. The proportion of U.S. special education students categorized as having learning disabilities grew from 21.5% to 35.9% of the special education population between 1977 and 2012. For the same period the proportion of students categorized as having other health impairments grew from 3.8% to 11.6%. Additionally, a new category for students with autism grew from 0% to 7.1% (U.S. Department of Education, 2013). Though most of these disability populations grew, the

proportion of students with intellectual disabilities declined from 26 % of students with disabilities to 6.7% (U.S. Department of Education).

While most of these national trends continued largely unabated between 2001 and 2011, some showed changes in direction. In keeping with prior trends, between 2001 and 2011 the national proportion of students categorized as having other health impairments doubled, while the population of students with autism quadrupled, (Sculler & Winkler). Also in keeping with previous national trends, the population of students with intellectual disabilities and emotional impairments continued to decline as a proportion of students with disabilities (Sculler & Winkler, 2011). However, the national trend for students with learning disabilities reversed direction in 2012 declining from 2.86 to 2.43 million (Sculler & Winkler, 2011).

Some of the changes in disability populations were due to changes in definitions, policy changes, or creation of new disability categories. Drops in the rate for students with intellectual disabilities (mental retardation under IDEA) started with the American Association of Mental Deficiency moving the cutoff point for intellectual disability from an IQ score of 85 to 70, decreasing this population by 13% (Scull & Winkler, 2011). Learning disabilities (LD) became the largest disability group in special education by 1990 and continued to grow until 2005, but caps on the number of students exempted from statewide testing accountability standards and the Response to Intervention (RTI) alternatives for these students contributed to the national prevalence of LD falling from 6.1% of total student enrollment in 2005 to 4.9% in 2010 (Scull & Winkler). This, in turn, resulted in the first reported decline in the proportion of students with disabilities compared to total enrollment from 13.8% to 13.1% between 2004 and 2010 (Scull & Winkler). The addition of autism as a disability category and the expansion of the category of

other health impairments also contributed to the rapid growth of these two IDEA disability populations (Scull & Winkler).

Changes in special education services and practices

The Education of All Handicapped Act (EHA) of 1975 established the right to a “Free Appropriate Public Education” in the “Least-Restrictive Environment” and special education services initially focused on providing remedial academics or alternate curricula for students with disabilities (Flexer, 2013). When these students continued to experience poor postschool outcomes (Gordon, Hasazi, & Roe, 1985), the special education focus began to emphasize school-to-work transition (Will, 1984). The 1983 Amendments to EHA Section 626 and the Rehabilitation Act Amendments of 1986 funded discretionary programs related to transition services and supported employment and transition services were required by the Individuals with Disabilities Education Act of 1990. At the adult service level this transition-to-work focus was supported by the Rehabilitation Act Amendments of 1986 and 1992 that established a “presumption of employability” for youth with disabilities (Flexer).

In the late 1990s, the participation of students with disabilities in employment-related transition services (such as work-based learning) was over shadowed by requirements for their participation in an increasingly college-oriented general education curriculum under the IDEA of 1997 (Flexer, 2013). Although the 1997 IDEA Amendments required transition planning related to student’s courses of study be included in the IEPs of students by no later than age 14, it introduced strict accountability standards for the progress of students with disabilities in the general curriculum. Inclusion initiatives and the IDEA of 1997 contributed to a 23% decline in the number of students with disabilities instructed in separate special education classes by 2003 (Wagner, Newman, & Cameto, 2004). However, changes for this period were concurrent with a 15% decline in vocational education and a 40% decline in life skills course taking (Wagner, et

al.). In the 2000s, the No Child Left Behind (NCLB) Act created an even greater focus on preparation for postsecondary education, while the IDEA of 2004 redefined transition services as “results-oriented” rather than “outcome-oriented (Flexer). Transition services focused on postschool outcomes continued to decline in the 2000s due to an emphasis on evidence-based practices which strongly favored interventions focused on in-school interventions and in-school transition outcomes (Test, Mazzotti, #####).

Changes in postschool outcomes

In addition to an increased focus on in-school outcomes, students with disabilities had to compete in a secondary curriculum that was increasingly rigorous and focused on postsecondary education. This shift was reflected in a 8% increase of four-year college enrollment, a 17% increase in two-year college enrollment between 1987 and 2004 (Wagner, Newman, Cameto, & Levine, 2005). However, these gains in postsecondary enrollment were offset by a 21% decrease in high school completers who were in competitive employment within 18 months of graduation (Wagner, et al., 2005).

These shifts in special education policy and practice appear to have had disparate impact on different groups of students with disabilities. While students with emotional disabilities were increasingly likely to obtain a high school diploma, they showed no improvement in postsecondary education participation between 1987 and 2003 (Wagner et al., 2005). While postschool engagement in school, work, or preparation for work increased 7% for students with learning disabilities and 33% for students with multiple disabilities between 1987 and 2003, it declined 10% for students with intellectual disabilities and 14% for students with other health impairments for this same period (Wagner et al., 2005).

These rapid economic and policy changes were concurrent with a misalignment between secondary programs and postschool goals for special education students (Baer, Daviso, Flexer, &

McMahan Queen, 2011) and also for secondary students in general (Bromberg and Thokas, 2016). Baer, et al., found that students whose postschool goals were focused on employment after high school often did not receive secondary services that were predictors of employment outcomes. Bromberg and Thokas found that for all students this misalignment of secondary services fell most heavily in the area of career readiness with only 13% completing the necessary preparation for careers after high school. The American Institutes for Research (2103) noted that “as schools have increased their focus on developing academic mastery, they have limited time to address some these [career readiness] skills” (p.6).

Research Questions

A review of the research indicates that shifts in disability populations, secondary curricula, and postschool outcomes need to be considered in policy decisions involving special education. Because these three aspects of special education vary widely among states in terms of implementation and practice, it has been difficult to evaluate their relative impact on each other. The purpose of this study was to examine these trends in relation to each other in the context of a single state. Specifically, this study was designed to address the following research questions by conducting a secondary data analysis on the Ohio Longitudinal Transition Study for data that was collected for special education students exiting in the years of 2006 through 2014. This study was guided by the research questions:

1. Were there significant changes in OLTS exit sample disability categories over time?
2. Were there significant changes in OLTS exit sample secondary programs over time?
3. Were there significant changes in OLTS exit sample postschool outcomes over time?

Method

Secondary data are defined as data collected by a person or organization that are used for a different purpose than originally intended (U.S. Department of Education, 2007). The authors employed a secondary data analysis of exit and follow up interviews and surveys collected through the Ohio Longitudinal Transition Study (OLTS) for students with disabilities who graduated or aged out of special education from 2006 through 2014. The OLTS exit and follow up data was collected for all exiting students from a non-repeating stratified sample of one-fifth of local education agencies (LEAs) in the Great Lakes state each year with the cycle repeating every five years for each LEA. The OLTS was a longitudinal follow-up design which tracked cohorts of students receiving special education services starting with an interview just prior to exit and then a phone interview one year following exit. This model has been recommended by researchers for conducting follow-up studies (Halpern, 1990) and has been employed by the National Longitudinal Study (NTLS).

Sample

Over the nine-year period of this study, a total of 20,047 students were successfully interviewed at exit. Of this population 9,828 exiters or family members were successfully interviewed by phone one-year after graduation for a response rate of 49%. Ninety-four percent of the interviews were conducted with exiters and six percent were conducted with family members or other informants. A comparison of exit and follow up samples indicated no significant differences between the exit and follow up samples. Additionally, the follow up sample was compared with the demographic characteristics of transition-age youth in this state between 2005 and 2013 (U.S. Department of Education, 2015) which showed the sample to be representative of all categories of disabilities except those for deaf-blind and speech and

language impairments. The follow up sample was also found to significantly underrepresent high school dropouts. These three categories of students with disabilities were not included in this analysis.

Instrument

The survey for this study was developed previously from a pool of survey questions in the first National Longitudinal Study for Transition (Baer, et al., 2003) and can be accessed at www.olts.org. The OLTS survey consisted of an exit survey that was administered by a special educator familiar with the exiter and a follow-up phone interview that was generally administered by the same teacher. The three-page exit survey included a one page review of Educational Management Information System (EMIS) records (Ohio Department of Education, 2011) and an additional two pages of interview questions. Data drawn from the EMIS included questions about: (a) age at graduation or exit, (b) gender, (c) ethnicity, (d) school setting or program, (e) IDEA defined disability category, (f) level of inclusion, (g) courses of study, and (h) career-related services. Data drawn from the two-page exit interview included questions regarding student post-school goals, IEP participation, satisfaction with high school services, and transition services.

The one-year phone follow up survey was conducted by the same special education teachers who conducted the exit surveys and consisted of two pages that included questions about: (a) employment, (b) post-school services, (c) postsecondary education, (d) benefits, (e) satisfaction, (f) independent living, and (g) reasons for not working or attending postsecondary education as planned. This phone interview was generally conducted by the special education teacher who administered the exit interview.

Survey Procedure

Each year in half-day sessions, special education teachers at the selected LEAs were trained to conduct the surveys and code student responses. They were directed to conduct interviews for all students with IEPs who were exiting their school district in that year. Prospective survey administrators were instructed to obtain as many ways of contacting the student after graduation as they could during the exit interview. Surveyors were instructed to send completed surveys to Kent State University for coding and analysis. All student-identifiable information was retained by the LEA and data were submitted for coding and analysis using a survey number for identification.

The survey administrators were instructed to conduct the interview and follow up phone interview with the exiters whenever possible and with family members or other informants otherwise. Surveyors were allowed to paraphrase questions when necessary to make them more understandable to the students or family member being interviewed. For the one-year follow up phone interviews, surveyors were directed to conduct interviews with the same student or family member they interviewed on exit. Exit interviews were typically conducted as part of the students' final exit or Summary of Performance meeting. In the majority of cases, students provided the information on their own, but for 6% of students this information was provided by parents or guardians.

One year after graduation, the surveyors conducted a follow up phone interview. In these phone interviews, the teachers asked respondents about postsecondary education, employment, and independent living experiences in the year following their exit from high school. The surveyors made at least four attempts to reach the special education exiters on year following exit from high school. Completed exit and one-year follow up surveys were then sent to a state

university for coding. These data were then crosschecked by the researchers to eliminate coding errors.

Variables

For the logistic regression analysis, the independent variable was a dummy variable created from the year that the exiters graduated or aged out of high school. The Year 2006 was coded as “1” on up to the Year 2014 that was coded as “9.” Two co-variables that were included as independent control variables were female and African-American statuses which were coded as “1” or “0.” These data were collected from the Educational Management Information System (EMIS) data submitted to the state in compliance with IDEA reporting requirements.

The eight dependent disability variables for research question #1 were seven disability categories identified by the IDEA and one disability category called “physical sensory” that included students with hearing, visual, and orthopedic impairments. The IDEA categories included: (a) learning disabilities, (b) other health impairments, (c) emotional disabilities, (d) intellectual disabilities, (e) multiple disabilities, (f) traumatic brain injury, and (g) autism. These categories were defined by IDEA and collected from the LEA EMIS records.

The four dependent secondary program variables for research question #2 were: (a) work study, (b) career-technical education, (c) general education, and (d) supported employment. Work study was defined as a semester or more of work study services generally provided by a work study coordinator. Career-technical education was defined as three or more semesters in a recognized career-technical education program. General education was defined as more than 80% of coursework occurring outside special education. School-supervised employment was defined as a semester or more of work-based learning from a job training coordinator. These categories were defined by EMIS and collected from school records.

The four dependent outcomes variables for research question #3 were (a) full-time employment, (b) part-time employment, (c) two-year college, and (d) four-year college. Full-time employment was defined as three or more months in paid competitive work for 35 or more hours per week. Part-time employment was defined as 20-34 hours of paid competitive employment for three or more months. Four-year college was defined as one or more semesters in an accredited four-year college. Two-year college was defined as one or more semesters in an accredited two-year college or technical school. These data were collected as part of the OLTS one-year follow up interview.

Analysis

Analysis of data included: (a) descriptive year-by-year comparisons and (b) the use of logistic regression analysis. For descriptive analyses, the authors developed graphs for exiters': (a) disability category, (b) secondary programs, and (c) postschool outcomes. For each of these variables, graphs were presented for exiters with *non-cognitive disabilities* and for exiters with *cognitive disabilities*. Year-by-year graphic depictions for students with non-cognitive disabilities included exiters with learning, emotional, other health impaired and sensory-physical disabilities. (The category of sensory-physical disabilities was created by combining exiters with hearing, visual, and orthopedic impairments to create a large enough grouping to be statistically analyzed). Year-by-year graphic depictions for exiters with cognitive disabilities included exiters with autism, traumatic brain injury, intellectual disabilities, and multiple disabilities.

The authors conducted logistic regression analyses for each research question, Logistic regression analysis has been used in trend analysis and can be used with differing group sizes. This resulted in eight logistic regression analyses to analyze changes over time for each of the eight disability categories, four to analyze changes over time for the four major secondary

program categories (i.e. regular classes, career-technical education, work study, and supported employment), and four to analyze changes over time for the four major postschool outcomes (full-time work, part-time work, four-year college, and two-year college). Female and African-American status were used in each logistic regression analysis as control variables because earlier national and OLTS studies showed that these items co-varied with the dependent variables (Flexer, et al., 2011). The year of exit was used in the logistic regression by creating a set of dummy variables from one to nine for the administration year. This allowed trends to be assessed by analyzing the size of “year” coefficients in sequential order. A Bonferroni correction was employed to control for the number of logistic regression analyses conducted for each disability category. This resulted in the authors using an alpha of $.05/8$ or $.006$ as the significance level employed in the analysis. Because this study was primarily descriptive and exploratory, effect sizes and confidence intervals were not presented.

Results

Were there significant changes in OLTS exit sample disability categories over time?

Students with non-cognitive disabilities over time

Figure 1 shows rates over time for non-cognitive disabilities of learning, other health impairments, emotional, and sensory-physical categories. It shows what appears to be an increase in the rate for Other Health Impairments.

Figure 1. OLTS rates (%) for non-cognitive disabilities over time (N=6,872)

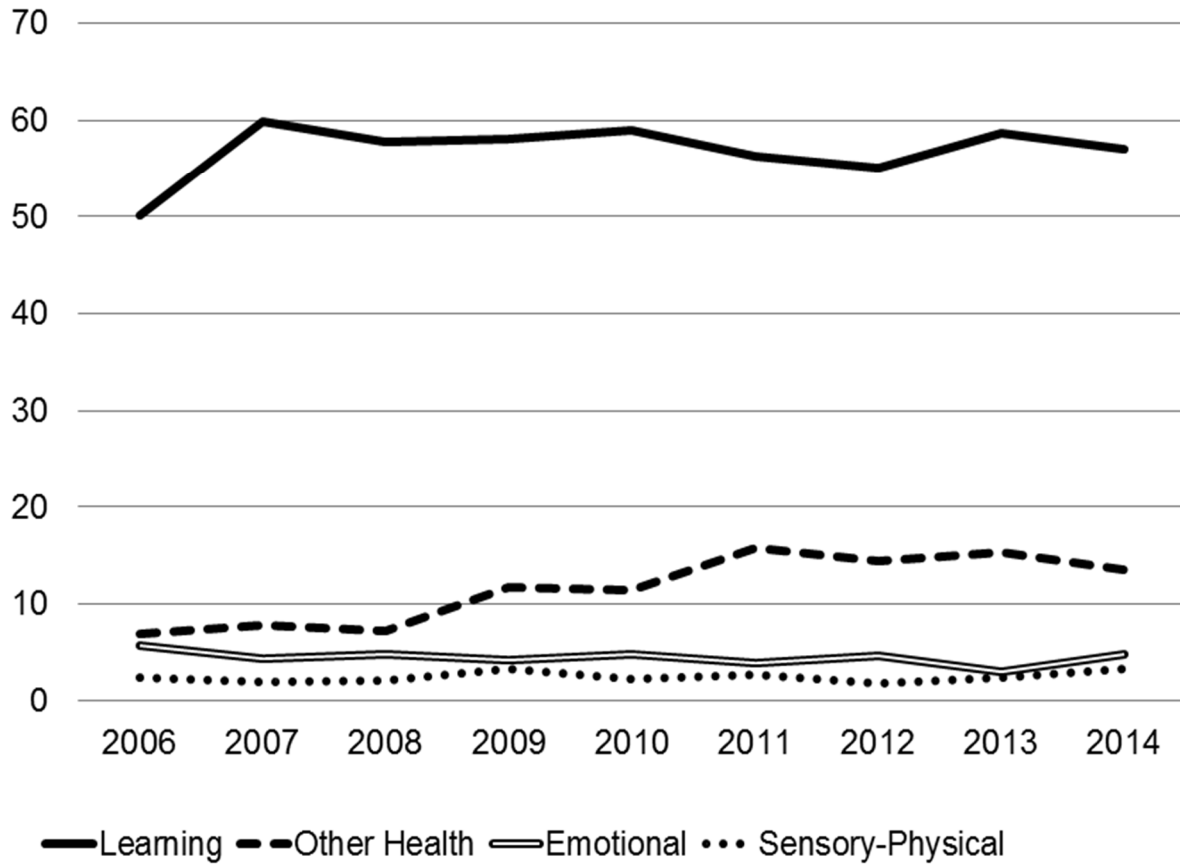


Table 1 shows that the OLTS year was a significant positive predictor of exiters categorized as having Other Health Impairments ($p < .000$) after controlling for female and African-American status. African-American status also was a significant negative modifier ($p < .000$) for an exiter being categorized as having Other Health Impairments.

Table 1 OLTS survey year as a predictor of exiters with Other Health Impairments

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	.103	.015	.000	1.108
African-American Status	-.495	.106	.000	.610
Constant	-2.435	.096	.000	.088

Students with cognitive disabilities over time.

Figure 2 shows the disability rates for students with cognitive disabilities (i.e. intellectual disabilities, multiple disabilities, autism, and traumatic brain injury over time). This figure shows a large decrease in students categorized as having intellectual disabilities (IDEA category of mental retardation) and a substantial increase in students with autism over time.

Figure 2 OLTS disability rates (%) for cognitive disabilities over time (N=2,047)

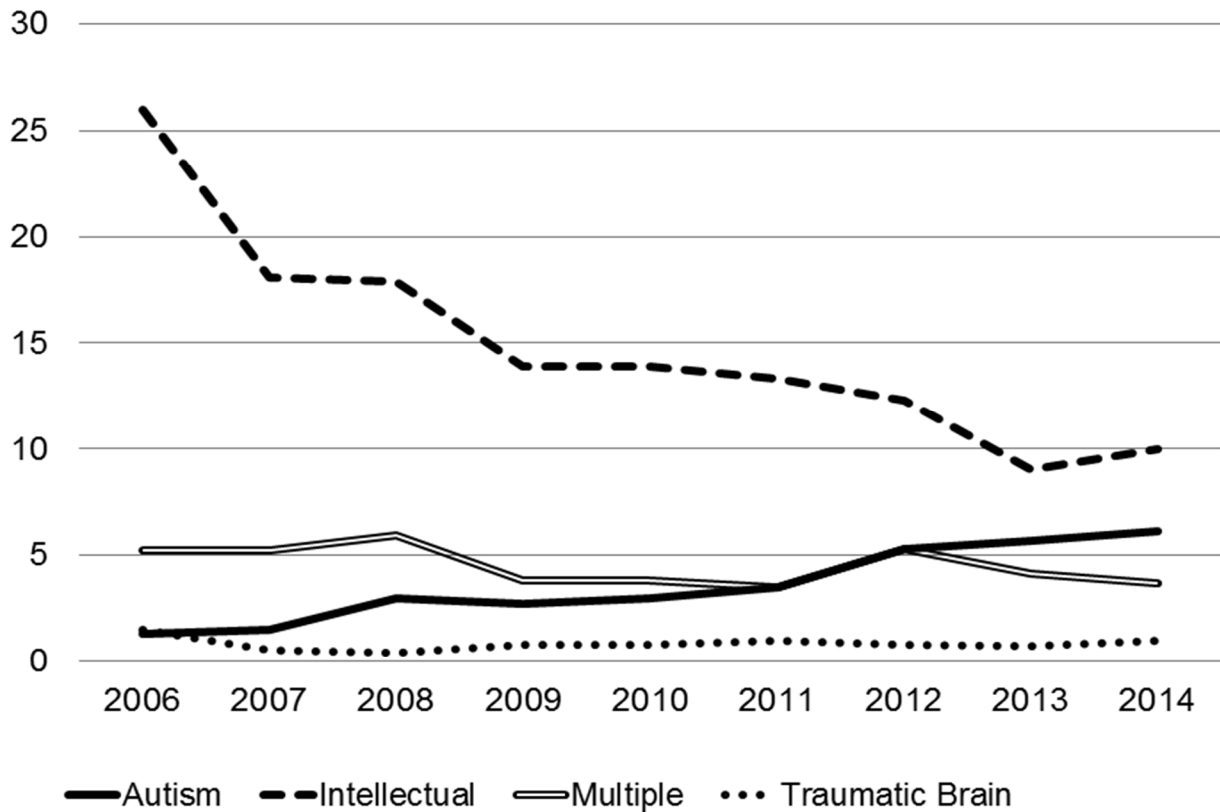


Table 2 shows that the OLTS year was a positive predictor of exiters reported as having Autism ($p < .000$) after controlling for female and African-American status. This indicated that exiters reported as having Autism became more prevalent in the later years. Female and African-American status were significant and substantial negative modifiers for Autism.

Table 2 OLTS survey year as a predictor of Autism

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	.190	.027	.000	1.209
Female Status	-1.322	.158	.000	.267
African-American Status	-.970	.228	.000	.379
Constant	-3.920	.177	.000	.020

Table 3 shows that OLTS year was a negative predictor of exiters reported as having Intellectual Disabilities after controlling for female and African-American status. Female and African-American status were significant positive modifiers for Intellectual Disabilities.

Table 3 OLTS survey year as a predictor for Intellectual Disabilities (ID)

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.127	.014	.000	.880
Female Status	.376	.062	.000	1.456
African-American Status	.854	.073	.000	2.349
Constant	-1.489	.082	.000	.226

Were there significant changes in OLTS exit sample secondary programs over time?

Programs for students with non-cognitive disabilities

Figure 3 shows secondary programs for students with non-cognitive disabilities (i.e. learning, other health impaired, emotional, and sensory-physical) as reported in the OLTS for the Years 2006-2014. This figure shows that the proportion of students who were reported to be in work study showed a substantial drop over time. The percentage of graduation tests (OGT) was closely related to regular education participation. Other secondary programs showed no significant trends for this period.

Figure 3 Secondary programs for students with non-cognitive disabilities over time

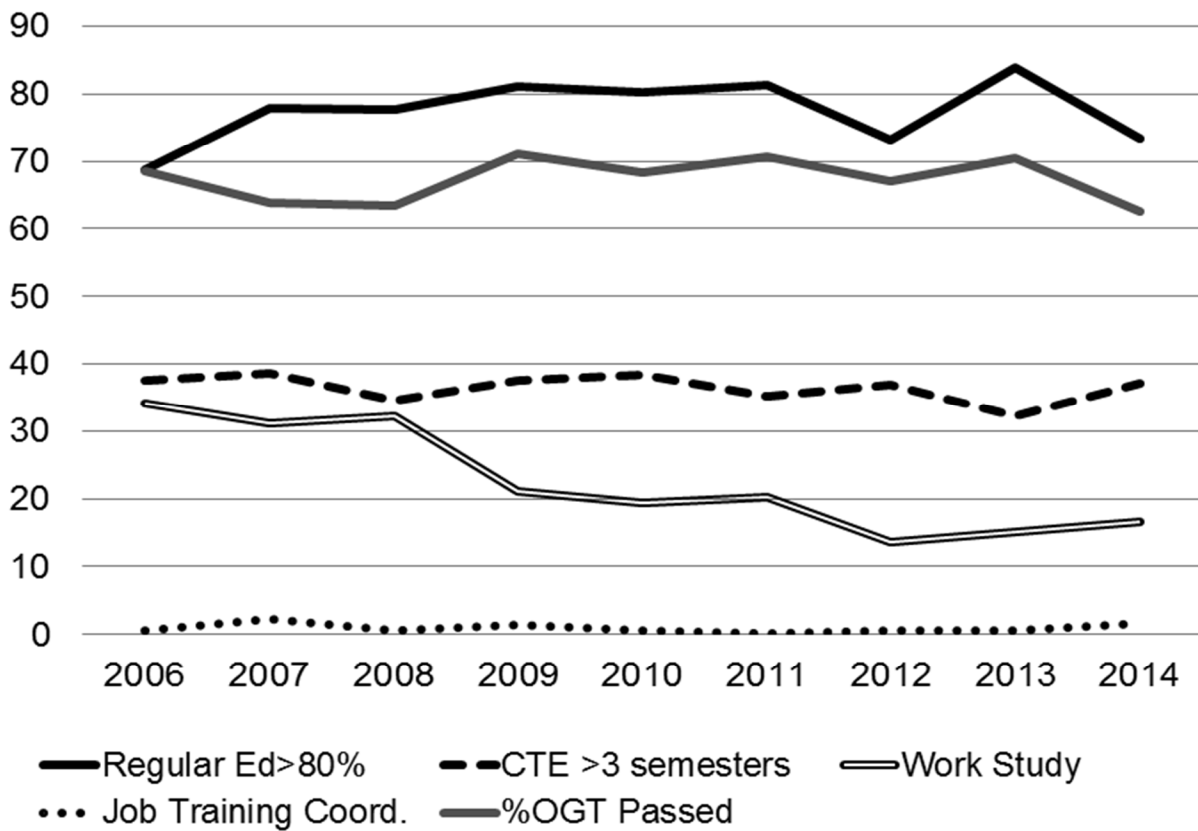


Table 4 shows that the OLTS survey year was a significant negative predictor of work study participation for exiters with Learning Disabilities ($p < .000$) after controlling for female and African-American status. This indicated that work study participation significantly declined for students with LD for the 2006-2014 period. African-American status was a significant positive modifier for reported participation in work study for this group.

Table 4 OLTS survey year as a predictor of work study for students with LD

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.147	.016	.000	.864
African-American Status	.389	.094	.000	1.476
Constant	-.603	.091	.000	.547

Table 5 shows that OLTS survey year was a significant negative predictor of work study participation for exiters with Other Health Impairments ($p < .000$) after controlling for female and African-American status. This indicated that work study participation significantly declined over the nine-year period for students with Other Health Impairments.

Table 5 OLTS year as a predictor of work study for students with Other Health Impairments

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.162	.038	.000	.851
Constant	-.609	.227	.007	.544

Secondary programs for students with cognitive disabilities

Figure 4 shows that programs for students with cognitive disabilities (autism, intellectual, multiple, and traumatic brain injury) showed a substantial decline in the proportion of students who were reported to be in work study. Other secondary programs did not show any apparent increases or decreases for the same period. The percentage of graduation tests passed (OGT) appeared to mirror the percentage of students in each cohort who were in regular education classes more than 80% of the time.

Figure 4 Secondary programs for students with cognitive disabilities over time (N=2,047)

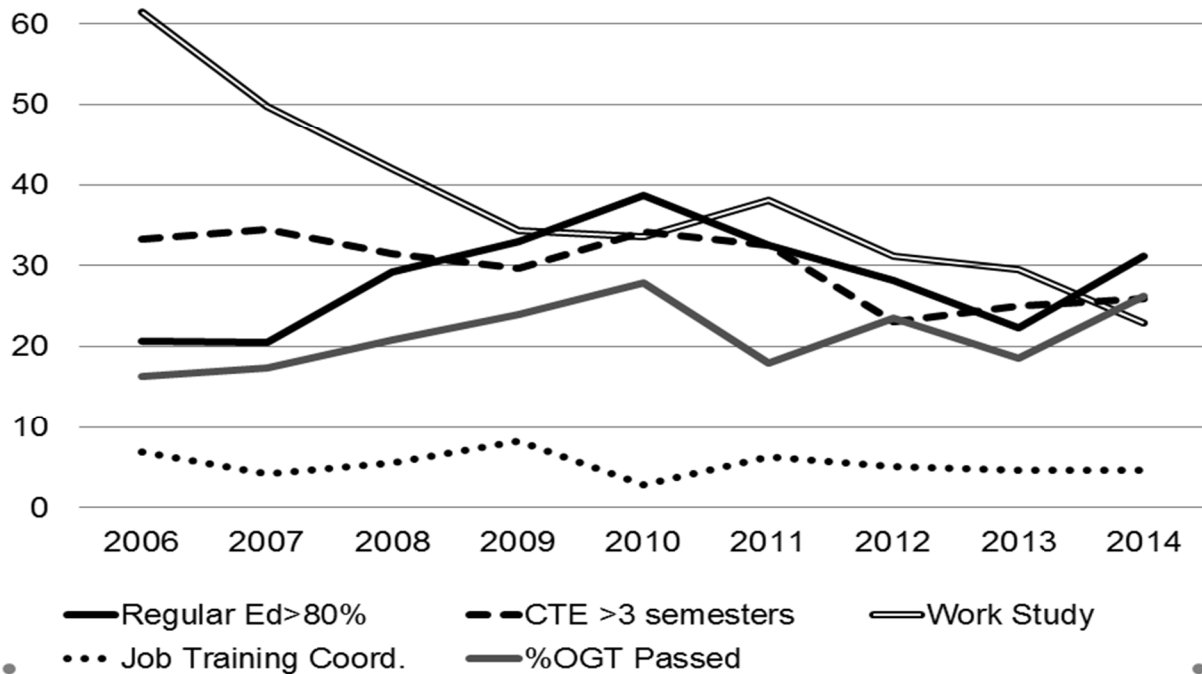


Table 6 shows that the OLTS year was a significant negative predictor of reported work study participation among students categorized as having intellectual disabilities (IDEA category of mental retardation) after controlling for female and African American status.

Table 6. OLTS year as a predictor of work study for students with intellectual disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.161	.027	.000	.851
Constant	.226	.158	.154	1.253

Table 7 shows that the OLTS year was a significant negative predictor of reported work study participation for students with multiple disabilities after controlling for female and African-American status. African-American status was a significant positive modifier for work study participation for students with multiple disabilities. Declining work study participation

was noted for students with autism and traumatic brain injury, but not at a significant level due to the smaller sample size for these groups.

Table 7 OLTS year as a predictor of work study for students with multiple disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.144	.047	.002	.866
African-American Status	.738	.271	.006	2.092
Constant	.271	.272	.319	1.311

Were there significant changes in OLTS exit sample postschool outcomes over time?

Outcomes for students with non-cognitive disabilities

Figure 5 shows the outcomes for students with non-cognitive disabilities (i.e., learning, other health impairments, emotional, and physical-sensory). This figure shows significant declines in full and part-time employment outcomes for 2009-2012 but recovery in part-time work, and to a lesser degree full-time work outcomes, for 2013 and 2014.

Figure 5. Outcomes for students with non-cognitive disabilities over time (N=6,824)

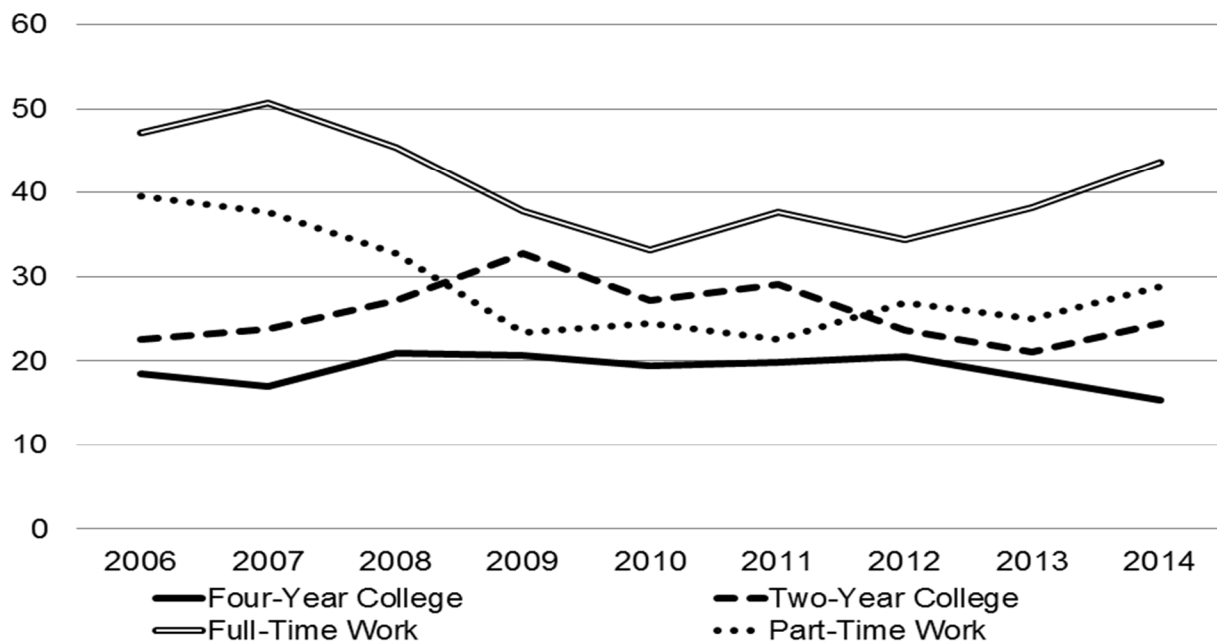


Table 8 shows that the year of exit was a very small but significant negative predictor of part-time work for exiters with learning disabilities after controlling for female and African-American status. Female status was a significant negative modifier of part-time employment outcomes for this disability group.

Table 8. OLTS year as a predictor of part-time for students with learning disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.054	.014	.000	.948
Female Status	.259	.063	.000	1.296
Constant	-.751	.084	.000	.472

Figure 6 shows the trends in postschool outcomes for students with cognitive disabilities as a combined group. This figure shows a substantial drop in both full and part-time employment outcomes for this group over time with some recovery noted in employment in 2013.

Figure 6 Outcomes for students with cognitive disabilities over time ((N=2,055))

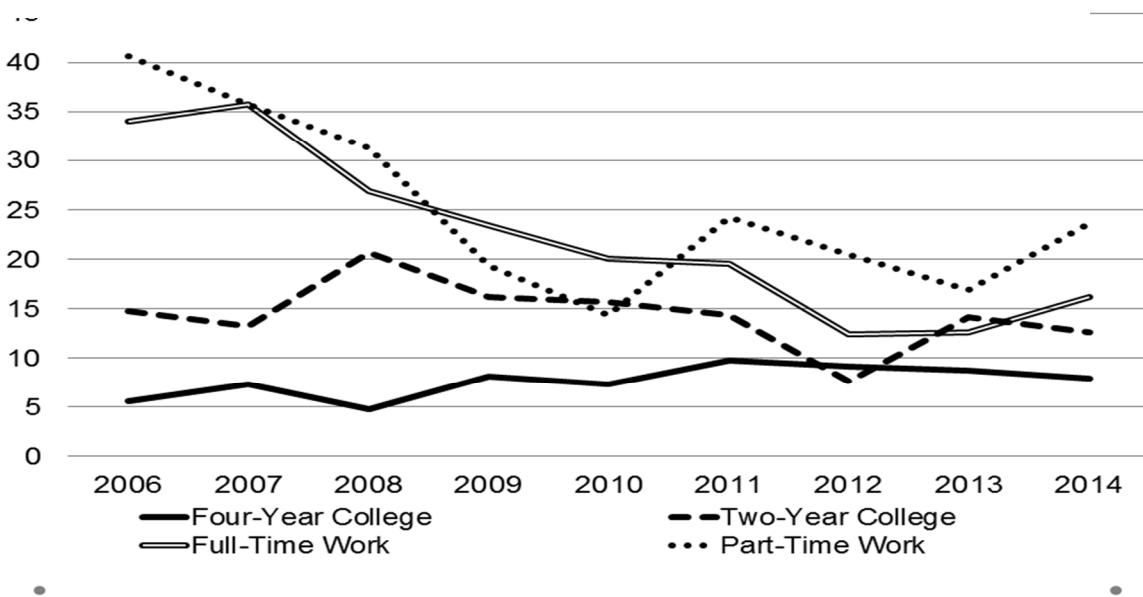


Table 9 shows that the OLTS year of exit was a significant negative predictor of two-year college for students with intellectual disabilities after controlling for female and African-

American status. Female and African-American status were significant positive modifiers of two-year college enrollment.

Table 9. OLTS year as a predictor of two-year college for students with intellectual disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.104	.036	.004	.901
Female Status	.548	.163	.001	1.730
African-American Status	.619	.169	.000	1.856
Constant	-1.747	.217	.000	.174

Table 10 shows that the OLTS year was a significant negative predictor of full-time employment for students with intellectual disabilities after controlling for female and African-American status. Female status was a significant negative modifier of full-time employment.

Table 10. OLTS year as a predictor of full-time work for students with intellectual disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.137	.029	.000	.872
Female Status	-.414	.130	.001	.661
Constant	-.069	.168	.682	.934

Table 11 shows that the year of exit was a significant negative predictor of full-time work for exiters with multiple disabilities after controlling for female and African-American status. Female and African-American status were not significant modifiers of full-time work outcomes for this disability group.

Table 11. OLTS year as a predictor of full-time work for students with multiple disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.272	.079	.001	.762
Constant	-.786	.398	.048	.456

Table 12 shows that the year of exit was a significant negative predictor of part-time work for exiters with intellectual disabilities after controlling for female and African American status. Female and African-American status were not significant modifiers of full-time work outcomes for this disability group.

Table 12. OLTS year as a predictor of part-time work for students with intellectual disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.127	.030	.000	.881
Constant	-.504	.147	.001	.604

Table 13 shows that the year of exit was a significant negative predictor of part-time work for exiters with multiple disabilities after controlling for female and African-American status. Female and African-American status were not significant modifiers of part-time work outcomes for this disability group.

Table 13. OLTS year as a predictor of part-time work for students with multiple disabilities

	B	S.E.	Sig.	Exp(B)
OLTS Survey Year	-.230	.064	.000	.795
Constant	-.537	.312	.085	.584

Discussion

Were there significant changes in OLTS exit sample disability categories over time?

National trends showed a decline in students categorized as having intellectual disabilities and increases for autism and other health impairments. The decline in students categorized as having intellectual disabilities and the concurrent increase in the number of students with autism may represent a shift in assumptions about the characteristics of students with intellectual disabilities. However, because autism includes a broad spectrum of students may also impact how students with both cognitive and non-cognitive disabilities are viewed.

In this study, the authors found trends in disability categories for the Great Lakes state studied mirrored in the national data, except for a decrease in learning disabilities. The incidence of intellectual disabilities declined while autism skyrocketed. For non-cognitive disabilities the authors found that the category of other health impairments significantly increased, but the authors did not find a significant decrease in the incidence of learning disabilities. These findings

indicated that in general, national disability category trends were being reflected in the state studied.

The practice implications of these disability category trends include the need for extensive personnel development related to serving students with autism and for students with other health impairments. For autism training may need to include an increased emphasis on managing distracting environments, eliminating stressors, and developing routines. For students with other health impairments such as attention deficits and hyperactivity it may indicate the need for many of the same approaches as for autism, but may also include the need for training in flexible presentation, engagement, and response options for these students.

Were there significant changes in OLTS exit sample secondary programs over time?

National trends indicated a move toward inclusion in the general education curriculum and away from training in vocational and life skills training. In this study, the authors found no significant changes in the proportion of exiters in general education, career-technical education, or supported employment participation for the nine-year period. It did find a significant and substantial decline in work study participation. This suggests that the decrease in participation in work study programs was not offset by a higher proportion of exiters who were in general education classes more than 80% of the time.

From this study, it was impossible to determine whether work study participation was simply phased out or whether students who would have been in this program were now being served in special education classes focused on the general curriculum. The re-definition of transition services in the IDEA of 2004 from an “outcome-oriented process that promotes movement from school to postschool activities” to a “results-oriented process . . . that is focused on academic and functional achievement” may have been interpreted to mean greater focus on

“in-school” transition activities. This shift may have been further supported by an emphasis on “evidence-based” transition activities which have been nearly exclusively developed for promotion of in-school versus postschool outcomes.

The implications of these findings suggest a need to somehow incorporate work-based learning into the academic curriculum. This could have the effect of improving academic performance by providing students with disabilities with real-world experiences that allow them to learn more effectively. It could also have the effect of improving work-based learning in tasks involving academic competencies. This collaboration could be facilitated through better collaboration between career-technical programs and general education. Additionally, rehabilitation service providers could begin collaborating with schools in transition planning at an earlier age to allow students to participate in work-based learning experiences offered through WIOA.

Were there significant changes in OLTS exit sample postschool outcomes over time?

National trends have required an increasing focus on postsecondary education outcomes and indicate substantial progress for students with disabilities as a whole. However, these data suggest that students with cognitive disabilities have experienced increasingly higher rates of failure in academic coursework and fewer gains in postsecondary education. For the same period, these students showed some gains in postsecondary education but significant declines in post high school employment outcomes.

This study showed no significant increases in postsecondary education for 2006-2014 and significant decreases in postschool employment outcomes for students with cognitive disabilities. This finding coupled with a concurrent decrease in work study participation for these students points to a possible concern that these students were moved from secondary programs that were

better predictors of employment without concurrent improvements in postsecondary education outcomes. Though the economic recession certainly contributed to employment declines for all students with disabilities between 2009 and 2013, the finding that long-term employment losses were mainly confined to students with cognitive disabilities suggested that it was not the only factor.

The declining employment outcomes of students with cognitive disabilities point to the need for a wider range of postsecondary education options, as well as better transition-to-work alternatives for these students. For students capable of entering degree or certificate programs at two-year college this implies strengthening of postsecondary disability supports as well as strengthening the ability for students to strengthen their advocacy and self-determination skills. For students who cannot be reasonably expected to complete any existing certificate or degree programs, it may be necessary to create postsecondary education options that give them more time to prepare for entering the work force. The recent growth in Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID) funded by the Office of Postsecondary Education may provide the opportunity for these students to learn work, independent living, and further academic skills with their non-disabled peers.

Limitations of this Study

This study was conducted in a single state and may not reflect trends in other states. The sample included only exiters who could be successfully reached one year after exiting high school and therefore cannot be generalized to students who dropped out and could not be reached one year after exit. As a secondary data analysis, the researchers could not rule out the possibility that school programs were coding disabilities or secondary programs in a way that biased the results. For example, work study participation may have been coded differently by schools in an

effort to bring themselves into greater compliance with the academic requirements of the IDEA of 2004/.

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