

Developing and Implementing a Longitudinal Tracking System for Students with Disabilities after K-12 Departure

The Research & Planning (R&P) section of the Wyoming Department of Workforce Services is in a unique position to describe labor market outcomes for Wyoming high school students by analyzing data collected through its Workforce Data Quality Initiative (WDQI) grant, administrative databases, surveys, and data-sharing agreements with 11 other states¹. In addition to developing the tools whereby labor market information is available, R&P examines the high school enrollment rates and labor market participation rates for students with an Individualized Education Program (IEP) or a 504 Vocational Rehabilitation Accommodation Plan (504 plan) as one measure of the effectiveness of school-based early intervention programs for students with a documented disability.

In the 2009/10 school year, 13,173 Wyoming public school students, or 14.8% of the total, were classified as “children with disabilities” by the U.S. Department of Education, which includes those students who had an IEP or a 504 plan. The majority of the students classified in this manner by the U.S. Department of Education had an IEP.

In the U.S. in 2014, 17.1% of persons with a disability were employed, compared to 64.6% of the population without a disability, according to the U.S. Bureau of Labor Statistics. The unemployment rate for persons with a disability in the U.S. was 12.5% in 2014, more than double the rate for persons without a disability (5.9%).

The ability to identify where students work, what they earn, and their participation in the labor market during (and after) the high school years is critical to setting program goals and improving employment opportunities for those with a disability. Knowing the distribution of labor market participation at the sub-state level gives educators and policymakers empirical evidence on which to base workforce and education policy decisions. Therefore, it is prudent to

¹ States with which R&P has data sharing agreements are Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.

examine participation in the labor market, earnings, and 12th grade completion rates for students with either IEPs or 504 accommodation plans in Wyoming public schools.

Example: Wyoming High School Senior Class of 2010

Of the Class of 2010, 984 students (12.4%) had an IEP at some point in their academic careers. Of the 7,919 students in the Class of 2010, 30.8% (2,438) did not graduate high school that year (see **Table 1**). Of the 984 students with an IEP from the Class of 2010, 433, or 44.0%, did not graduate high school in 2010. Of the 107 students from the Class of 2010 with a 504 plan, 27 (25.2%) did not graduate their senior year of high school.

	Total	IEP^a	504 Plan^b
Class of 2010			
N	7,919	984	107
%	100.0%	12.4%	0.6%
Did Not Graduate in 2010			
N	2,438	984	27
%	30.8%	44.0%	25.2%
Working in Wyoming or Other State in 2010			
N	5,439	584	85
%	68.7%	59.3%	79.4%
Wages in Wyoming in 2010			
Mean Annual Wage	\$6,566	\$6,308	\$5,810

^aIEP = Students with an Individualized Educational Program.
^b504 Plan = Students with a Section 504 Vocational Rehabilitation Plan.
 Source: Custom Extract from Workforce Data Quality Initiative (WDQI) Project.

For the Class of 2010, 584 students with an IEP (59.3%) were found working in Wyoming or a partner state in 2010, compared with 68.6% of the general education population (see **Table 2**). Based on Unemployment Insurance (UI) wage records, 56.7% of students with IEPs had earnings in Wyoming in 2010, compared to 65.0% of all students from the Class of 2010. An additional 26 students with an IEP (2.6%) had earnings in other states based on wage records, compared to 3.6% for the total Class of 2010. As shown in the **Figure**, in 2010, students with an IEP or 504 plan working in Wyoming earned slightly less than the mean annual wage for all students from the Class of 2010. The mean annual wage for students from the Class of 2010

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working in Wyoming was \$6,566. The average earnings for those with an IEP for the same year were \$6,308, while the average earnings for students with a 504 plan were lower, at \$5,810.

Table 2: Characteristics of Selected Segments of the Wyoming High School Class of 2010

Source Description	Data ID	Data Description	2007	2008	2009	Senior 2010	2011	2012	2013
All Secondary School Students (N = 7,919)									
Total Wage Records	2.0000	Number with Wages	3,421	4,825	4,868	5,439	5,596	5,473	5,381
	2.0010	Percent with Wages	43.2	60.9	61.5	68.7	70.7	69.1	68.0
	2.0030	Mean Annual Wage	\$2,333	\$3,604	\$4,465	\$6,566	\$10,233	\$13,167	\$15,626
WY Wage Records	2.0110	Percent with Wages	41.8	59.1	59.7	65.0	64.7	62.1	59.1
Other States Wage Records	2.0200	Percent with Wages	1.4	1.8	1.8	3.6	5.9	7.0	8.9
Any State Post-Secondary School ^a	3.0100	Number Enrolled	109	591	1,232	3,287	3,275	2,803	2,518
	3.0110	Percent Enrolled	1.4	7.5	15.6	41.5	41.4	35.4	31.8
Individualized Educational Program (N = 984)									
Total Wage Records	2.0000	Number with Wages	405	531	526	584	615	609	612
	2.0010	Percent with Wages	41.2	54.0	53.5	59.3	62.5	61.9	62.2
	2.0030	Mean Annual Wage	\$2,050	\$3,344	\$4,241	\$6,308	\$9,799	\$13,603	\$15,350
WY Wage Records	2.0110	Percent with Wages	39.6	52.1	51.6	56.7	57.9	57.0	56.2
Other States Wage Records	2.0200	Percent with Wages	1.5	1.8	1.8	2.6	4.6	4.9	6.0
Any State Post-Secondary School ^a	3.0100	Number Enrolled	7	22	70	204	197	145	114
	3.0110	Percent Enrolled	0.7	2.2	7.0	18.8	17.6	11.4	8.3
Section 504 Accommodation (N = 107)									
Total Wage Records	2.0000	Number with Wages	56	69	70	85	83	80	78
	2.0010	Percent with Wages	52.3	64.5	65.4	79.4	77.6	74.8	72.9
	2.0030	Mean Annual Wage	\$1,900	\$2,933	\$3,598	\$5,810	\$9,679	\$12,388	\$13,521
WY Wage Records	2.0110	Percent with Wages	51.4	62.6	64.5	73.8	70.1	65.4	61.7
Other States Wage Records	2.0200	Percent with Wages	*			5.6	7.5	9.3	11.2
Any State Post-Secondary School ^a	3.0100	Number Enrolled		7	19	48	48	39	37
	3.0110	Percent Enrolled		6.5	17.8	44.9	44.9	36.4	34.6

* Black cells indicate non-discloseable data.
^aSource: National Student Clearinghouse.
 Source: Workforce Data Quality Initiative Report No. 1 for Wyoming School Attendance and Employment, 2006 to 2013, Appendix A&B and non-published data.

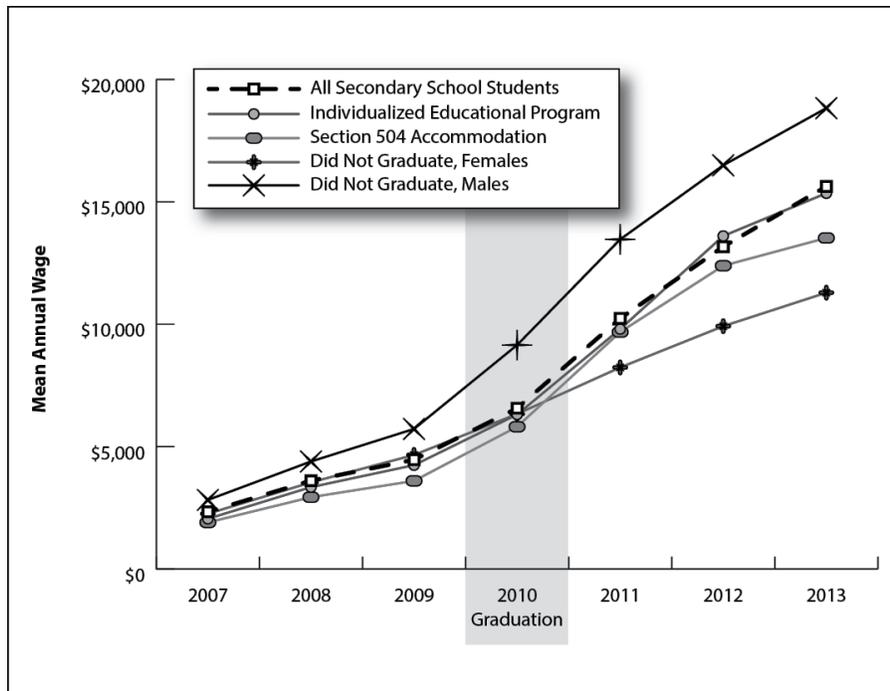


Figure: Mean Annual Wage of Selected Segments of the 2009/10 Cohort Year

Future Research and Further Reading

While directions for future research are broad, the statistical application of WDE student data and administrative records offers tools to interested parties and service providers to improve the planning and delivery of services to the student population with special needs. Data published in R&P reports offer those with oversight responsibility for early intervention and special education delivery – such as Head Start, Child Development Services of Wyoming, the Wyoming Department of Education, school boards, the Wyoming State Legislature, and the Wyoming Governor’s Council on Developmental Disabilities – with an additional empirical and effective tool to carry out their duties.

While research is clear that early intervention programs positively affect student readiness, little has been written about the availability of early intervention services in rural states like Wyoming. Because Wyoming is a rural state and access to early intervention services may be severely limited due to the geographic location of the family in need and the location of qualified service providers, the distribution of public school staff with early intervention service credentials (e.g., speech and language pathologists, occupational therapists, etc.) warrants

examination. Understanding the staffing patterns of Wyoming public schools and the distribution of early-intervention service providers in the state is key in order to facilitate the effective delivery of programs and services which can impact the completion rate and labor market participation rate for individuals with disabilities. One example of improved service delivery might be helping the state's vocational rehabilitation agency identify students who are eligible for 504 programs at a younger age, so that students who would benefit from the program may have the opportunity to access vocational rehabilitation services before high school graduation. Understanding which school districts have access to licensed service providers and an adequate number and type of service providers is also necessary to ensure that early intervention needs are met for all Wyoming students who would benefit from such an intervention.

Workforce Data Quality Initiative Report No. 1 for Wyoming: School Attendance and Employment, 2006 to 2013. Chapter 3: Outcomes for Students with Disabilities.

http://doe.state.wy.us/LMI/education_we_connect/WDQI_Pub1.pdf

WE Connect, Part 3: Graduation and Work Experience for Students with Special Needs.

http://doe.state.wy.us/LMI/education_we_connect/WE_Connect_Part_3.pdf

Persons with a Disability: Labor Force Characteristics Summary

<http://www.bls.gov/news.release/disabl.nr0.htm>