

What are the impacts of receiving a high school diploma as compared to earning a GED or dropping out?

This paper is one in a multi-part series using data produced from the pilot Michigan Workforce Longitudinal Data System (WLDS). The WLDS is created by combining administrative records from multiple state databases, covering topics such as workforce development, education, and unemployment insurance. Once matured, WLDS data can be leveraged to answer a number of important questions related to the workforce and education, from the employment outcomes of Michigan's students to the effectiveness of state assistance programs.

In this part of the series, the labor market outcomes of those receiving a high school diploma will be examined in comparison to those earning a GED or dropping out of high school. In particular, this paper will discuss both the average time it takes to find employment and the median earnings for those individuals that have attained a high school diploma or less, and demonstrate how these outcomes compare with those that have attained post-secondary certificates or degrees.

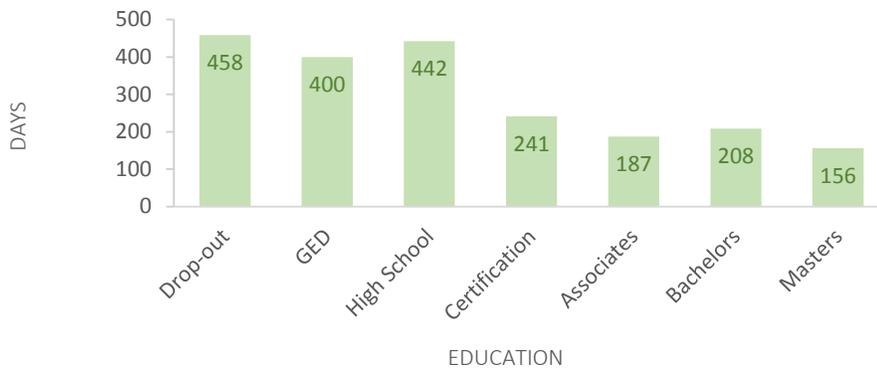
As a technical note, the initial run of WLDS data used a small, select population of Michigan Works! customers as the base upon which the pilot data system was built. All individuals included in the test population had to meet two criteria: they had to exit an education program during the study's target period of July 1, 2009 to June 30, 2011, and they had to be registered as a Michigan Works! customer at any point between December 10, 1999 and June 30, 2014. Due to circumstances under which an individual typically visits a Michigan Works! office, this test population is not representative of the state population as a whole. For instance,

employment outcome data for this group is often less positive than for the population due to employment barriers faced by a number of Michigan Works! customers. **Consequently, none of the data presented in this paper should be viewed as a valid representation of the Michigan population. Rather, this paper is meant to provide an illustration of the types of information that can be made available when the WLDS is fully expanded.**

Time to Employment

One of the key contributions of the WLDS is identifying how different educational groups fare in the Michigan labor market, and identifying how long it takes students to find work after graduating is an important part of answering this question. Looking at Figure 1 (page 2), we can see the average time to employment by educational attainment in the WLDS test population. For those who attained a high school diploma or less, there appears to be no discernable correlation between level of education and time needed to find a job. Those who have obtained a GED have the lowest time

Figure 1: Average Time to Employment by Education



to employment of 400 days, whereas high school graduates take an average of 442 days to find paid work. High school dropouts take slightly longer at 458 days. Looking across all three categories, it is quite surprising that high school graduates perform roughly the same as dropouts and worse than those with GEDs. However, this could very well be a product of the unique test population of Michigan Works! customers.

When examining all educational categories, the greatest difference in time to employment is between those who have some kind of post-secondary credential and those who do not. Specifically, there is a substantial drop from an average time to employment of 442 days for those with high school diplomas, to only 241 days for those with a certification. This 45% reduction is significant, as it represents an additional six months spent trying to find a job for those with diplomas compared to those with certificates. For individuals with education beyond high school, those who have a higher level of education typically take less time to find employment. With the exception of those with bachelor's degrees, time to employment goes down as educational attainment increases.

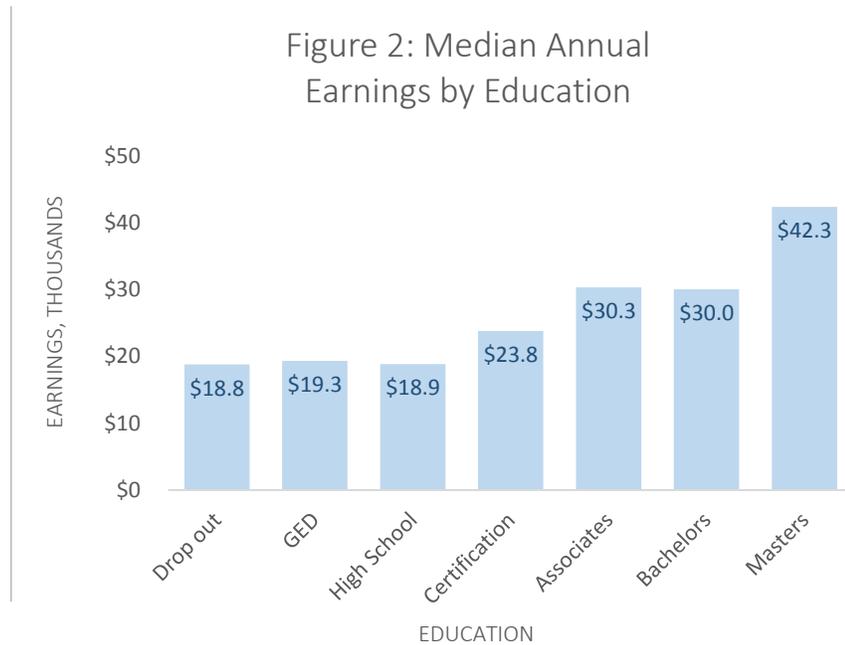
Again, it is important to recall that these data only represent the test population of Michigan Works! customers. Once the WLDS is expanded, the relationship between education and employment can be examined in the wider student population.

Earnings

To further examine the relationship between education and the labor market, Michigan's WLDS can tell us not only how long it takes students to find a job, but also how much they earn once employed. Figure 2 examines the relationship between educational attainment and median annual earnings in the WLDS test population. As in Figure 1, there is once again no relationship between attainment and labor market outcomes for those earning a high school diploma or less. Those who possess a GED have the highest median annual earnings of the group at \$19,323, while those with a high school diploma make \$18,866. Surprisingly, high school dropouts make only marginally less than graduates, earning \$18,803.

When comparing those who have a post-secondary credential, however, we can see that there is an overall positive correlation between educational attainment and median annual earnings. These data suggest that there is only a marginal difference in earnings between high school dropouts and graduates, while there is a strong financial return for educational attainment beyond high school. Yet, it is important to note that this relationship is unusual and likely a product of the unique test population in the WLDS. Looking at comparable data from the U.S. Census Bureau, Michigan high school dropouts earned over \$2,000 less than their counterparts in the test population, while those with high school diplomas and GEDs earned significantly more.

Overall, census data show a positive relationship between earnings and educational attainment at every level of education, not just those beyond high school. This discrepancy between the WLDS and census data shows the inherent bias in examining only Michigan Works! customers, and the importance of expanding the WLDS to the broader student population.



Conclusion

Once expanded, Michigan’s WLDS will provide critical information that helps students and other stakeholders understand how education choices influence labor market success. It will not only provide earnings and employment information for various educational outcomes, but this information can also be disaggregated in a number of ways, such as by cohort or prosperity region. Moreover, WLDS data can be linked with information to help identify the full cost of high school students dropping out, as well as measure the return on investment of programs that promote greater educational attainment. In summary, while existing information is currently limited, future development of the WLDS will allow stakeholders to answer a number of important questions related to the economic outcomes of Michigan’s students.

This paper is the product of a partnership between multiple state agencies. The WLDS is managed by the Michigan Workforce Development Agency, while all research and analysis is conducted by the Michigan Bureau of Labor Market Information and Strategic Initiatives. Data for the WLDS is provided by the Michigan Workforce Development Agency, Michigan Center for Educational Performance and Information, and Michigan Unemployment Insurance Agency.