Labor Market Returns for Trade School Programs

Overview of GI Bill-Eligible Trade School Programs

Comparing Outcomes for Public, Nonprofit, and For-Profit Sectors

WEAK RETURN ON INVESTMENT AT TRADE SCHOOLS THAT ENROLL GI BILL BENEFICIARIES

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Weak Return on Investment at Trade Schools that Enroll GI Bill Beneficiaries

**Highlights**

We found that student outcome data at Title IV-participating trade schools that enroll GI Bill beneficiaries in certificate programs showed a disappointing return-on-investment but robust retention and graduation rates (see table 1). For example, 70% of students graduated from trade schools attended by GI Bill beneficiaries, but less than half earned more than a high school graduate 10 years after enrolling. Although other research shows that earnings after graduation vary considerably based on the certificate being pursued, the dataset we used is only beginning to provide such program-level data.

The robust graduation rate of 70% is likely related to the shorter-term nature of certificates compared to associate’s degree programs: just 32% of first-time, full-time students earned an associate’s degree by 2017-18, 3 years after first enrolling.

**Table 1: Student Outcomes at Trade School Certificate Programs That Enroll GI Bill Beneficiaries**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Average rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>75%</td>
</tr>
<tr>
<td>Graduation (first-time, full-time students)¹</td>
<td>70%</td>
</tr>
<tr>
<td>Borrowed federal student loans</td>
<td>51%</td>
</tr>
<tr>
<td>Repaid 1 year after entering repayment²</td>
<td>31%</td>
</tr>
<tr>
<td>Defaulted within 3 years of entering repayment²</td>
<td>14%</td>
</tr>
<tr>
<td>Earned more than $28,000 after 10 years³</td>
<td>43%</td>
</tr>
</tbody>
</table>

Source: VES analysis of Education Department College Scorecard data.

¹Rate reflects students who graduate within 150% of the program’s length.

²Repayment rates are for independent students who paid down at least $1 of their federal student loan debt principal. Independent students are no longer financially dependent on their parents.

³The average earnings of high school graduates aged 25-34 is $28,000.

In addition to aggregate data, we also analyzed outcomes by sector. The for-profit trade schools that we analyzed skewed the aggregate outcomes because they enrolled 77% of the students attending certificate programs. However, as discussed later in this Issue Brief, other student outcomes at for-profit trade schools are generally poorer than in the public and nonprofit sectors.

**Labor Market Returns of Certificates**

Considerable attention is focused on GI Bill beneficiaries seeking college degrees where, despite variation, the return on investment is generally considered to be high, particularly for bachelor’s degrees. The return on investment for those pursuing job-oriented, career-education training at trade schools receives much less attention.

The research findings on the labor market returns of certificate programs are nuanced, making generalizations difficult. A 2012 report by the Georgetown University Center on Education and the Workforce found considerable variation in labor market returns based on occupation, gender, geographic location, and whether graduates were employed in their field of study. For example, the study found that the 44% of certificate graduates who were employed in their field of study had an in-field earnings premium of 37% compared to individuals with high school diplomas, and the wage premium for men was higher than for women. In fact, certificates in fields with the highest proportion of men had about the same value as associate’s degrees. Notably, removing healthcare certificates—the largest field of study and one dominated by women—contradicted the narrative that short-term certificates, which require less than 1 year of instructional time, have little economic value.

**Trade School Programs, GI Bill Enrollment, and Accreditation**

About 7,800 trade schools approved to enroll GI Bill beneficiaries offer no other credentials than certificates.

**Enrollment.** Trade schools, however, enroll a small proportion (about 5%) of the 974,000 beneficiaries using the GI Bill in 2017. Moreover, only 43% of trade schools (3,346 of 7,778) had at least 1 beneficiary enrolled in 2017. By sector, for-profit schools enrolled the majority of beneficiaries—82%; public and nonprofit trade schools enrolled 15% and 3% of beneficiaries, respectively. The majority of schools (68%) enrolled fewer than 10 beneficiaries. However, about 85% of beneficiaries were enrolled in the 32% of schools with 10 or more GI Bill students.

**Accreditation.** GI Bill-eligible schools need not be accredited, which is a prerequisite for schools to participate in the Title IV program. For those trade schools that had beneficiaries enrolled in 2017:

- 59% were accredited, enrolling 63% of beneficiaries;
- for-profit and public schools were equally likely to be unaccredited (about 40%), but the majority of nonprofit schools lacked accreditation (55%); and
- about 85% of beneficiaries at unaccredited schools were in the for-profit sector.
Program Length. According to the Georgetown University report cited above, short-term certificates that take less than a year are the most common (54% of certificates), followed by those that take between 1-2 years to complete (41%). The remaining 5% of certificates take more than 2 years. During our research, we identified one GI Bill eligible school where students can earn a certificate in as little as a week of classroom and field instruction—the Montana Fishing Guide School.

What Type of Training Do Trade Schools Offer?

Although some trade schools focus on training in specific occupations, others offer career training in a wide variety of fields.

Frequently, the training that some certificate programs provide is reflected in the school’s name—e.g., Houston School of Carpentry, Dive Oahu Inc, South Dakota School of Massage Therapy, Birmingham Police Academy, New York City Fire Department Academy, Desert Hills High School, and Heartland Baptist Bible College. About 25% of trade schools that enroll beneficiaries specialize in cosmetology. According to our analysis of preliminary Education Department data, the most popular certificate program offered by for-profit schools is in cosmetology and personal grooming services. In contrast, practical/vocational nursing and nursing assistants are the top training programs offered by public institutions.

Several states, such as Florida, New York, Tennessee, and Oklahoma, operate “public technical institutes” offering certificates in a wide variety of occupations. These technical schools operate separately from the states’ community college systems. For example, beneficiaries enrolled in the Francis Tuttle Technical Institute in Oklahoma can earn certificates in fields such as cooking, automotive repair, practical nursing, cosmetology, and dental assisting. Some for-profit and nonprofit trade schools also offer certificates in a wide variety of occupations.

Trade School Outcomes by Institutional Sector

As noted, aggregate data obscures important inter-sector differences in outcomes at trade schools. In general, outcomes at public and nonprofit trade schools were better than those at for-profits trade schools that also offer career-education training (see table 2).

Graduation. Graduation rates were 3 percentage points higher at public and 10 percentage points higher at nonprofit trade schools compared to for-profits, which reported that 69% of students completed certificates within 3 years of enrolling.

We also examined the distribution of graduates across sectors and found that poorer-performing for-profits actually enrolled more students than those with stronger outcomes. For example, 49% of the for-profit trade schools that enrolled about half of the GI Bill beneficiaries pursuing certificates had graduation rates of less than 70%. In contrast, 65%-75% of beneficiaries were enrolled at public and nonprofit trade schools that graduated 70% or more of students; and, 64% of beneficiaries were enrolled at nonprofits that graduated 80% or more of students.

Debt. For-profit trade school students were much more likely to have student loan debt than those who attended other sectors. Thus, 57% of students who attended for-profit trade schools had federal loan debt compared to students who had enrolled in public (29%) and nonprofit (48%) institutions. Moreover, at 72% of for-profit trade schools, 70% or more of students had federal loan debt. Repayment. For-profit school students had slightly lower loan repayment rates compared to students who attended other sectors. Within 1 year of entering repayment, 30% of independent students at for-profit trade schools had begun paying off their student loans compared to 39% at public and 34% at nonprofit institutions.

Default. Default rates were similar across institutional sectors. For example, 14% of students who enrolled in for-profit trade schools defaulted within 3-years of entering repayment compared to 13% and 12% at public and nonprofit institutions, respectively.

Earnings. For-profit school students had lower earnings than those who attended public and nonprofit institutions. Just over a third of students (38%) who received federal student aid at a for-profit trade school made more than a high school graduate within 10 years after enrolling, compared to 57% and 56% of such students who enrolled in public and nonprofit sector trade schools, respectively. Earnings data include both graduates and non-completers.

Methodology

Initially, we had planned to analyze the veteran-specific GI Bill Comparison Tool’s data on retention and graduate rates for trade schools, supplementing those data with other student outcome measures found on the Education Department’s (ED) College Scorecard. However, concern about the accuracy, completeness, and currency of the Comparison Tool data and its comparability to ED reported data led us to rely instead on College Scorecard data.
Comparison Tool shortcomings. First, the Comparison Tool reports graduation rates for individuals using benefits who completed a certificate in that term, a measure that excludes those who had exhausted their benefits by the time they graduated. In addition, there is no clear timeframe for the data being reported. In contrast, the Scorecard reports completions for the cohort of first-time students who enrolled at the same time, a more accepted methodology.

Second, the Comparison Tool dataset is poorly documented. For example, we were unable to determine whether a “blank” meant that the school had not voluntarily reported data; whether a blank was different from a “0%” graduation rate; or why so many schools reported a 100% graduation rate, which seemed questionable.8

Third, the crosswalk that enables VA to identify GI Bill approved schools that participate in Title IV is incomplete, out of date, and sometimes inaccurate.2 For example, 52% of schools that enroll about 3% of beneficiaries have no crosswalk and we identified a number of instances in which a for-profit and public institution had the same ED school identification number, which is clearly an error. The crosswalk was constructed manually for the 2014 launch of the Comparison Tool, and no automated process was ever established to update it as schools merged, were sold, or closed locations.

College Scorecard analysis. We used ED’s College Scorecard to analyze outcomes for trade schools that offer no other credentials than certificates and that enroll GI Bill beneficiaries. We excluded other schools that had certificate programs if they also offered degrees.

To identify trade schools that GI Bill beneficiaries attend, we used the GI Bill Comparison Tool, which reflected calendar year 2017 enrollment.10 We excluded job training, flight programs and foreign schools from this analysis.11 These exclusions left a total of 14,185 participating schools. Of those, 7,778 (55%) offer no other credentials than certificates—that is, they are trade schools.12 Fifty-seven percent, however, had no beneficiary enrollment in 2017.

The number of trades schools enrolling at least one beneficiary that we were able to match in College Scorecard differed by outcome because some schools lacked data for one or more of the six variables analyzed. For example, earnings and repayment data were available for about 900 trade schools, while 1,400 to 1,500 schools had data for graduation and federal loans, respectively. The Scorecard data reflect outcomes for 2016–17 academic year. The averages reported are unweighted and count each institution equally. The size of the match was limited by the fact that some trade schools eligible to enroll GI Bill beneficiaries are not Title IV eligible and therefore are not included in the Scorecard.

Table 2: Student Outcomes for Trade School Certificate Programs That Enroll GI Bill Beneficiaries

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>For-profit</th>
<th>Public</th>
<th>Nonprofit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>75</td>
<td>74</td>
<td>82</td>
</tr>
<tr>
<td>Graduation (first-time, full-time students)a</td>
<td>69</td>
<td>72</td>
<td>79</td>
</tr>
<tr>
<td>Borrowed federal student loans</td>
<td>57</td>
<td>29</td>
<td>48</td>
</tr>
<tr>
<td>Repaid 1 year after entering repaymentb</td>
<td>30</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>Defaulted within 3 years of entering repayment</td>
<td>14</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Earned more than $28,000 after 10 yearsc</td>
<td>38</td>
<td>57</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: VES analysis of Department of Education College Scorecard data.

aRate reflects students who graduate within 150% of the programs’ length.
bRepayment rates are for independent students who paid down at least $1 of their federal student loan debt principal.
cThe average earnings of high school graduates aged 25-34 is $28,000.

1Schools that offer no other credentials than certificates are known as non-college degree programs. This Issue Brief refers to them as “trade schools.”
2The program level data currently available is limited to the number of borrowers, the number of degrees awarded, and the mean and median federal student loan debt. Small programs (<10 students) have no data at all. ED plans to expand the type of program-level outcomes it reports to include earnings and loan default and repayment rates.
3Based on our analysis of 2016 Department of Education survey data, about three quarters of all undergraduate veterans are male.
4Healthcare certificates represented almost half of certificates awarded in 2010 and 57% of those who graduated from for-profit schools. See pp. 21 and 28 of this hyperlink.
5Some schools that participate in the GI Bill do not participate in Title IV even though they are accredited.
More than 100 institutions are public, nonprofit, and for-profit high schools, offering high school diplomas or college-preparatory programs. Heartland Baptist Bible College offers certificates in church music, biblical studies, and ministry secretarial studies.

A 2014 study identified 12 states that have technical institutes that are separate from their community college systems (see pp. 6-7 of hyperlinked study). In some states, including South Carolina, the technical institutes also offer associate’s degrees.

Legislation enacted in December 2016 (§ 404 of P.L. 114-315) required all schools that participate in the GI Bill to begin reporting “academic progress,” as defined by VA, beginning in December 2017. Prior to the enactment of § 404, VA could not require schools to report veteran outcomes. VA officials told us that they plan to begin reporting the data in 2019.

VA and ED assign different codes to identify schools. The crosswalk enables VA to identify the same school in ED’s databases, allowing VA to import data such as accreditation status and a variety of outcome measures.

We downloaded the Comparison Tool dataset we analyzed on April 2, 2019.

The excluded correspondence, foreign, and flight schools totaled 371, and 18,339 organizations offer job training or apprenticeships.

The remaining schools offer either a combination of certificates and primarily associate’s degrees or associate’s degrees and higher.