RESEARCH REPORT

August 14, 2018 | 18-5

HIGH SCHOOL 21+ OUTCOMES

Until 2014, the General Educational Development (GED®) test dominated the high school equivalency (HSE) test market throughout the United States, to the point that educational experts acknowledged the acronym "GED" had become synonymous with "high school equivalency."[i] However, changes to the test, the way it is administered, and the test's management brought about a shifting HSE landscape that would see states adopt alternative methods for demonstrating secondary equivalency.[ii]

This research report examines Washington state's HSE alternative – High School 21+ (HS21+) – by comparing pre- and post-completion outcomes to those of the GED®. The report first explores demographic information of completers from both programs, comparing said demographics with the state population lacking a high school diploma or equivalent. The report then looks at the population of students who earn a postsecondary certificate or degree prior to completion of the GED® or HS21+ as well as those who continue in the Washington community and technical college (CTC) system after completing either program. Finally, the report compares employment outcomes for both groups and offers some suggestions to ensure the HS21+ program continues to offer enhanced opportunities for those it serves.

About this report

The HS21+ program first started in 2013. The new nature of HS21+ relative to GED® limits the data in this report to four cohorts when reviewing post-completion academic outcomes and three cohorts when reviewing employment outcomes. Because Washington CTCs administer HS21+, the comparative data from the GED® program includes only those achieved through GED® prep at a CTC, excluding those earned through community-based organizations and independent study.

Employment and wage data comes from a match of student records with unemployment insurance (UI) data. As a result, this provides an employment rate for those with a valid Social Security number in UI-covered positions only. All wage data is adjusted for inflation to the first quarter of 2017.

As further explained below, the 2013-14 cohort of completers does not reflect the volume of other cohorts examined in this report. In cases where inclusion does not fundamentally change results, the 2013-14 cohort is included in aggregate calculations and listed alongside the other cohorts when broken out by year. Readers should use caution when inferring conclusions based on this outlier cohort alone.

Summary of Key Findings

- GED® test participation declined significantly after 2014, the year the GED® was overhauled, and high school equivalency awards by community and technical colleges have not since recovered.
- The population served by the HS21+ program is better aligned in terms of race/ethnicity with the overall state population of adults who lack a high school diploma or its equivalent.

COMMUNITY AND TECHNICAL COLLEGES
Washington State Board

CONTACT INFORMATION
Travis Dulany
Policy Research Associate
p: 360-704-1070
e: tdulany@sbctc.edu

- As expected from a program with minimum age requirement, HS21+ serves a slightly older population. The median age for GED® completers in the four cohorts examined was 24, while HS21+ served a group whose median age was 28.
- Demographics in age, gender, and race/ethnicity, among other factors, signal that the programs serve different populations, which provides at least some explanation for the varying outcomes experienced in both programs.
- About 3 percent of participants held a postsecondary credential from a Washington state community or technical college before completing their GED® or HS21+ program. A significant portion of these students earned these credentials multiple years before completing the GED® or HS21+ program.
- A higher percent of GED® recipients continued enrollment at a community or technical college after demonstrating high school equivalency. Similarly, a higher percent of GED® recipients went on to earn a postsecondary credential, and GED® completers tended to go further in their postsecondary pursuits to earn a higher-level certificate, as well.
- Across most cohorts, GED® recipients were more likely to enroll in college-level coursework. However, this gap narrowed when considering only those courses for which a student grade was reported, and the grade distribution between both programs is nearly identical.
- Up to 16 percent of GED® recipients and 18 percent of HS21+ awardees enrolled in a basic skills course after completion. Although course names and descriptions suggest these courses are designed to transition students on to further education or the workplace, further review is needed to ensure proper coding of these courses and appropriate course placement of GED® and HS21+ completers.
- When broken out by race/ethnicity, gaps in post-completion outcomes in the HS21+ program suggest opportunity to improve postsecondary credential attainment among certain groups.
- One year after completion, GED® recipients demonstrated higher employment rates than HS21+ graduates, a difference of about 7 percent annually. This gap narrowed when restricting the populations to ages 21 and older.
- Both the GED® and HS21+ programs appear to have a positive impact on employment rates.
- HS21+ completers demonstrated higher hourly wages across the three cohorts examined, although this is likely due to the older HS21+ population.
- One year later, the highest proportion of working completers from both programs work in the Retail Trades and Accommodation and Food Services industries, with restaurants having the highest concentration.

Background: Declining GED® Completions and the Introduction of HS21+

GED® and the New Era of High School Equivalency

The American Council on Education (ACE) first administered GED® tests in 1942 to soldiers returning from World War II. The test grew in popularity across the US over the succeeding decades, undergoing revisions in 1978, 1988, and 2002.[iii] However, educational companies and organizations challenged GED®'s universal HSE success as the test underwent its fourth revision in the years leading up to 2014, transforming the HSE market into a more competitive one.[iv]

A number of factors played a role in the shifting HSE landscape prior to 2014. First, control and management of the GED® test changed hands when ACE, a non-profit organization overseen by educational administrators, created a jointly run limited liability corporation in partnership with the for-profit Pearson Company. With new management of the test came changes to its administration. The new version required students to take the test on a computer, specifically in a Pearson VUE certified testing location. This had implications for students, who would now require keyboarding skills, as well as colleges and community-based organizations administering the test, who would need to make site changes at testing facilities. The implications were even more significant for correctional facilities, where computer access is restricted, although Washington did not experience the challenges many other states faced.[v] Second, the overhauled 2014 test came with a higher price for most students. In Washington, the price went from $75 to $120. Test prices vary based on what subsidies are offered, but on average the price increased.[vi]

GED® Testing Service has suggested the revised test, although more expensive, offers a more dynamic and rigorous experience, aligned with modern standards, that is intended to be more meaningful to employers and postsecondary institutions as the test-taker seeks attainment beyond the GED®. The more rigorous battery of tests measure (1) reasoning through language arts, (2) mathematical reasoning, (3) science, and (4) social studies, all of which are administered through four separate 70 to 150 minute exams.[vii] Implementing a new battery of tests with revised subjects, however, also meant students who had only completed part of the series prior to 2014 would have to retake the entire battery of tests once the new version went live.

As the changes to the GED® played out, two other educational organizations – CTB/McGraw-Hill[viii] and Educational Testing Service[ix] – introduced their own HSE exams. While some states continued to use the GED®, others replaced the GED® with one of its new competitors.[x] All of this coincided with a decline in GED® participation and completion throughout the country – a decline to which Washington was not immune.[xi]

A 2016 Washington Student Achievement Council (WSAC) and Washington State Board for Community and Technical Colleges (SBCTC) study[xii] of the GED® noted the 2014 test changes coincided with a 62.8 percent decline in participation in the state. Citing the National Council of State Directors of Adult Education, the report notes test participation typically increases the year before a major change to the GED® test, as students are working to complete the test or else be required to retake the entire series, and then sharply decreases in the first year of the new test. In Washington, test participation fell from 22,734 test-takers in 2013 to 8,450 the following year. The WSAC/SBCTC study notes participation did not rebound in 2015, with about 9,597 test-takers.

As further discussed below, HSE achievement throughout the Washington community and technical college system has not recovered from these declines.

High School 21+

Washington's alternative HSE program graduated its first cohort around the same time GED® test-takers began clicking through the new computer-based test. The HS21+ program was authorized under state statute allowing community and technical colleges to issue a high school diploma under certain conditions and upon meeting specified academic standards.[xiii] HS21+ students demonstrate competencies in reading, writing and math contextualized in science, history, government, occupational studies, and digital literacy. However, HS21+ is separated from traditional HSE methods in that it allows completers to show their command of the various subjects through previous high school or college coursework; work, life, and military experience; a prior learning portfolio; and credit for testing. SBCTC advertises the program as one that "expands high school completion options already offered by the community and technical college system to include a comprehensive approach that aligns with adult learning styles and includes competency-based

assessments that demonstrate academic, career and personal competencies needed for further education and employment."

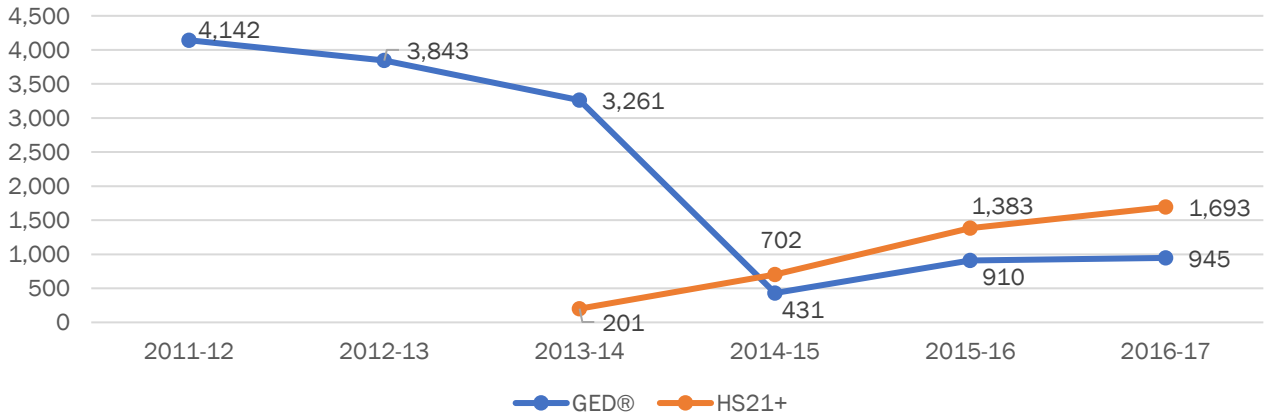
As the name implies, participants in the HS21+ program must be at least 21 years old, a requirement not applied to the GED®. Advisors assess students' education and work readiness and then create a customized plan of action. Once the plan is created, students take classes selected to fill education gaps and then move to the next level once they have mastered the subject matter. Different from the GED®, students completing the program receive a high school diploma, rather than a certificate of equivalency.[xiv]

Participation and Demographics

Participation

At Washington CTCs, high school equivalency achievement has not recovered from the sharp decline in 2014. Despite annual growth over the three years since the GED® overhaul and the introduction of HS21+, high school credentials awarded by CTCs still trail pre-2014 levels. In the most recent academic year, 945 test-takers at CTCs passed the GED® while nearly 1,700 were awarded HS21+ diplomas. In total, this represents a 23.8 percent decline compared with 2013-14. Figure 1 illustrates the change over the last five years.

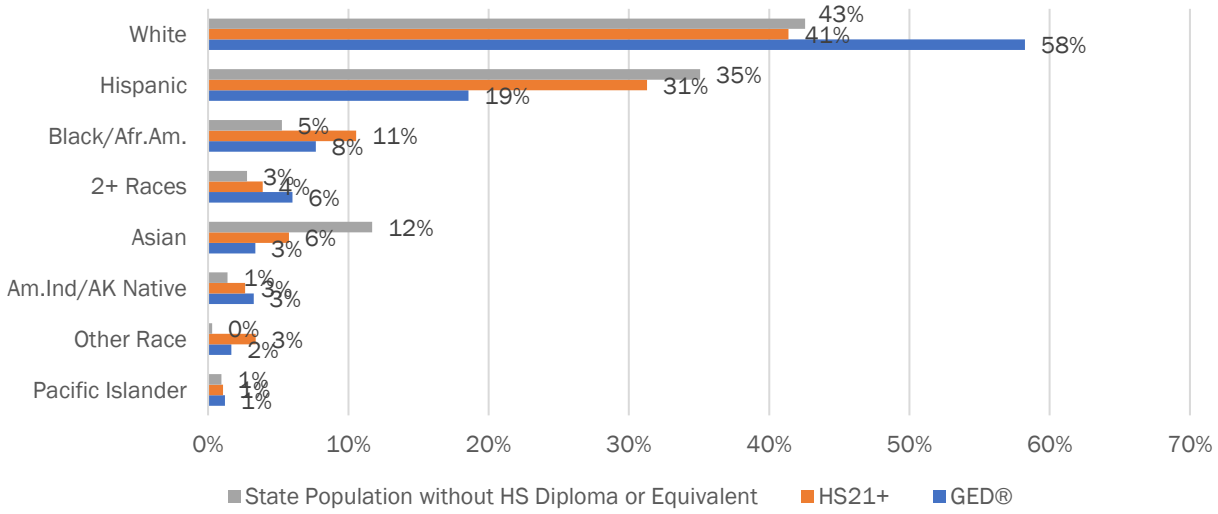
Figure 1
GED® and HS21+ completers by year



Demographics

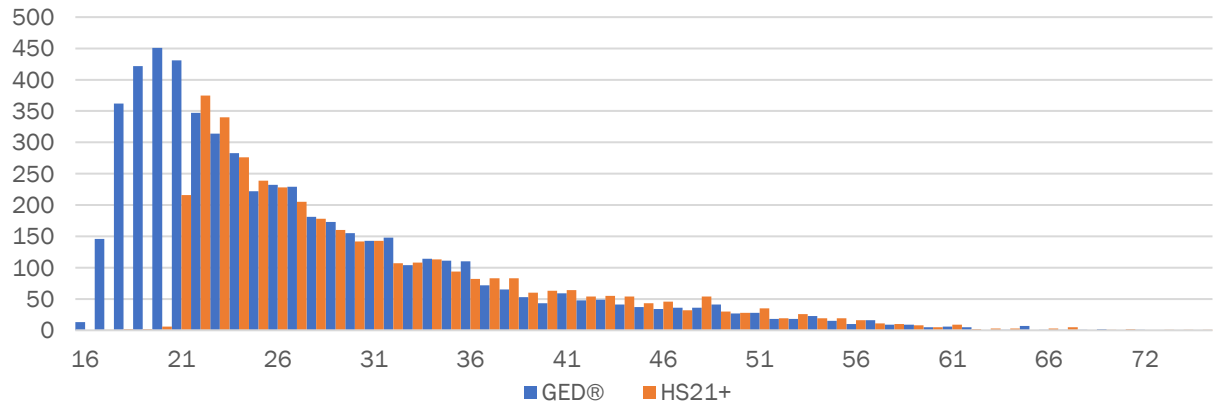
Despite the lower completion levels, the growth over the last four years in the HS21+ program signifies promise for many who lack a high school diploma or its equivalent, particularly for underserved populations. According to 2016 American Community Survey estimates[xv], about 9 percent of Washingtonians over the age of 25 do not have a high school diploma or its equivalent. Disaggregated by race and ethnicity, Figure 2 shows the distribution of this population compared to those who have passed the GED® or received a HS21+ diploma over the last four years. Although not an exact matchup, the population served by the HS21+ program better aligns with the overall state population lacking a high school diploma or its equivalent. As an example, Hispanic students comprise 35 percent of the population without a high school credential and 31 percent of those who completed HS21+. Compared to the 19 percent of GED® completers who are Hispanic, this suggests the HS21+ program is serving a higher percent of certain in-need populations, which will ultimately contribute to equity and inclusion efforts in education.

Figure 2
Race/Ethnicity of all GED® and HS21+ completers and percent of working-age population in need of a high school credential



As expected from a program with minimum age requirements, HS21+ serves a slightly older population. The median age for GED® completers in the four cohorts examined was 24, while HS21+ served a group whose median age was 28. Figure 3 shows a significant portion of GED® completers received their HSE credential between ages 16 and 18, signifying some school-aged Washingtonians opt to complete a GED® before they would have otherwise completed high school.

Figure 3
Age upon completion of GED® & HS21+



In addition to being younger, GED® completers over the last four years have a more even gender distribution, with 53 percent males and 47 percent females. This differs significantly from the predominately female HS21+ population, with 63 percent of completers being female and 37 percent male.

Table 1 shows the 10 colleges awarding the highest percent of HS21+ credentials over the four-year period. Renton Technical College awarded the highest proportion, about one-fifth, of HS21+ diplomas. Renton also serves a significant share, about one-third, of Hispanic HS21+ completers, which has implications when reviewing post-completion outcomes, further discussed later in this report.

Table 1
Ten colleges awarding the highest percent of HS21+ diplomas 2013-14 through 2016-17

College	% of HS21+ Diplomas
Renton Technical College	21.8%
South Puget Sound Community College	12.5%
Lower Columbia College	9.4%
Big Bend Community College	8.7%
Edmonds Community College	7.2%
Bates Technical College	6.9%
Tacoma Community College	5.9%
Clark College	4.7%
Grays Harbor College	3.7%
Wenatchee Valley College	2.9%

About 2.6 percent of GED® awardees and 3 percent of HS21+ graduates held a postsecondary credential from a Washington state CTC before completing their GED® or HS21+ program. The vast majority of these postsecondary credentials were certificates, specifically certificates ranging from one credit to 44 credits, as shown in Table 2.

Table 2
Distribution of postsecondary credentials received prior to GED®/HS21+ completion

Postsecondary Credential	GED®	HS21+	Both Programs	N-Size for Both Programs
Apprenticeship	0.7%	2.5%	1.5%	4
Associate in Arts – Transfer DTA	4.1%	2.5%	3.4%	9
Associate in Business – DTA/MRP	0.7%	0.8%	0.8%	2
Certificate, >= 90 credits	2.1%	2.5%	2.3%	6
Certificate, 1-19 credits	33.6%	27.5%	30.8%	82
Certificate, 20-44 credits	56.8%	52.5%	54.9%	146
Certificate, 45-89 credits	1.4%	9.2%	4.9%	13
WorkForce Degree other than the AAS-T	0.7%	2.5%	1.5%	4
Total	100.0%	100.0%	100.0%	266

Many of these students earned their credentials well before completing a high school diploma or its equivalent. Looking at the two most frequently awarded certificates, GED® students achieved a 1-19 credit certificate an average 4.25 years, and a 20-44 credit certificate an average 2.5 years, before they finished their GED® program. HS21+ completers held the shorter certificate an average 7.3 years before completing their high school diploma, while the average for the longer 20-44 credit certificate was about 5.5 years.

Table 3
Postsecondary credential attainment prior to GED®/HS21+
Average number of quarters prior to high school diploma or equivalent

Certificate	Average Number of Quarters Prior to Completion of GED®	Average Number of Quarters Prior to Completion of HS21+
Certificate, 1-19 credits	17	29
Certificate, 20-44 credits	10	22

About one-third of these credentials were for nursing assistant/aide programs. A higher proportion of HS21+ graduates pursued certification to become a truck & bus driver, while a higher percent of GED® completers received a credential in custodial/building services compared with their HS21+ peers.

Table 4
Postsecondary Credential Attainment Prior to GED®/HS21+
Top programs of study

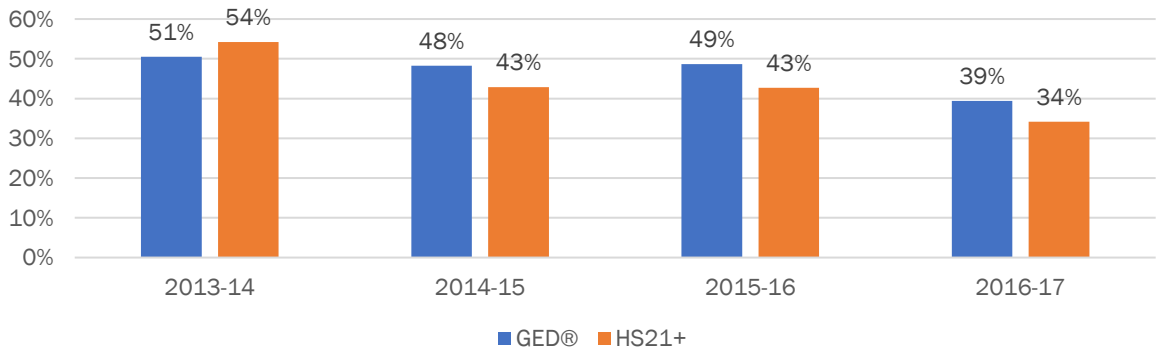
Program of Study	GED®	HS21+	Both Programs
Nursing Asst/Aide	30%	28%	29%
Early Childhood Educ & Tch	4%	5%	5%
Custodial/Bldg Services	7%	2%	5%
Liberal Arts & Sciences	4%	4%	4%
Office Occs & Clerical	5%	2%	3%
Drywall Installation	5%	1%	3%
Flagging & Traffic Control	5%	1%	3%
Truck & Bus Driver	1%	5%	3%
Phlebotomy	1%	4%	2%
Auto Mechanics	2%	2%	2%

Post-Completion Outcomes

Continuing Enrollment

Figure 4 illustrates how a higher percent of GED® recipients continued enrollment at a CTC after demonstrating high school equivalency than HS21+ students. Excluding the outlier year of 2013-14, 5 to 6 percent more GED® completers continued enrollment at CTCs than HS21+ completers.

Figure 4
Percent of GED® and HS21+ completers later enrolling in a CTC



Enrollments taper off over time at a similar rate across both cohorts, shown in Appendix I. For example, 24 percent of the 2014-15 cohort of HS21+ graduates, and 25 percent of GED® completers, enrolled at a CTC one quarter after receiving a diploma. By the 8th quarter after completion, 13 percent of the cohort in both programs were enrolled at a CTC. First quarter retention for HS21+ students declined sharply over the four cohort years as program participation ramped up, which merits further study in future years as enrollments stabilize over time.

Continued Basic Skills Enrollment

As demonstrated in Figure 5, when compared with GED® completers, a higher percent of HS21+ graduates took at least one Basic Skills course after completing their HS21+ program. However, as listed in Table 6, the highest proportion of these courses was in "Educational Interviewing," which, according to one course catalog,[xvi] helps students "develop and monitor a personal plan of action to reach personal, educational, and workplace goals through an orientation to the college community…" The course with the second highest percent of participants serves "students who are currently working or preparing to work in a specific job area and are enrolled in an IBEST program." This additional coursework appears to focus less on providing basic skills and education in core content areas and more on preparing students for higher learning and the workplace. Nonetheless, examples exist where some students enroll in basic skills courses such as Applied Math or Basic Reading & Writing several quarters after completing a GED® or HS21+ credential. Others enroll in HSE prep courses, as shown in Table 6, which lists the top Classification of Instructional Program (CIP) codes. Colleges should review these enrollments to ensure they are coded correctly and address the issues driving these students to enroll in basic skills courses rather than moving on to precollege or college-level coursework.

Figure 5

Percent of GED® & HS21+ completers who take a basic skills course after completion

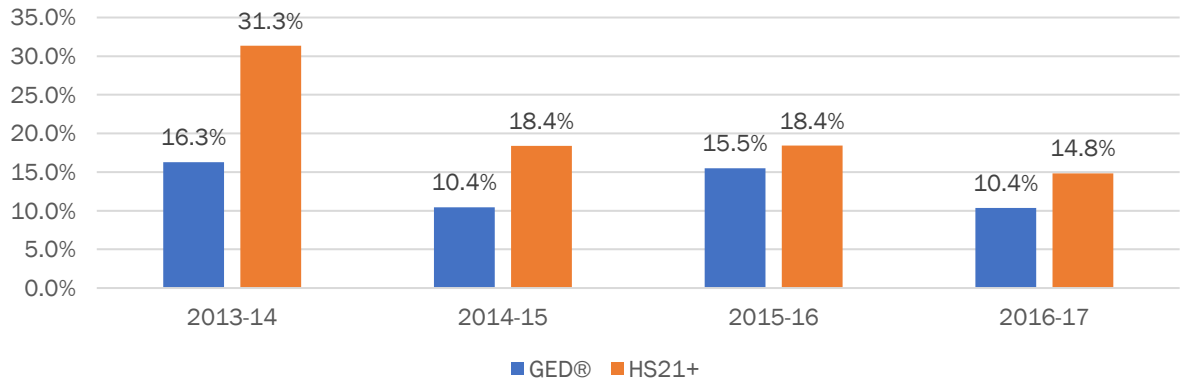


Table 5
Top 10 basic skills course titles and programs of study taken by GED® and HS21+ completers

Top 10 Courses Taken by Students who Enroll in Basic Skills Courses After Completion

Basic Skills Course	GED®	HS21+
Education Interview-ABE	1%	8%
IBEST Academic Sup-lvl E	0%	7%
Case Management: Impact	7%	0%
Educational Intervw-ABE	0%	5%
Educational Interviewing	5%	0%
ELA Intermed Foundation	0%	3%
ABE 4	3%	0%
IBEST Academic Sup-lvl 4	0%	3%
Educational Interview	2%	0%
I-BEST support	1%	1%

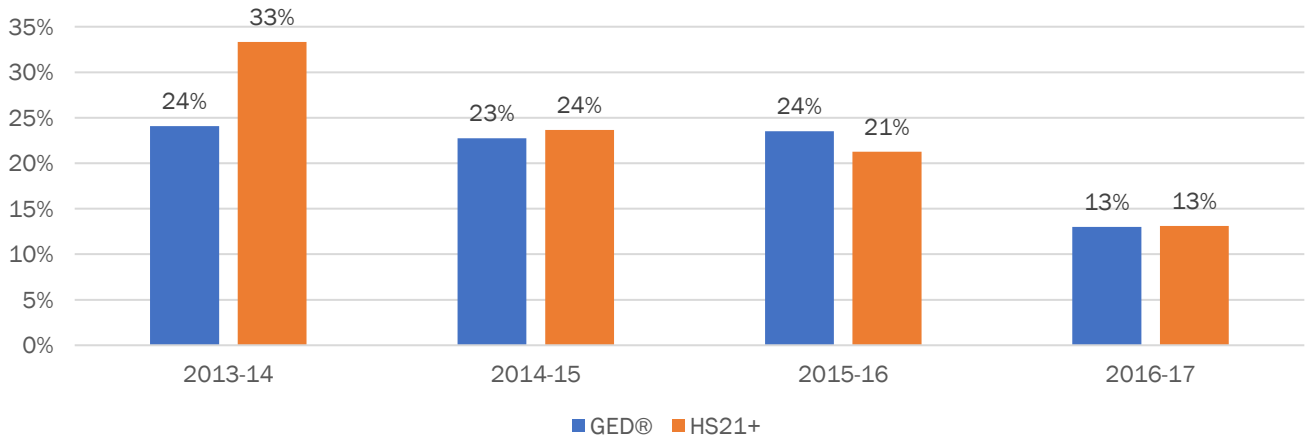
Top 10 CIPs for Students who Enroll in Basic Skills Courses After Completion

Basic Skills CIP	GED®	HS21+
ABE Level 4	26%	29%
Educational Interviewing	13%	20%
Advanced HSE Prep	11%	18%
Basic HSE Prep	15%	4%
ABE Level 3	7%	4%
ESL Level 3	1%	8%
Spec Non-State Funded ABE	9%	0%
ESL Level 4	3%	3%
ESL Level 2	1%	4%
ESL Level 6	1%	3%

Precollege Enrollment

With the exception of the 2013-14 cohort, a similar percent of GED® and HS21+ completers enrolled in precollege, also known as "developmental," coursework intended to help students prepare for introductory college courses.

Figure 6
Percent of GED® & HS21+ completers who take a precollege course after completion



The most common subject area, about two-thirds of precollege courses, was developmental math, as shown in Table 6.

Table 6
Type of precollege coursework for GED®/HS21+ completers

CIP Title	GED®	HS21+
Dev Ed/Computational Skills	65%	63%
Dev Ed/Writing	21%	20%
Dev Ed/Coord Studies	5%	8%
Dev Ed/Reading	5%	6%
Dev Ed/Other	3%	1%
Dev Ed/ESL	1%	0%

College-level Course Enrollment

Although 34 percent to 54 percent of GED® or HS21+ completers later enroll in coursework at a CTC, only 7 percent to 19 percent enrolled in a college-level course, while even fewer earned a grade in the course.

Figure 7
Percent of completers enrolled in college-level coursework

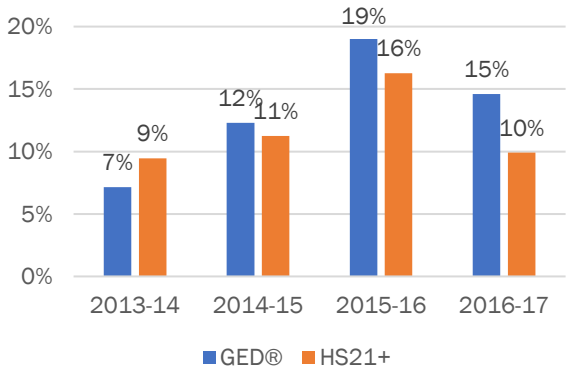
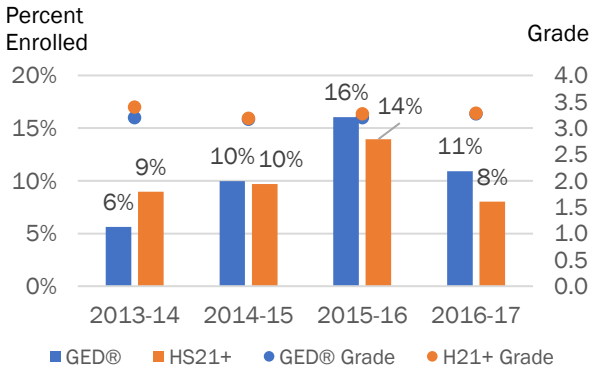


Figure 8
Percent of completers enrolled in college-level coursework *who earn a grade*



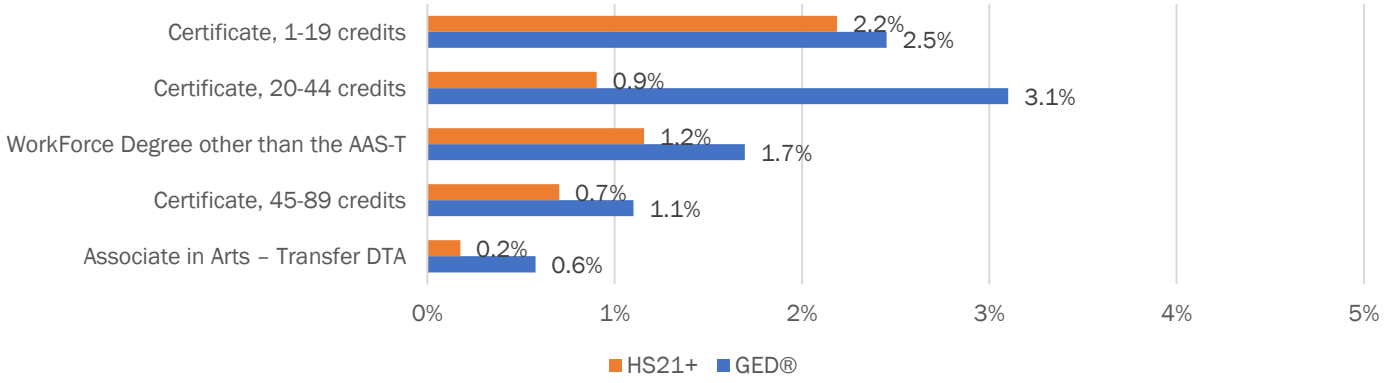
Across most cohorts, GED® recipients were more likely to enroll in college-level coursework, demonstrated in Figure 7. However, Figure 8 shows this gap narrows when considering only those courses for which the student earned a grade, and the grade distribution between both programs is nearly identical. Twenty-four (24) percent of students taking a college-level course enrolled in an English/language arts class, while 11 percent enrolled in college-level math. This distribution is similar across completers of both programs. Note that figures 7 and 8 include all coursework after GED® and HS21+ completion. Because this is not limited to a particular timeframe, the year-over-year change is less significant than the difference between GED® and HS21+ enrollment within a single year.

Postsecondary Attainment

Looking at all four cohort years, 9.2 percent of GED® completers continued on to receive a postsecondary credential, compared with 5.4 percent of HS21+ graduates. However, when removing the outlier year of 2013-14, this evens out to 6.6 percent for GED® postsecondary attainment and 5.2 percent for HS21+. The significantly higher number of GED® completers in 2013-14 skews the postsecondary attainment rate because a significantly higher number in that cohort had a longer period to complete a certificate or degree.

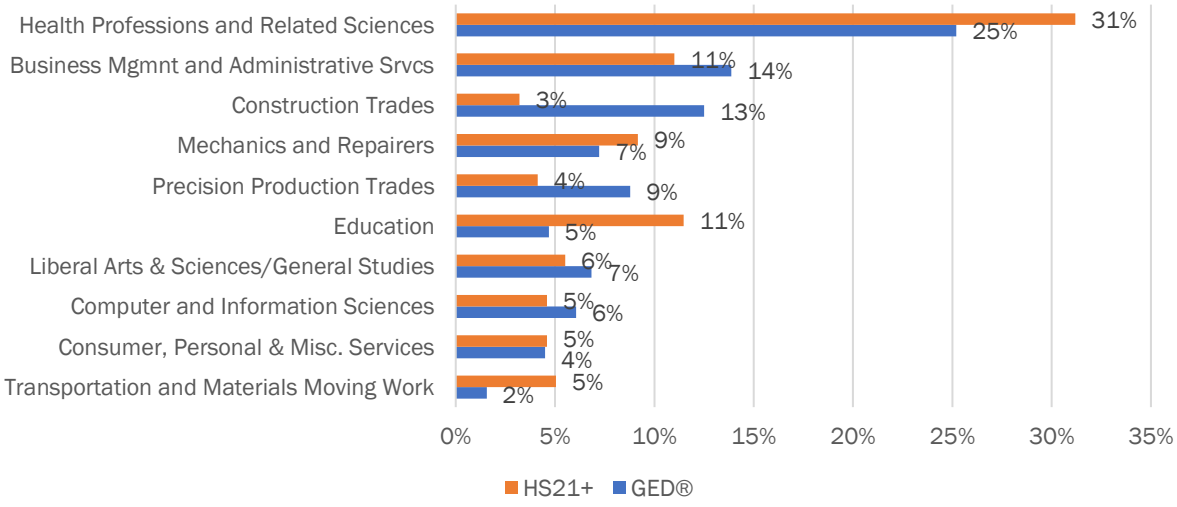
A higher percentage of GED® completers went further in their postsecondary pursuits to earn a higher-level certificate, as well. This holds true even when controlling for the 2013-14 academic year. Figure 9 identifies the percent of the four cohorts earning a postsecondary credential by award type. Similar percentages of the cohorts were awarded a shorter, 1 to 19 credit certificate, but GED® recipients were more likely to earn higher-level credentials.

Figure 9
Percent of GED® and HS21+ completers later earning a postsecondary credential



Health Professions and Related Sciences was the most popular area of study for those earning a postsecondary credential. As noted for students who received a degree prior to GED® or HS21+ completion, Nursing Assistant/Aide was the most popular credential earned by completers in both programs, capturing 12 percent of all postsecondary credentials awarded. GED® completers earned a higher credential in this field, with 4.5 percent receiving a 1-19 credit certificate and 6.8 percent earning a 20-44 credit certificate. Conversely, almost all of the Nursing Assistant/Aide certificates awarded to HS21+ completers were 1-19 credit certificates. Construction and precision production trades were more popular for GED® recipients, while education, particularly early childhood education, made up about 11 percent of postsecondary credentials earned by HS21+ recipients compared with 5 percent for those coming from a GED® program.

Figure 10
Top 10 areas of study for GED® and HS21+ completers later receiving a postsecondary credential



Aside from the outlier year of 2013-14, the data provided no discernable information to determine whether completers of one program earn a postsecondary credential before or after completers of another program. The amount of time between GED®/HS21+ completion and postsecondary attainment tends to vary widely. Depending on the postsecondary program, some students may begin work toward the postsecondary credential before completing a high school program, while others may require more precollege coursework before getting started on a certificate or degree.

Table 7

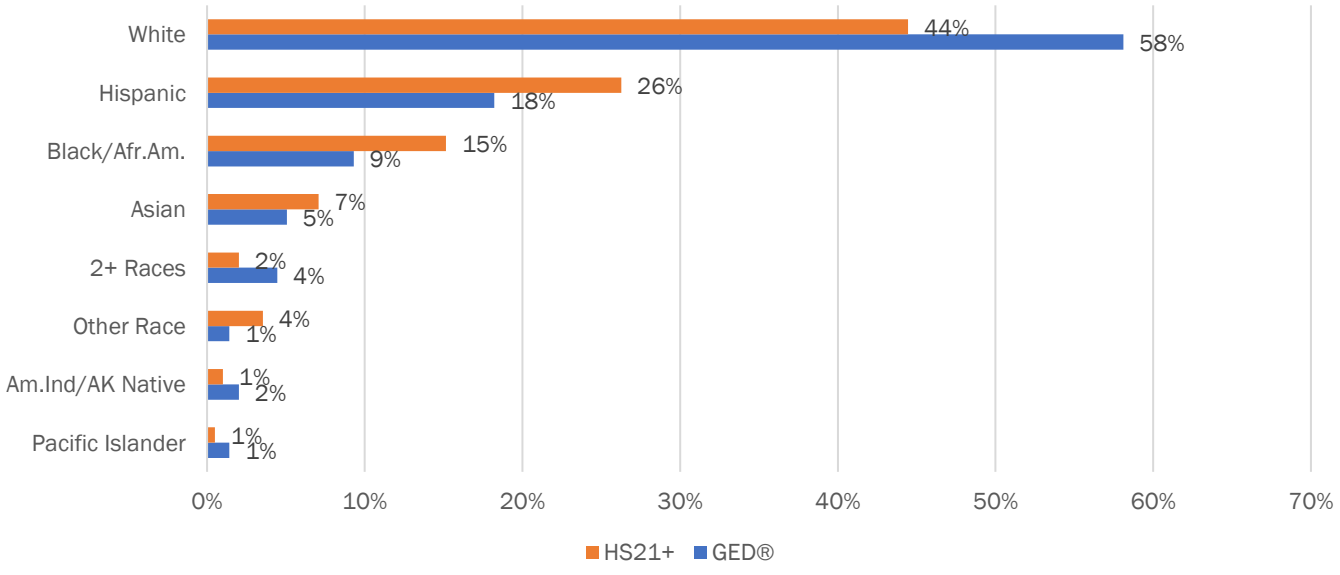
Average number of quarters between completion and postsecondary credential receipt

Cohort Year	2013-14		2014-15		2015-16		2016-17	
Award Type	**GED®**	**H21**	**GED®**	**H21**	**GED®**	**H21**	**GED®**	**H21**
Associate in Arts – Transfer DTA	12	7	9	4	8	8	2	2
Certificate, 1-19 credits	8	4	4	4	3	3	2	2
Certificate, 20-44 credits	5	3	6	7	4	5	2	3
Certificate, 45-89 credits	8	13	5	7	6	5	4	3
WorkForce Degree other than the AAS-T	11	11	8	8	6	6	-	2

Comparing the percent of total GED®/HS21+ completers with the percent distribution who earned a postsecondary credential afterwards by race/ethnicity points to certain gaps in postsecondary achievement. Comparing Figure 2, which includes all completers, with Figure 11 illustrates parity in demographics between the two groups of GED® recipients (e.g. 58 percent of GED® recipients were white and 58 percent of GED® recipients who later earned a postsecondary credential were also white). This alignment does not exist at the same level for HS21+ students. For example, 31 percent of HS21+ graduates were Hispanic, but Hispanics represented only 26 percent of those who later earned a certificate or degree.

Figure 11

Race/Ethnicity distribution of GED® and HS21+ completers later earning a postsecondary credential



Employment Outcomes

Post-completion employment outcomes are tracked through a match with unemployment insurance (UI) records maintained by the Employment Security Department. The data is mapped to North American Industry Classification System (NAICS) categories to understand the types of industries GED® and HS21+ completers enter. Because the data relies on UI records, however, not all completers who enter the workforce appear in the dataset. Specifically, if a graduate begins work for an employer not subject to UI regulations, moves to a state not included in UI data-sharing agreements, or does not have a valid Social Security number, the student will not be reflected in the figures below.

One year after completion, GED® recipients demonstrated higher employment rates than HS21+ graduates, a difference of 7 percent to 9 percent annually. Figure 13 details this difference for each year, with a lower three-year average difference, weighted to graduating cohort size, of about 4 percent, likely due to fluctuating participant sizes in both programs. However, comparing employment rates one year prior to completion (see Figure 12), GED® recipient employment rates were noticeably lower than those of HS21+ graduates, likely due to the younger age of the GED® population. Consequently, detailed in Table 8, pre- to post-completion comparisons of GED® recipients show employment rates increased significantly – up to 24 percent, compared with the 8 percent increase among HS21+ students

Figure 12
Percent of completers placed in UI-covered jobs one year before completion

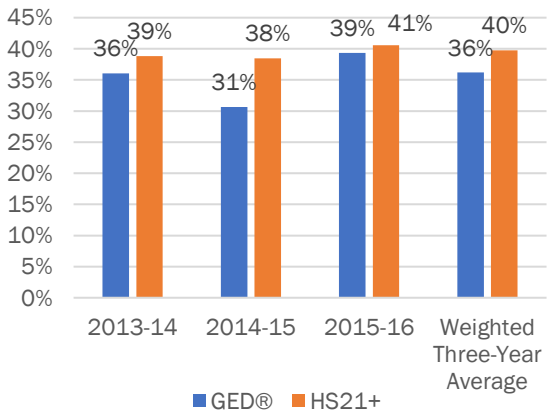


Figure 13
Percent of completers placed in UI-covered jobs one year after completion

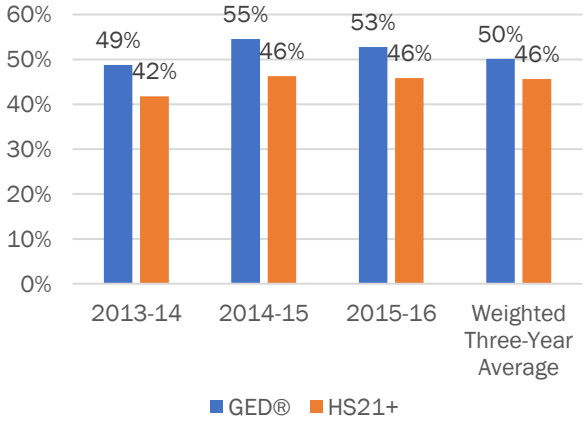


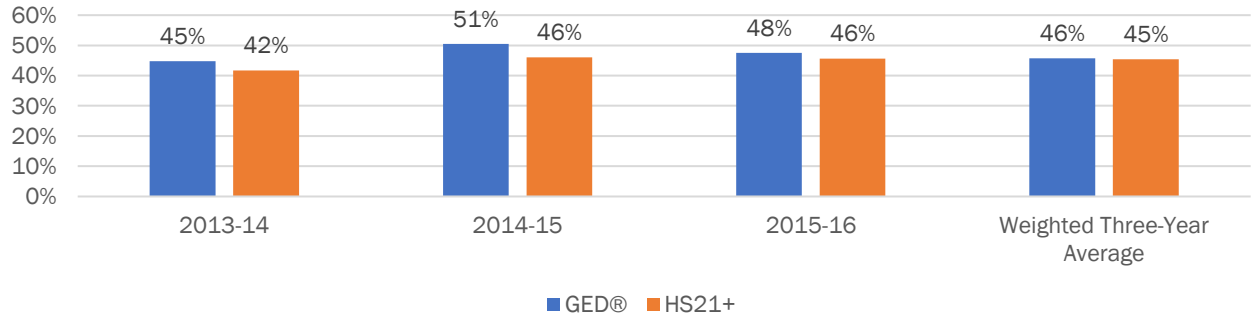
Table 8
Difference in employment rate: percent change in placement rate one year before completion and one year after completion

Program	2013-14	2014-15	2015-16
GED Change	13%	24%	14%
HS21+ Change	3%	8%	5%

The gap in post-completion placement can be explained in part by the age difference between the two populations. When comparing placement rates among those over the age of 21, as seen in Figure 14, job placement rates even out between the two programs, with a nearly identical three-year average weighted on cohort size.

Figure 14

Percent of completers ages 21 and older placed in UI-covered jobs one year after completion



Looking at a more detailed timeline of pre- and post-completion outcomes, both GED® and HS21+ appear to have a positive impact on employment rates, further detailed in Table 9.

Table 9

Percent of a cohort placed in UI-covered job before and after completion

Year	2013-14		2014-15		2015-16	
Quarters Before Completion	GED®	HS21+	GED®	HS21+	GED®	HS21+
-5	36%	39%	31%	38%	39%	41%
-4	35%	38%	33%	39%	41%	41%
-3	35%	37%	29%	39%	43%	41%
-2	35%	32%	32%	38%	42%	40%
-1	36%	32%	35%	36%	44%	41%
Quarters After Completion						
1	40%	44%	45%	44%	49%	44%
2	44%	48%	51%	45%	52%	45%
3	48%	42%	52%	44%	51%	45%
4	49%	42%	55%	46%	53%	46%

Wages

HS21+ completers demonstrated higher hourly wages compared with GED® recipients across the three cohorts examined, illustrated in Figure 15. However, this gap is explained by the three- to six-year median age difference of HS21+ graduates over GED® test-takers. Figure 16 provides the same median wage data for completers of both programs, but excludes those under 21. This data demonstrates that median wages even out between the two groups when controlling for age.

Pre- to post-completion wages increased by as much as 15.2 percent for GED® completers and 14.2 percent for HS21+ graduates (2015-16 cohort year), but wages generally demonstrate year-over-year increases and more data points are needed to definitively say whether either program results in higher wages.

Figure 15
Median wages one year after completion

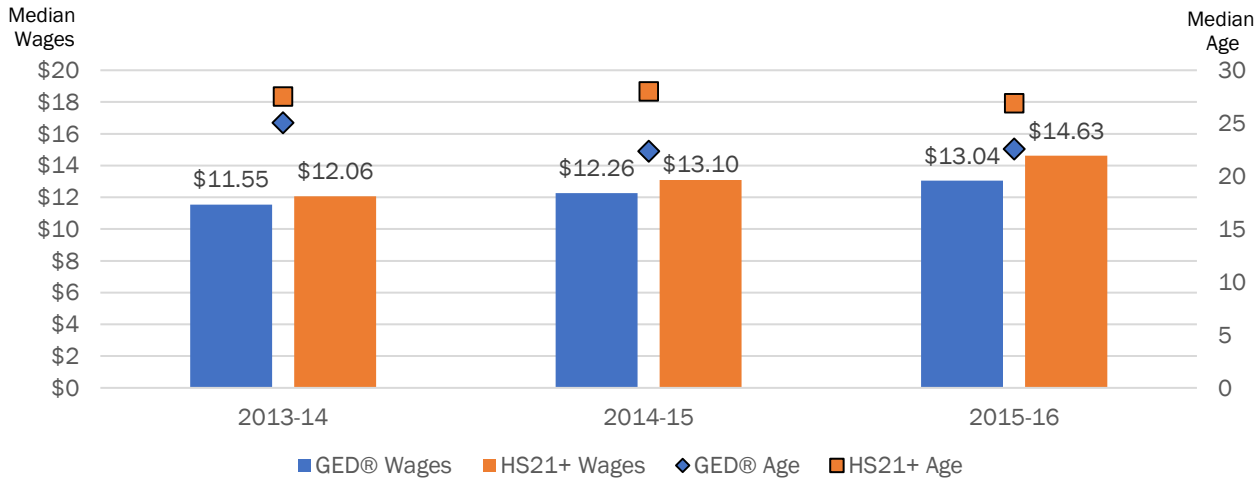
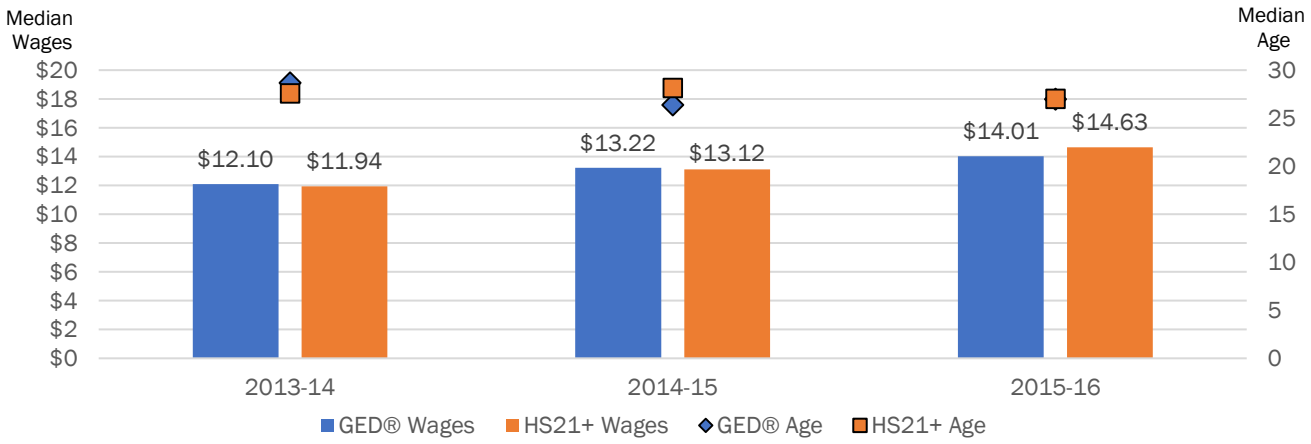


Figure 16
Median wages one year after completion for ages 21 and older



One year later, the highest proportion of working GED® completers work in the Accommodation and Food Services industries, while the highest share of HS21+ completers work in Retail Trade. Diving deeper into the NAICS categories, however, reveals the two categories with the highest percent of completers from both programs are restaurant-related, illustrated in Table 10. This appears to be caused by the flatter distribution of HS21+ graduates throughout the NAICS categories.

Figure 17
Distribution of NAICS groups for GED® and HS21+ recipients employed one year after completion

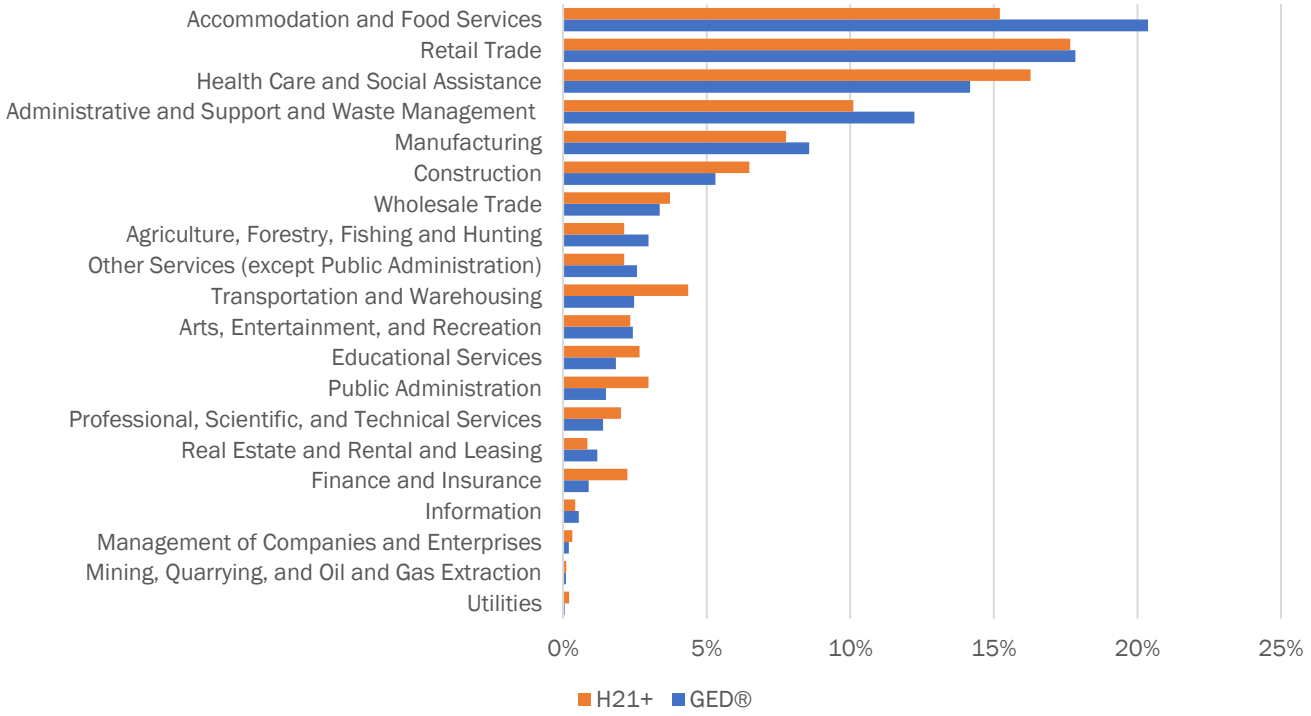


Table 10
Ten highest frequency industries for GED® and HS21+ completers in the workforce one year after completion

Rank	Top 10 NAICS Categories	GED®	HS21+	Both Programs
1	Limited-Service Restaurants	9.8%	6.4%	8.8%
2	Full-Service Restaurants	6.3%	5.6%	6.1%
3	Temporary Help Services	5.7%	5.2%	5.5%
4	Warehouse Clubs and Supercenters	3.6%	2.9%	3.4%
5	Services for the Elderly and Persons with Disabilities	2.9%	2.9%	2.9%
6	Supermarkets and Other Grocery (except Convenience) Stores	2.7%	2.3%	2.6%
7	Hotels (except Casino Hotels) and Motels	2.2%	1.7%	2.0%
8	Nursing Care Facilities (Skilled Nursing Facilities)	1.8%	1.8%	1.8%
9	Child Day Care Services	1.6%	1.8%	1.7%
10	General Medical and Surgical Hospitals	1.2%	2.0%	1.4%

Items for Future Review

The relatively limited employment data available due to the infancy of the HS21+ program provides a snapshot of employment data for three cohorts, but limits SBCTC's ability to assess employment outcomes for those who continue on to further postsecondary education. Future analysis should consider outcomes for the three cohorts examined in the Employment Outcomes section of this report to assess how best to guide these students to higher paying jobs. It is generally accepted that additional education and training leads to improved quality of life, but determining which educational pathway best serves this particular population is key. For example, knowing the HS21+ population is older than other high school equivalency populations, a future research question could review whether HS21+ graduates thrive under work-based learning programs that allow them to skill-up while on the job or whether a classroom-based workforce program approach is best.

This report looks at continuing enrollment and postsecondary attainment in the Washington state community and technical college system. The non-traditional student populations examined appear more likely to pursue a professional/technical pathway through a community or technical college, as evidenced by the higher proportion of students who complete a workforce degree or certificate rather than an academic degree or Direct Transfer Agreement. Still, future iterations of this report should study outcomes for GED® and HS21+ students who later attend public and private four-year institutions.

Appendix I: Percent of each cohort enrolled in a course at a community or technical college after completion.

Quarters After Completion	GED®				HS21+			
	2013-14	2014-15	2015-16	2016-17	2013-14	2014-15	2015-16	2016-17
1	26%	25%	26%	25%	30%	24%	22%	21%
2	22%	22%	24%	21%	28%	23%	24%	19%
3	15%	19%	22%	19%	23%	20%	23%	18%
4	17%	17%	22%	12%	24%	19%	21%	11%
5	16%	15%	19%	9%	18%	15%	17%	7%
6	15%	15%	16%	3%	17%	15%	15%	3%
7	9%	13%	16%		18%	14%	14%	
8	11%	13%	11%		17%	13%	8%	
9	11%	11%	7%		13%	9%	5%	
10	10%	11%	1%		13%	10%	2%	
11	7%	10%			13%	9%		
12	7%	7%			12%	5%		
13	8%	4%			8%	2%		
14	8%	2%			6%	0%		
15	5%				6%			
16	6%				4%			
17	6%				2%			
18	1%				0%			

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CONTACT INFORMATION
Travis Dulany
Policy Research Associate
p: 360-704-1070
e: tdulany@sbctc.edu