

Research Report

Exploring the Credential Pathways and Workforce Experiences of Washington CTC Student Parents

This research report explores the characteristics and outcomes for student parents who are enrolled in Washington community and technical colleges (CTCs). Nationally, student parents make up more than 20% of undergraduates. At Washington CTCs, student parents comprise 20% to 40% of students who report their family status between the 2008 and 2024 academic years.¹ This analysis describes the characteristics, educational pathways, and workforce outcomes for student parents enrolled in Washington CTCs and how they compare to CTC students without dependents. The descriptive analysis does not account for all factors that may contribute to these outcomes, and no causal relationships are identified.

Key findings

1. On average, 39% of CTC students during the study period are student parents. About 35% of all CTC student parents are single parents. Generally, students without dependents are more likely than student parents to be high school graduates and have completed some post-high-school coursework at first CTC enrollment. Student parents often first enroll as part-time students, particularly females. Female student parents are more likely to receive need-based aid than female students without dependents. Over half of CTC student parents and students without dependents first enroll in non-award-seeking programs. Health professions/related sciences is the most popular major for award-seeking students without dependents and student parents.
2. CTC student parents complete high school diplomas and associate's, bachelor's, and master's degrees at lower rates than CTC students without dependents. Short certificates and General Studies degrees are the most common CTC credential earned by student parents. Associate-Transfer degrees and bachelor's degrees are the most common credentials earned by students without dependents. Patterns between student parents and students without dependents across race/ethnicity tend to mirror those for all students.
3. Two-thirds of students (both with and without dependents) are employed before first CTC enrollment. On average, employment rates for both student groups increase or stay the same in 11 of 14 intended plans of study. These gains are the largest for CTC students without dependents, particularly those enrolling in Basic Education programs.
4. Average annual earnings increase for both student groups after CTC enrollment regardless of their intended plan of study. Student parents — particularly females — see smaller earnings gains after CTC enrollment than students without dependents. Overall, students without dependents experience a \$4,265 average annual wage increase after CTC enrollment, compared to \$3,403 for student parents. CTC students who are younger than 25 years old — both parents and those without dependents — see more substantial employment and wage gains after CTC enrollment than their older peers.

¹ www.sbctc.edu/colleges-staff/research/data-public/enrollment-data-dashboard

Overview

This research report explores the characteristics and outcomes for student parents who are enrolled in Washington community and technical colleges (CTCs). The Education Research and Data Center (ERDC) has previously analyzed the characteristics and trends of academic transfer students at in-state CTCs,² along with the difference in median earnings for Washington students who earn an associate degree compared to students with a bachelor's degree.³ These descriptive reports primarily examine education and workforce outcomes for cohorts of graduating Washington public K-12 students. However, these data do not allow for detailed exploration of student parents, who make up more than 20% of undergraduates nationally⁴ and experience particular responsibilities and challenges that can impede their college completion.

CTCs can serve as the point of entry for adults who have limited postsecondary experience.⁵ Student parents may enter the postsecondary setting with different needs, circumstances, and work experiences that vary from typical cohorts of graduating K-12 students without dependents. Student parents may also take nontraditional pathways to complete postsecondary degrees compared to public K-12 students who might take a more linear path from high school to a postsecondary institution. Student parents often navigate a complex balance between completing their caregiving responsibilities, accomplishing their educational goals for their professional growth, and earning a living wage that helps them achieve both. This report answers critical questions about the pathways and outcomes for parents within postsecondary and workforce systems compared to their peers without dependents.

Research questions

This report seeks to answer the following research questions about student parents at CTCs:

- What are the characteristics of student parents who enroll in Washington CTCs, compared to CTC students who are not parents?
- What are the most common pathways that student parents enter CTCs, compared to CTC students who are not parents?
- What proportion of student parents are attaining CTC credentials?
- What are the most common types of post-CTC credentials earned by student parents?
- What wages do student parents earn after their CTC enrollment? How does that compare to what they earned pre-CTC enrollment?

² <https://erdc.wa.gov/publications/student-outcomes/students-with-academic-transfer-degrees>

³ <https://erdc.wa.gov/data-dashboards/high-school-graduate-outcomes>

⁴ Gault, B., Holtzman, T., & Cruse, L.R. (September 2020). Understanding the student parent experience: The Need for Improved Data Collection on Parent Status in Higher Education. Institute for Women's Policy Research. IWPR #C485. Understanding-the-Student-Parent-Experience_Final.pdf

⁵ Prince, D. (April 2005). Building pathways to success for low-skill adult students: Lessons for community college policy and practice from a longitudinal student tracking study (The "Tipping Point" Research). SBCTC Research Report, No. 06-2.

Who are “student parents”?

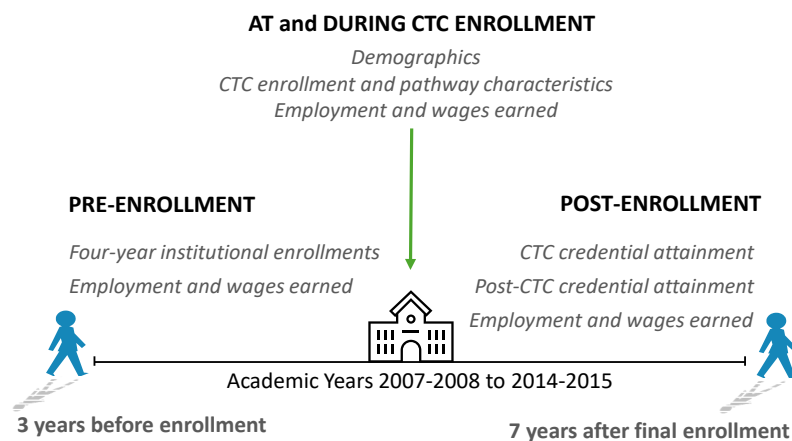
This analysis examines the characteristics and outcomes for student parents and students without dependents who enrolled for the first time ever in a WA CTC from the 2007–08 academic year to the 2014–15 academic year. Previously, the State Board of Community and Technical Colleges (SBCTC) obtained information about a student’s family status at the time of admission or registration. Beginning in the 2015–16 academic year, they began collecting family status through registration or financial aid applications.⁶ Students who are single parents with children or other dependents or are in a couple with children or other dependents are defined as **student parents**. Those without children or other dependents are defined as **students without dependents**. Students who report “other” or provide no response as to their family status are excluded from this study.

Study Framework

This study focuses on students who enrolled in a CTC for the first time between the 2007–08 and 2014–15 academic years. Students enrolled in the Running Start program⁷ are excluded from this analysis. Former Running Start students and students who do not participate in the Running Start program are included. Students with CTC credentials or achievements with missing first CTC enrollment dates are excluded from the analysis.⁸

This descriptive analysis explores the postsecondary and workforce experiences of CTC student parents and students without dependents three years before their enrollment, between their first and last enrollment, and up to seven years after their last enrollment.⁹

Figure 1: Analytical Framework



⁶ CTCs collect data from their students and then provide this data to SBCTC’s data warehouse.

⁷ Washington’s [Running Start program](#) enables 11th and 12th grade students to earn high school and college credits by completing college courses tuition free at in-state CTCs.

⁸ There were 58,622 students in SBCTC’s enrollment data with a recorded postsecondary achievement but no first date of CTC enrollment associated with the achievement during the study timeline. This could be due to several factors, such as a student’s first CTC enrollment date occurring before the 2007–08 Academic Year or potential data matching issues. Students with no wage records or negative wage earnings at any point during the study timeframe were excluded from the analysis (20,017 students).

⁹ The pre-enrollment period only spans three years because of reliability and quality concerns associated with postsecondary data and wage data from the early 2000s in ERDC’s P20W data warehouse.

Additionally, this analysis examines the demographic characteristics, educational pathway characteristics, and workforce experience of CTC student parents and students without dependents, based on insights from data collected during the students' first quarter of enrollment and subsequent quarters. Post-CTC enrollment outcomes for student parents and students without dependents are also explored, including what (if any) credentials these students completed at a CTC or four-year institution, along with wages earned before and after CTC enrollment. Postsecondary enrollment and credential attainment are assessed between academic years 2004–05 and 2021–22, while wage earnings are assessed between January 2004 and December 2022.¹⁰ This analysis investigates whether CTC student parents and students without dependents ever obtain a postsecondary credential based on their first and last quarter of CTC enrollment, which limits the ability to identify the exact timing of credential attainment.

Characteristics of CTC student parents and students without dependents

Table 1 reports characteristics of student parents and students without dependents. In total, 797,420 students enrolled in a CTC for the first time between the 2007–08 and 2014–15 academic years. Sixty percent of those students are students without dependents (479,764 students), and the remaining 40% of students are student parents (317,656 student parents).

Over one-third of all CTC student parents are single parents (34.6% or 109,920 student parents). First-time enrolled CTC student parents tend to be older than CTC students without dependents. On average, 82% of student parents in a couple relationship and 70% of single parents are age 25 or older, compared to only 39% of students without dependents. Females make up a greater proportion of CTC student parents compared to males, especially among single parents. On average, 73% of single parent CTC students are females. Slightly less than half of first-time enrolled CTC students without dependents are females (49.2%). While most students identify as white across both family types, 10% of student parents are Hispanic compared to 4% of students without dependents. On average, 12% of single parent students are Black, which is twice the proportion of Black student parents in a couple relationship (5.6%) and Black students without dependents (5.9%). On average, 12% of student parents in a couple relationship are Asian/Pacific Islander, which is similar to the proportion of Asian/Pacific Islander students without dependents (12.2%).

Table 1: Demographic characteristics of first-time enrolled Washington CTC students by family status

	Single parent students	Student parents in a couple relationship	Students without dependents
Student count (Total = 797,420)	109,920	207,736	479,764
Averages across cohort			
Age 25 or older	70.3%	82.2%	39.4%
Male	27.0%	42.9%	50.8%
Female	73.0%	57.1%	49.2%

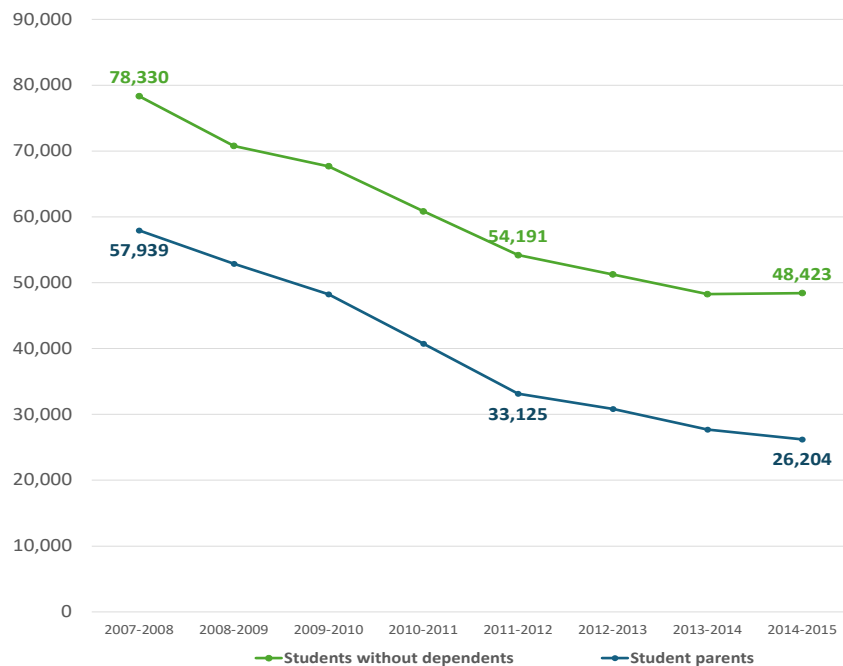
¹⁰ Nominal wages that are not adjusted for inflation are reported.

Table 1 (continued): Demographic characteristics of first-time enrolled Washington CTC students by family status

Race/Ethnicity Category	Single parent students	Student parents in a couple relationship	Students without dependents
Native American (American Indian or Alaskan Native)	3.8%	2.0%	2.2%
Asian/Pacific Islander (incl. Hawaiian)	7.3%	12.4%	12.2%
Black/African American	12.2%	5.6%	5.9%
Hispanic	9.0%	10.1%	4.2%
Other	7.0%	6.5%	5.0%
White	54.2%	54.5%	62.6%
Unknown	4.2%	5.5%	5.5%
Missing values for 21,238 students	2.4%	3.3%	2.5%

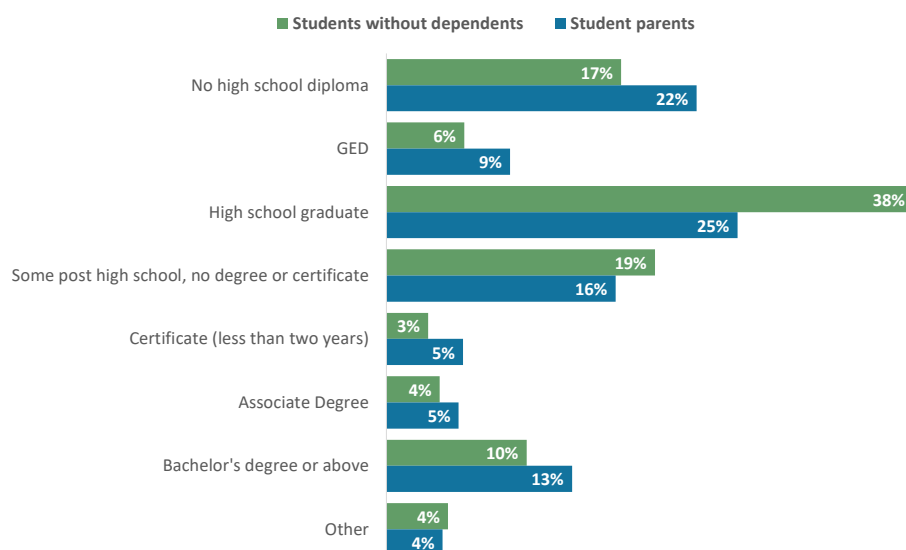
Figure 2 shows the number of first-time enrolled CTC students by enrollment year and family status. Approximately 78,330 students without dependents enrolled in a Washington CTC for the first time in the 2007–08 academic year, while 57,939 student parents first enrolled in a Washington CTC during the same year. Although first-time enrollees in both groups gradually decline during each subsequent academic year, student parents continually make up 40% of first-time enrolled Washington CTC students across all enrollment years of this analysis.

Figure 2: First-time enrolled CTC students in Washington by cohort and family status



As outlined in Figure 3, student parents bring a broader variety of prior education experiences at CTC enrollment than students without dependents. Generally, students without dependents are more likely to be high school graduates and have completed some post-high school coursework compared to student parents. At the time of CTC enrollment, 22% of student parents and 17% of students without dependents do not have a high school diploma.

Figure 3: Self-reported prior education of Washington CTC students by family status



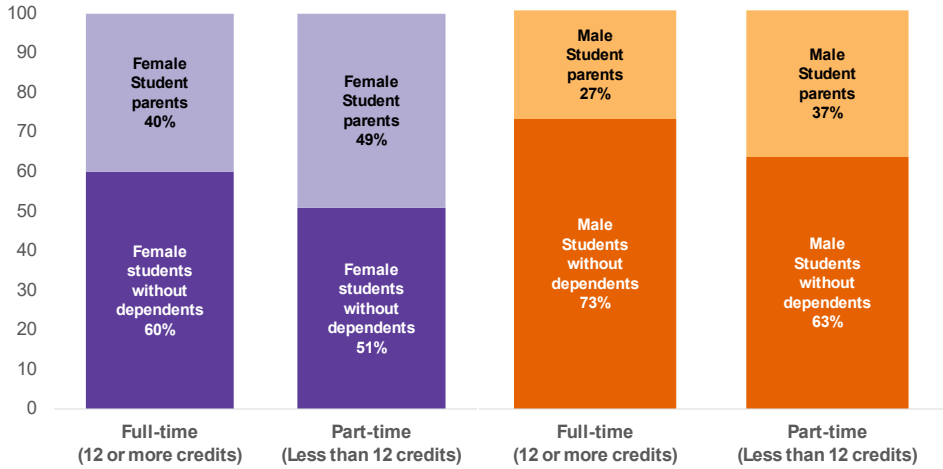
Almost 40% of students without dependents have already graduated from high school (38%) compared to 25% of student parents. Nineteen percent of students without dependents completed some post-high school coursework without earning a degree or certificate, compared to 16% of student parents who reached this same level of prior education. However, student parents make up the same or slightly higher rate for all other prior education levels. Thirteen percent of student parents already earned a bachelor's degree or above prior to their first CTC enrollment, compared to only 10% of students without dependents. Additionally, the proportion of student parents with GEDs, certificates, and associate degrees at time of first CTC enrollment is one to four percentage points higher than students without dependents with the same prior education levels.

Student parents may be more inclined than students without dependents to take non-linear pathways to complete their postsecondary degrees so they can manage caregiving responsibilities, educational commitments, and financial obligations, often all while they are employed.^{11,12}

¹¹ Goldrick-Rab, S., Welton, C.R., & Coca, V. (2020). *Parenting while in college: Basic needs insecurity among students with children*. Hope Center for College, Community, and Justice. Temple University. https://frac.org/wp-content/uploads/2019_ParentingStudentsReport.pdf

¹² Huerta, A.H., Rios-Aguilar, C., & Ramirez, D. (2022). "I had to figure it out": A case study of how community college student parents of color navigate college and careers. *Community College Review*, 50(2): 193-218.

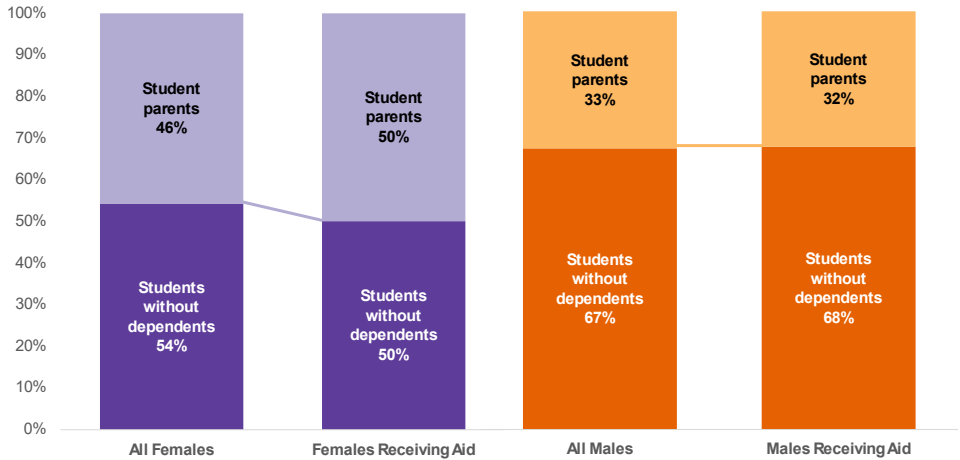
Figure 4: Enrollment status of first-time enrolled Washington CTC students by gender and family status



As outlined in Figure 4, the first-time enrollment characteristics of Washington CTC students by family status support the notion that student parents often start their CTC experience with a less traditional, part-time path. Student parents are disproportionately part-time students when they first enroll at a Washington CTC. Nearly 50% of part-time female students are parents compared to 40% of full-time female students. Similarly, 37% of part-time male students are parents, while 27% of full-time male students are parents.

Figure 5 outlines the receipt of need-based aid at CTC enrollment by gender and family status. Compared to male student parents, female student parents are slightly overrepresented among those who receive need-based aid. Forty-six percent of all female first-time enrolled CTC students are student parents, and 50% of all females receiving aid are student parents.

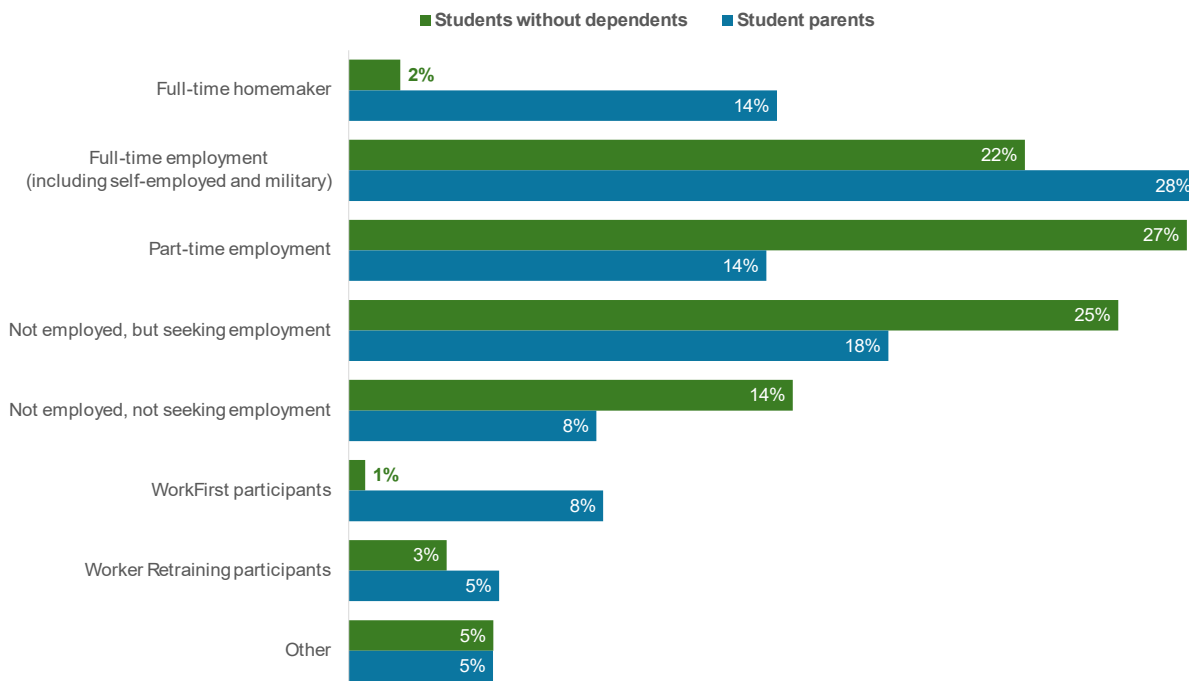
Figure 5: Washington CTC students' receipt of need-based aid at enrollment by gender and family status



One-third of all male first-time enrolled CTC students are student parents, and 32% of males who receive need-based aid are student parents. Thus, males tend to receive need-based aid at the same rate, regardless of their family status, while female student parents are more likely to receive need-based aid than female students without dependents.

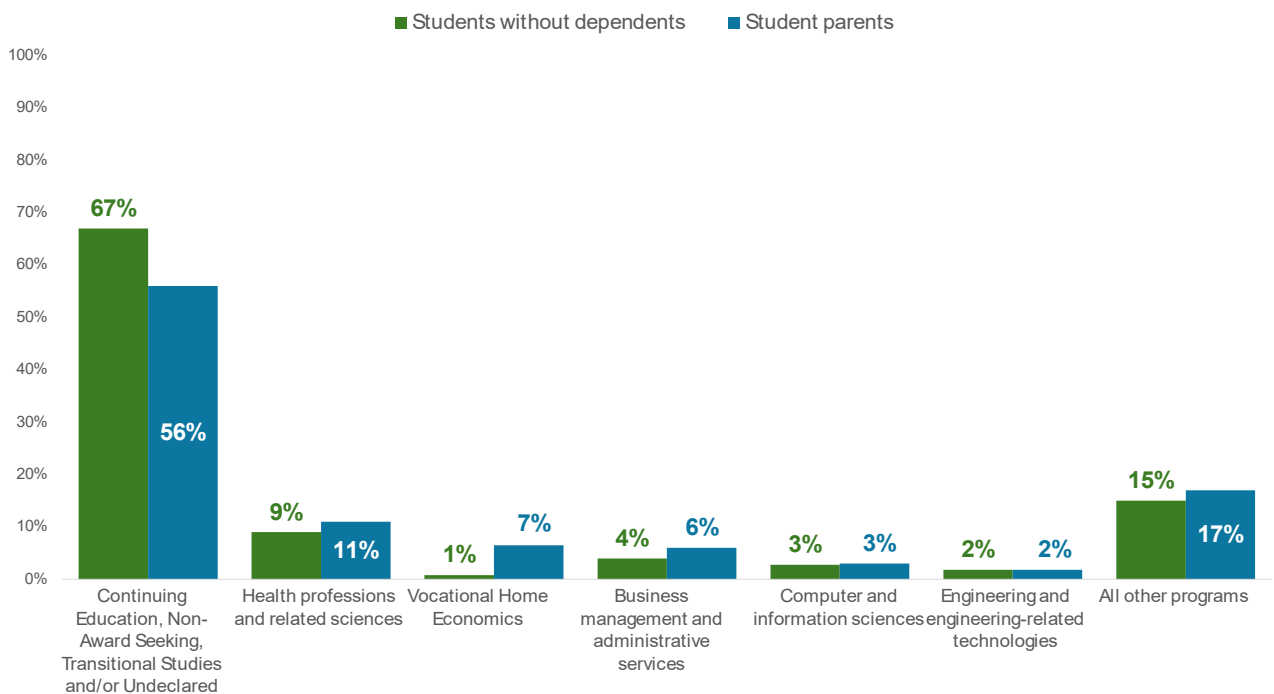
Figure 6 reflects the work status at first CTC enrollment for student parents and students without dependents. At first CTC enrollment, 28% of student parents are employed full-time compared to 22% of students without dependents. Student parents make up a greater proportion of full-time homemakers, WorkFirst program participants, and Worker Retraining program participants than students without dependents. These results suggest that student parents often first enroll in CTCs to expand their skills in a professional or technical area to help them advance in the workforce. Students without dependents are nearly twice as likely to be part-time employees compared to student parents (27% and 14%, respectively). Students without dependents also make up a greater proportion of those who are not employed at first CTC enrollment, though only 25% of these students are seeking employment. Students without dependents may be more inclined to enroll at a CTC to complete coursework or an academic degree that is transferable to a four-year institution instead of to gain new skills that help them enter the workforce, since they tend to be younger than student parents at first CTC enrollment.

Figure 6: Washington CTC students' work status at enrollment by family status



Regardless of family type, both student groups tend to first enroll as non-award seeking or undeclared majors (Figure 7). Two-thirds (67%) of students without dependents and over half of student parents (56%) enroll as either Continuing Education, non-award seeking, Transitional Studies, and/or Undeclared students. Health professions/related sciences is the second-most popular major across both groups, with 11% of student parents and 9% of students without dependents enrolled at first CTC enrollment. Six percent of student parents enrolled as business management and administrative services majors at first CTC enrollment, compared to 4% of students without dependents. Computer and information sciences, along with engineering and engineering-related technologies, were also common majors at first CTC enrollment for student parents and students without dependents (3% and 2%, respectively).

Figure 7: Percent of students enrolled in each Major/Program CIP series by family status

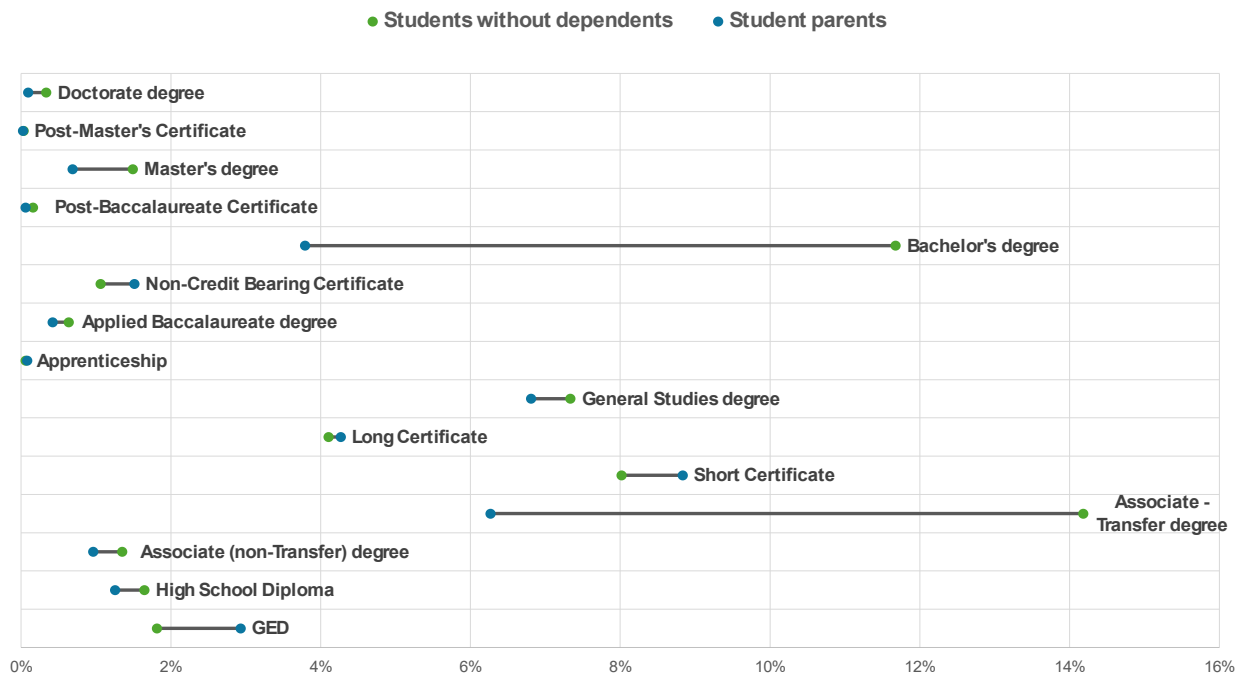


CTC credentials and other postsecondary credentials completed by student parents

Student parents and students without dependents have different CTC and post-CTC credential attainment patterns. Associate-Transfer degrees, short certificates, and General Studies degrees are the most common CTC credentials attained by student parents and students without dependents. Fourteen percent of CTC students without dependents complete an Associate-Transfer degree, compared to 6% of student parents. Short certificates are the most popular type of CTC credential earned by student parents (8.8%), followed by General Studies degrees (6.8%) and Associate-Transfer degrees (6.3%). Three percent of student parents complete their GED, compared to 1.8% of students without dependents.

Even fewer student parents complete post-CTC credentials after their first CTC enrollment, with only 3.8% of student parents ever completing a bachelor's degree compared to nearly 12% of students without dependents. Less than 1% of student parents ever complete a master's degree after their first CTC enrollment, compared to nearly 2% of students without dependents. This attainment gap suggests that student parents may leverage their first CTC experience differently than students without dependents, despite a majority of both groups first enrolling in similar programs. Since student parents in this cohort tend to already be engaged in the workforce or be full-time homemakers, their first CTC experiences tend to focus on completing workforce degrees that help them gain skills to enter into or advance in the workforce.

Figure 8: Percentage of Washington CTC students who ever complete a postsecondary credential by family status



As outlined in Figure 9, the attainment of short certificates, Associate-Transfer degrees, and apprenticeships by gender and family status are similar to the overall results for student parents and students without dependents. However, nearly twice the number of female student parents complete their GED as compared to female students without dependents (5,997 female student parents versus 3,583 female students without dependents). General Studies degrees are the second-most common CTC credential earned by female students without dependents and all student parents (18,121 female students without dependents, 7,644 male parents, and 13,898 female parents, respectively).

Figure 9: Count of students who earned CTC credentials post-enrollment by gender and family status

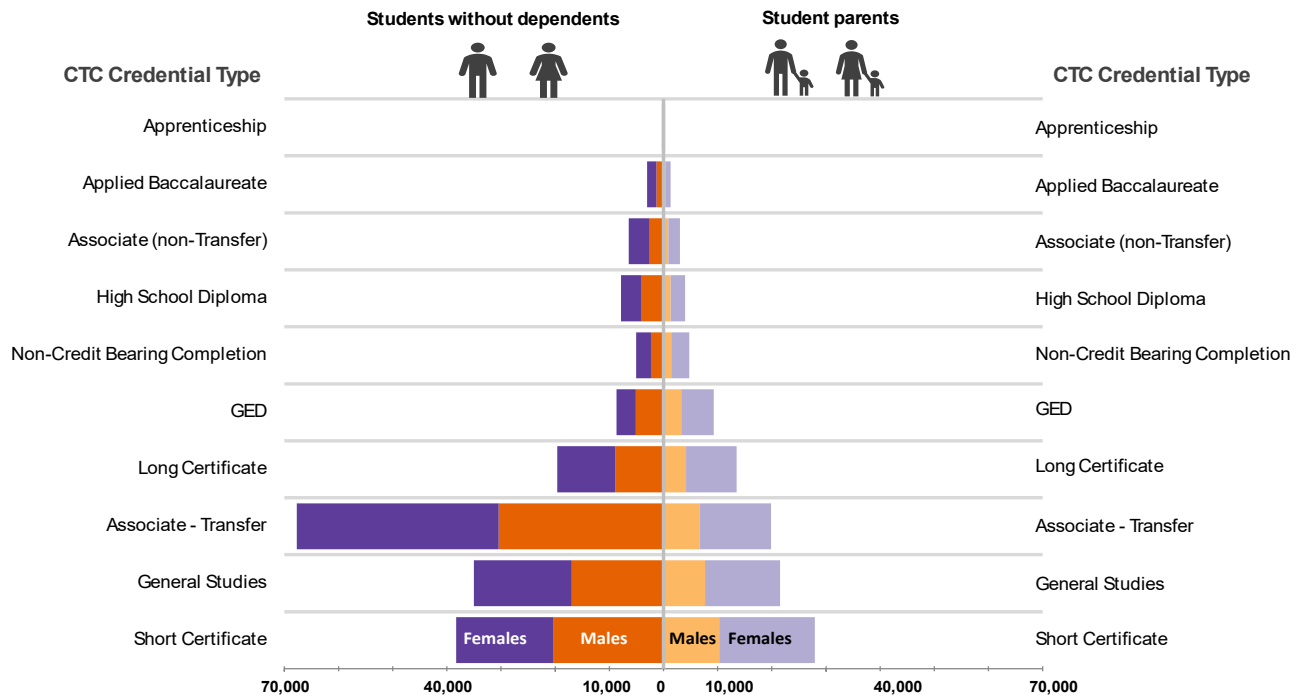


Table 2 outlines the average percentage point difference in student parents' attainment of CTC credentials by race/ethnicity category compared to CTC students without dependents of the same race/ethnicity category. Patterns across racial and ethnic groups tend to mirror those for all students. Specifically, student parents tend to have higher rates of GED, Certificate, and non-credit completion than students without dependents across all racial and ethnic groups and lower rates of other types of credential attainment. For example, student parents who are Black/African American, Asian/Pacific Islander, or White tend to have greater certificate attainment than their peers without dependents. In some cases, the gaps between student parents and those without dependents are wider for some racial and ethnic groups. For example, overall, Associate-Transfer degree attainment is about eight percentage points lower for student parents than students without dependents. The gap for Asian student parents is larger, at 11 percentage points. On the other hand, there is a smaller gap in Associate-Transfer degree attainment for Native, Black, and Hispanic/Latino student parents (about four to five percentage points).

Table 2. Average percentage point difference in student parents' CTC credential attainment compared to students without dependents by race/ethnicity

Race/Ethnicity Category	GED	High School Diploma	Associate (non-Transfer) Degree	Associate – Transfer Degree	Short Certificate	Long Certificate	General Studies	Apprenticeship	Applied Baccalaureate	Non-Credit Bearing Completion
Native American (American Indian or Alaskan Native)	1.5	-0.4	-0.1	-4.9	0.2	0.3	0.4	0.0	-0.1	0.6
Asian/Pacific Islander (including Hawaiian)	0.4	-2.6	-0.3	-11.2	1.3	0.9	-0.5	0.0	-0.3	0.2
Black/African American	0.6	0.1	0.0	-4.3	3.1	0.7	1.2	0.1	0.1	0.5
Hispanic	0.2	-0.3	-0.3	-4.4	0.3	-0.8	-1.2	0.0	-0.2	0.0
Other	1.0	0.2	-0.4	-8.8	0.0	-0.8	-1.4	0.0	-0.3	0.2
White	1.4	-0.2	-0.3	-7.4	0.9	0.5	0.1	0.0	-0.2	0.6
Unknown	0.5	-0.1	-0.6	-8.6	-0.3	0.0	-0.7	0.2	-0.3	0.3
Missing race/ethnicity data for 21,238 students										

Employment status and wages earned for student parents before and after CTC enrollment

Examining the employment rates and wages of CTC students before and after their first CTC enrollment provides a better understanding of the potential impact that CTC credential completion has on student parents and students without dependents. CTC student parents likely expect their CTC experience to improve their odds of gainful employment and higher earnings after completing their credential. As Figure 10 illustrates, 68% of student parents and 67% of students without dependents are employed before their first CTC enrollment. Overall, both student groups show an increased employment rate post-CTC enrollment, although CTC students without dependents see more than double the rate increase as that of student parents (11 versus five percentage points, respectively). However, the extent of the gains for each student group's employment rate varies by the student's intent for enrolling.¹³

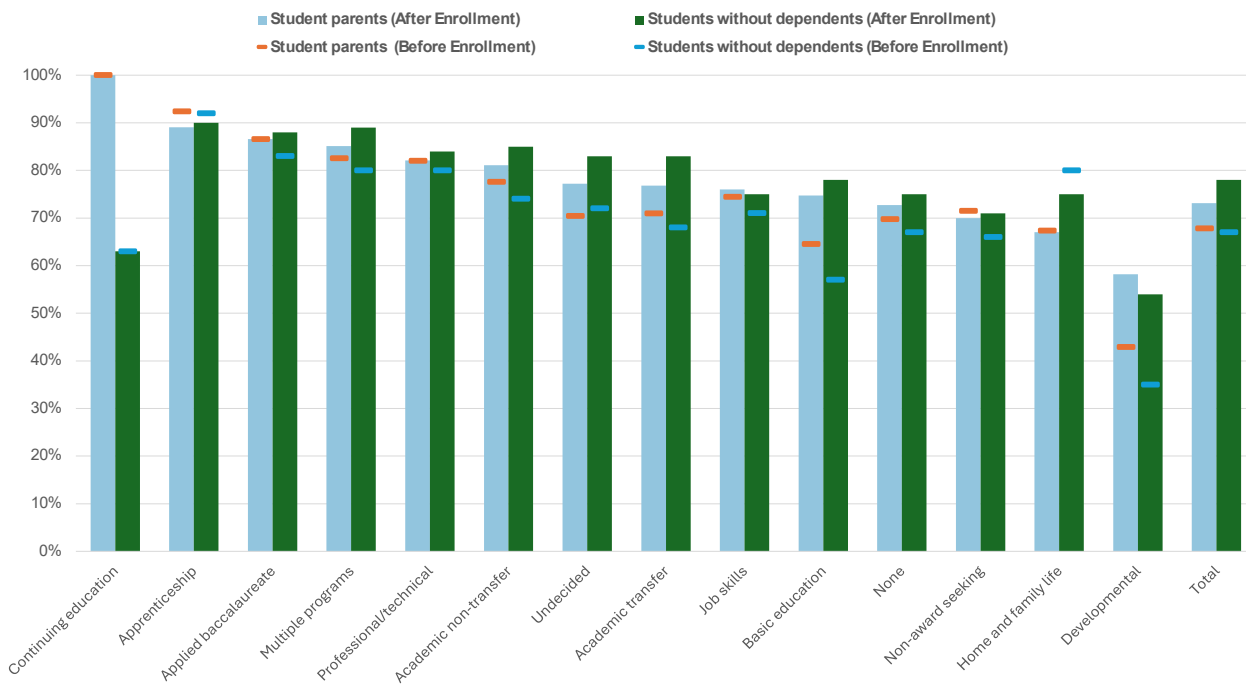
Gains in employment rate are the largest for CTC students without dependents who enroll in Basic Education programs, with an employment rate 21 percentage points higher post-enrollment (from 57% to 78%). The rate of employed student parents and students without dependents enrolled in Developmental programs also increases considerably over time, increasing 15 and 19 percentage points for student parents and those without dependents, respectively.

Despite both student groups increasing or maintaining employment rates in 11 of the 14 enrollment intent categories, some CTC student parents and students without dependents who enrolled in apprenticeship programs, Vocational Home and Family Life programs, and non-award seeking programs experience employment rate declines post-CTC enrollment. Before CTC enrollment, 92% of student parents enrolled in

¹³ CTCs use a one-character code to collect information about a student's intent for enrolling, which allows for examination of award-seeking and non-award seeking students, as well as those seeking academic or professional/technical degrees.

apprenticeship programs were employed, but after CTC enrollment the employment rate dropped to 89%. CTC students without dependents enrolled in apprenticeship programs see a similar employment rate decline of two percentage points post-enrollment (92% to 90%). Two-thirds (67%) of student parents enrolled in Vocational Home and Family Life are employed before and after CTC enrollment, while the proportion of employed students without dependents enrolled in the same program decreases by five percentage points, from 80% to 75% post-enrollment. The proportion of employed CTC students without dependents enrolled in non-award seeking programs increases by five percentage points post-enrollment (from 66% to 71%). In contrast, the employment rate drops by one percentage point for CTC student parents enrolled in non-award seeking programs after CTC enrollment.

Figure 10: Employment rate before and after enrollment by intent and family status

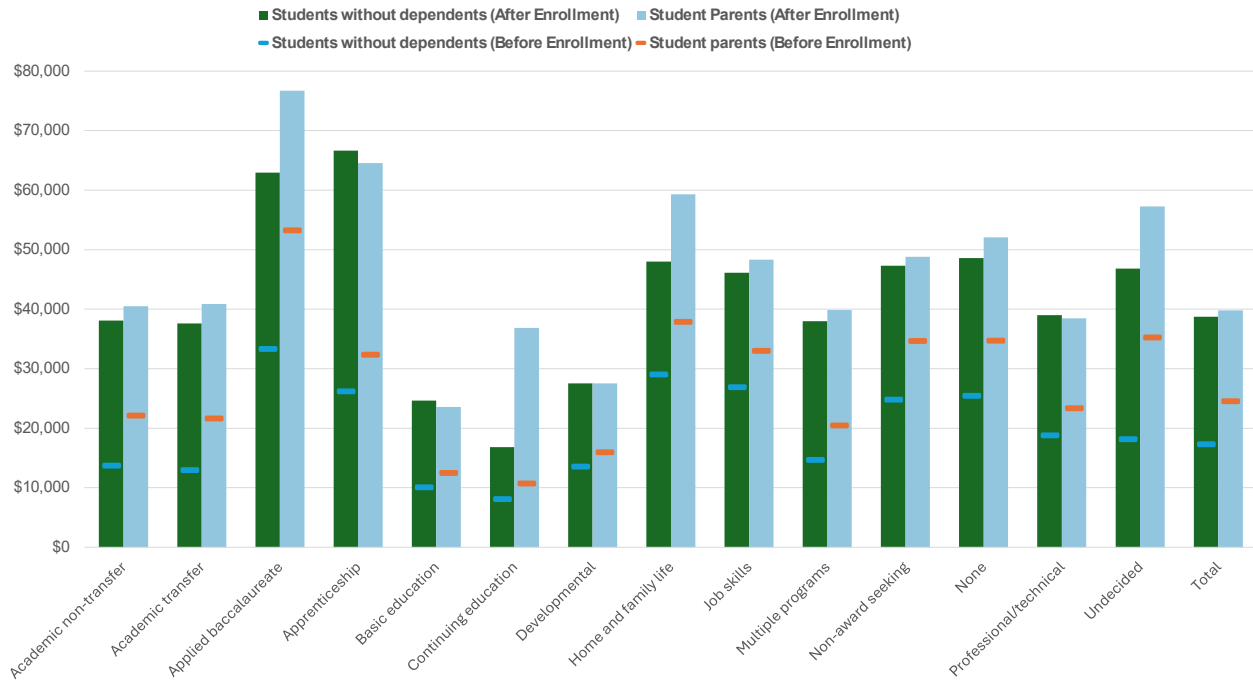


As illustrated in Figure 11, average annual earnings increase across all intent categories for student parents and students without dependents post-CTC enrollment. However, student parents experience smaller earnings increases than students without dependents in 12 of the 14 intent categories. Apprenticeship students see the biggest gains in average annual earnings before and after CTC enrollment, but the extent of the increase varies by family status. For example, students without dependents who enrolled in apprenticeship and Applied Baccalaureate programs experienced an average annual wage increase of about \$40,000 after enrollment. In contrast, student parents enrolled in the same programs earn an annual wage increase of about \$32,000 after enrollment. Findings are similar for CTC students enrolled in non-award seeking programs, although the gains are slightly smaller for both student parents and students without dependents.¹⁴ Home and Family Life students

¹⁴ Student parents enrolled in Continuing Education also see larger earnings gains than their peers without dependents, but the small number of students enrolled in this program ($n < 10$) prevents generalizations or comparisons with students enrolled in other intended plans of study.

earn an annual increase of around \$20,000 after enrollment, with student parents seeing slightly larger gains than students without dependents.

Figure 11: Average annual earnings before and after enrollment by family status and intent (nominal dollars)



Exploring earnings and employment across multiple demographic characteristics provides additional insight into the workforce presence of CTC student parents and students without dependents, and how it varies before, during, and after enrollment. As outlined in Table 3, at least two-thirds of male and female CTC students across all family types are employed before their CTC enrollment. The employment rate declines across all family types during CTC enrollment, with the most substantial decrease among male student parents (13 percentage point decrease, from 69% employed before enrollment to 56% during enrollment). Employed female student parents also decline by 11 percentage points during this timeframe (from 67% to 56% employed during enrollment).

While the percentage of students employed during CTC enrollment decreases for all student groups, average wages modestly increase for all students during the same timeframe. Female students without dependents and male student parents see the largest wage gains, with average annual wages increasing by about \$3,500 for female students without dependents (from about \$16,300 to \$19,800) and about \$3,000 increased annual wages for male student parents (from about \$31,000 to \$34,000). Employment rate and wage increases are more substantial for CTC students when comparing changes to average earnings during CTC enrollment and after CTC enrollment. The employment rate for female and male CTC student parents increased by 17 percentage points after enrollment, from 56% employed during enrollment to 73% employed after enrollment.

Examining the average wages of first-time enrolled CTC students by gender and family status further reinforce that student parents — particularly female student parents — experience smaller gains in earnings after CTC enrollment than students without dependents. On average, female student parents earn about \$14,000 more in

annual wages after CTC enrollment, compared to female students without dependents who earn about \$19,000 more in annual wages. The gap in earnings gains is even larger when looking at male CTC students: Male student parents earn an average of \$17,500 more in annual wages after CTC enrollment, while the average annual earnings for male students without dependents increases by \$23,500.

Table 3. CTC students' mean hours and wages (quarterly and annually) by enrollment period, gender, and family status (nominal dollars)

	Females		Males	
	Students without dependents	Student parents	Students without dependents	Student parents
Before CTC enrollment				
Employed	68%	67%	67%	69%
Mean quarterly hours worked	267	310	280	374
Mean annual hours worked	1,069	1,238	1,118	1,496
Mean quarterly wages	\$4,070	\$5,116	\$4,544	\$7,734
Mean annual wages	\$16,282	\$20,465	\$18,175	\$30,937
During CTC enrollment				
Employed	68%	56%	62%	56%
Mean quarterly hours worked	298	302	303	354
Mean annual hours worked	1,191	1,207	1,212	1,417
Mean quarterly wages	\$4,955	\$5,701	\$5,473	\$8,515
Mean annual wages	\$19,822	\$22,803	\$21,892	\$34,061
After CTC enrollment				
Employed	79%	73%	78%	73%
Mean quarterly hours worked	352	350	380	400
Mean annual hours worked	1,408	1,402	1,519	1,601
Mean quarterly wages	\$8,900	\$8,643	\$10,440	\$12,112
Mean annual wages	\$35,602	\$34,571	\$41,759	\$48,446
Difference – Before vs. After CTC enrollment				
Increase in mean annual wages	\$19,320	\$14,106	\$23,585	\$17,509

Shifts in employment rate and average wage earnings by age reveal wider variation across student parents and students without dependents. As expected, students who are 25 and older — both parents and those without dependents — have higher employment rates before CTC enrollment than students who are under 25 years old. On average, 62% of students without dependents who are less than 25 years old are employed compared to 61% of student parents in the same age group. Among those ages 25 and older, 76% of students without dependents are employed before CTC enrollment compared to 70% of student parents in the same age group.

CTC students who are less than 25 years old — both parents and those without dependents — see more substantial employment gains after CTC enrollment than their older peers. The percentage of employed student parents and students without dependents under age 25 increases by nearly 20 percentage points after CTC enrollment for these students (19 percentage points for students without dependents and 15 percentage points for student parents, respectively). In contrast, the percentage of employed student parents who are at least 25 years old increases by only two percentage points after CTC enrollment. Employed students without dependents in this same age group decreases slightly over time, from 76% employed before enrollment to 74% after enrollment.

Younger CTC student parents and students without dependents also experience the biggest average wage gains after CTC enrollment. Student parents who are under age 25 earn an average of \$20,500 more after CTC enrollment, while student parents who are at least 25 years old earn \$14,500 more in annual earnings after enrollment. Students without dependents who are under 25 experience an average \$27,000 increase in annual earnings after enrollment, while their peers who are age 25 or older earn an average of \$17,000 more annually after enrollment. Some of this increase can be attributed to the fact that individuals under 25 typically work fewer hours before enrolling in a CTC. However, hourly wages for those under 25 also rise more significantly — more than doubling for both student parents and those without dependents under 25. In contrast, for those 25 and older, hourly wages increase by about one-and-a-half times for both student parents and those without dependents.¹⁵

Table 4. CTC Students' Mean Hours and Wages (quarterly and annually) by Enrollment Period, Age Group, and Family Status (nominal dollars)

	Less than 25 years old		Ages 25 and older	
	Students without dependents	Student parents	Students without dependents	Student parents
Before enrollment				
Employed	62%	61%	76%	70%
Mean quarterly hours worked	196	212	370	364
Mean annual hours worked	782	849	1482	1456
Mean quarterly wages	\$2,084	\$2,227	\$7,085	\$7,080
Mean annual wages	\$8,335	\$8,908	\$28,339	\$28,318
During enrollment				
Employed	69%	59%	59%	55%
Mean quarterly hours worked	273	264	349	339
Mean annual hours worked	1093	1055	1395	1356
Mean quarterly wages	\$3,684	\$3,514	\$7,923	\$7,753
Mean annual wages	\$14,734	\$14,057	\$31,691	\$31,012
After enrollment				
Employed	81%	76%	74%	72%
Mean quarterly hours worked	360	341	377	377
Mean annual hours worked	1439	1364	1506	1509
Mean quarterly wages	\$8,753	\$7,366	\$11,248	\$10,710
Mean annual wages	\$35,014	\$29,462	\$44,990	\$42,840
Difference – Before vs. After CTC enrollment				
Increase in mean annual wages	\$26,679	\$20,554	\$16,651	\$14,522

¹⁵ Hourly wages are calculated by dividing mean annual wages by mean annual hours worked.

Discussion

Descriptive analyses like this one provide preliminary insights into understanding how the experiences and credentials earned among CTC student parents vary from their peers without dependents. SBCTC has noticed considerable growth in short certificates among Washington students since the 2008–09 academic year, though the increase is concentrated in a subset of programs.¹⁶ Short certificates are the most common CTC credential earned by student parents and the second-most common CTC credential earned by male students without dependents. These findings reiterate the popularity of short certificates as a CTC credential and reinforce the credential’s two different purposes: (1) to help students gain immediate employment and (2) to act as a launching point to earning a longer-term certificate or degree.

Washington’s SBCTC, Department of Labor & Industries, and other agencies have invested extensive resources into promoting and expanding apprenticeship programs across the state because they offer a unique combination of academic and paid on-the-job training that helps students launch their careers. While apprenticeships are the least common CTC credential earned across all student groups in this analysis (particularly for female students without dependents and female student parents), CTC students who complete an apprenticeship see the largest average annual wage gains after CTC enrollment. Applied Baccalaureate (AB) degree completers in this study also experience large average annual wage gains after CTC enrollment, though the earnings increase is smaller for student parents. SBCTC has offered AB degrees since 2007, so this credential option was an emerging opportunity during the timeframe of this study.¹⁷

Some student parents may enroll at a CTC to advance their career opportunities, employment stability, or gain a new skill, and they may be especially motivated by their children to achieve personal or educational goals that help them reach self-sufficiency.¹⁸ The changes to employment and earnings for student parents and students without dependents examined in this report suggest that CTC students who are less than 25 years old — both parents and those without dependents — see more substantial employment gains after CTC enrollment than their older peers.

Opportunities for Future Research

Student parents are a unique group of postsecondary students because they balance a commitment to support their dependents with their desire for professional or personal growth. Importantly, they also comprise a significant portion of the CTC student population, warranting greater research and examination into strategies to increase their credential attainment and outcomes from CTC enrollment. Understanding the experiences and outcomes of these students is critical since they often face higher rates of economic insecurity, time constraints, and resource limitations that can influence their postsecondary success.¹⁹ CTC data systems in other states do not always collect details about a student’s family status, but there is growing recognition nationwide for

¹⁶ Stephens, D. (September 2010). Growth in short-term certificates at Washington’s Community and Technical Colleges. Research Report, No. 10-3.

¹⁷ Kaikkonen, D.A. & Quarles, C.L. (2018). The effect on earnings of the Applied Baccalaureate Degree. *Community College Review*, 46(4): 347 – 367.

¹⁸ Huerta, A.H., Rios-Aguilar, C., & Ramirez, D. (2022). “I had to figure it out”: A case study of how community college student parents of color navigate college and careers. *Community College Review*, 50(2): 193-218.

¹⁹ Institute for Women’s Policy Research and Ascend at the Aspen Institute. 2019. “Parents in College: By the Numbers.” Facts Sheet, IWPR #C481. Washington DC: The Institute for Women’s Policy Research and Ascend at the Aspen Institute. <https://iwpr.org/parents-in-college-by-the-numbers/>

improving mechanisms that gather this information.²⁰ The following questions are areas for further exploration of postsecondary experiences and workforce outcomes for student parents:

- What supports or programs exist for student parents within Washington’s postsecondary system?
- How much time does it typically take for CTC student parents to complete their CTC credentials? What proportion of student parents have attained a credential within five years of their CTC enrollment?
- What other education outcomes beyond the completion of a credential should be explored, especially for students who enroll in Continuing Education and/or non-award seeking programs at CTCs?
- If a student parent attends a four-year institution after their CTC experience, how often does their CTC program of study align with their chosen four-year institutional program of study?
- How does the “stop-out” rate vary for student parents compared to students without dependents?

Data sources. The data for this publication came from the ERDC P20W data system. This data system links administrative records from several state agencies. Data sources for this publication include:

- Washington State Board for Community and Technical Colleges (**SBCTC**) — For data on enrollment in RS during high school, enrollment after high school, and postsecondary credentials awarded at a Washington public CTC.
- Public Centralized Higher Education Enrollment System (**PCHEES**) housed at the Office of Financial Management (OFM) — For data on enrollment in Running Start during high school, enrollment after high school, and postsecondary credentials awarded at Washington public 4-year institutions.
- Washington State Employment Security Department (**ESD**) — For data on earnings and employer characteristics for individuals who are employed in wage-paying positions in Washington State.

Published: February 2025

Authors: Megan Schoor, Danielle Fumia

Contact: Education Research and Data Center, Forecasting and Research, Office of Financial Management (erdc@ofm.wa.gov)

Acknowledgements: ERDC would like to recognize the valuable insights, expertise, and support from our partners at SBCTC who consulted on this publication, notably Carmen McKenzie, Monica Peper, Summer Kenesson, Travis Dulany, and Diana Knight. This report is a byproduct of the Harvard University Strategic Data Project fellowship that Megan Schoor completed between October 2022 and September 2024.

To accommodate people with disabilities, this document is available in alternate formats by calling the Office of Financial Management at 360-902-0555.

²⁰ Gault, B., Holtzman, T., & Cruse, L.R. (September 2020). Understanding the student parent experience: The Need for Improved Data Collection on Parent Status in Higher Education. Institute for Women’s Policy Research. IWPR #C485. [Understanding-the-Student-Parent-Experience_Final.pdf](#)