



Long Term Postsecondary and Employment Outcomes of Multilingual Students Enrolled in Washington Public High Schools



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About the ERDC

The research presented here uses data from the Education Research and Data Center, located in the Washington Office of Financial Management. ERDC works with partner agencies to conduct powerful analyses of learning that can help inform the decision-making of Washington legislators, parents and education providers. ERDC's data system is a statewide longitudinal data system that includes de-identified data about people's preschool, educational and workforce experiences. In Fiscal Year 2019, ERDC was awarded a five-year Statewide Longitudinal Data System ([SLDS](#)) Grant, which involves using our data system to examine educational equity issues in Washington's public educational systems. ERDC is one of 28 grantees across the country who are participating in the FY19 SLDS Grant Program.

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Why is it important to understand long term postsecondary and employment outcomes of multilingual students?

Students who are multilingual bring many assets to their educational context, such as emerging understanding of more than one language and multicultural competence. They often encounter challenges in our school system related to inequitable distribution of resources, discrimination and under-supported language development programs that are not barriers for many of their English-only peers (Gándara et al., 2003). National data show that multilingual learners have lower rates of math and reading proficiency, as well as high school graduation rates than their peers (US Department of Education, 2022).

Focusing on a specific group of students and identifying differential outcomes may indicate that some students have less access than others to services, supports or opportunities. This report aims to provide leaders in education information on the educational and workforce outcomes specific to multilingual learners, with the goal of producing more equitable student outcomes in the future through policy, resources and improvement of service delivery related to Washington's Transitional Bilingual Instruction Program (TBIP).

While the Education Research & Data Center (ERDC) publishes reports that include results often disaggregated by K-12 program participation, ERDC has not conducted studies specifically focused on students known as multilingual learners (also referred to as English learners, English language learners or multilingual English learners). This report will refer to this student group as multilingual students and multilingual learners interchangeably.¹

For the purposes of this report, multilingual learners/students are defined as students who receive services from Washington's Transitional Bilingual Instruction Program (TBIP). TBIP serves students whose primary language is not English, providing English language development services with the goal of helping students to transition out or exit the program by achieving proficiency in English, as demonstrated by standardized assessment performance.

There are different instructional models offered in Washington K-12 public schools. Dual language models focus on developing cultural competence and bilingualism/biliteracy. Developmental late-exit models and transitional early-exit models focus on increasing instructional time spent in English and decreasing instructional time spent in the primary

¹ This language is being used rather than English learner or English language learner to avoid the use of deficit language and to reflect the assets that this group of students brings to their educational context.

language of a student until eventually all instruction is in English. Finally, alternative models — which are programs taught entirely in English — represent the majority of programs offered in Washington schools. These alternative models include content-based or sheltered instruction and supportive mainstream programs. Content-based or sheltered instruction occurs in classrooms comprised of primarily multilingual learners with a focus on academic content and English language development (OSPI, 2022c). Supportive mainstream programs occur in classrooms that have a mix of multilingual learners and English speakers. Multilingual students then receive additional instruction in English language development from a classroom teacher (OSPI, 2022c). All programs are “designed to address the unique needs of eligible students who come from linguistically and culturally diverse backgrounds” (OSPI, 2022a). Program eligibility is determined by language proficiency placement testing of students whose parent or guardian indicates by survey to the school district that their child’s first or primary language is one other than English.

OSPI monitors multilingual learners throughout their K-12 experience, collecting data on attendance, test scores, discipline and other key K-12 metrics (OSPI, 2022b). However, there is less known about what happens to this group of students after they leave the K-12 education system. To our knowledge, there are no Washington state or national studies on the long-term outcomes of multilingual students, though there is an ERDC dashboard that provides some long-term postsecondary and workforce outcomes for English Learners who graduate high school (ERDC, 2021). The current study takes this dashboard a step further by exploring more outcomes for multilingual students, with results disaggregated by race, gender and other factors. Additionally, this study includes students who graduate as well as those who do not.

This study addresses the following research questions:

- 1. What are the long-term postsecondary education and employment outcomes for students who receive services from the State Transitional Bilingual Instruction Program (TBIP)?**
- 2. What are the outcomes for students who transition out of TBIP versus those who do not?**
- 3. What are the student gender and race/ethnicity characteristics associated with these outcomes?**

This is an exploratory study that will lay the foundation for future studies to focus on more specific or in-depth questions about multilingual learners.

Data

The data for this report came from the ERDC P20W data warehouse. This data warehouse links administrative records from several contributing education state agencies. This study used administrative data from K-12 education, postsecondary education and workforce sectors. K-12 data provided by the Office of Superintendent of Public Institution (OSPI) are from the:

- Comprehensive Education Data and Research System (CEDARS)
- Migrant Student Information System (MSIS)

Postsecondary² education data are from:

- Washington's Public Centralized Higher Education Enrollment System (PCHEES)
- State Board for Community and Technical Colleges' (SBCTC) data warehouse

Workforce data included:

- Employment Security Department Unemployment Insurance (UI) wage data
- Department of Labor and Industries Registered Apprenticeship data

K-12 and postsecondary data covers the 2010 to 2021 school years and employment data covers the 2010 to 2020 calendar years. Postsecondary data includes basic skills³ enrollments. Unemployment Insurance wage data represents individuals employed in wage-paying positions for employers based in Washington State, though some exclusions apply such as those who are self-employed, federal employees, small farm employees and the military.⁴ The multilingual learners included in this study are students who received TBIP services at any point since the 2010 school year. Students receiving language services under Title III for American Indian or Alaska Native students are not included in this analysis, as these are different programs with different services and objectives.

² Data from out-of-state and private institutions are not included.

³ Basic skills enrollments are when students enroll exclusively in Adult Basic Education (ABE) or English as a Second Language (ESL) courses during a term.

⁴ See [Washington State P20W Longitudinal Data System Research Handbook](#) for full list of exclusions.

Analytical approach

Study Design

This is a longitudinal descriptive study that compares a cohort of multilingual learners expected to graduate in 2015 to all students statewide who are expected to graduate in 2015. This study examines outcomes by gender, race and other characteristics to consider potential inequities.

Cohort

This study followed students who attended Washington public schools who were expected⁵ to graduate in 2015 from the 2010 school year to 2021. This cohort includes 93,737 students total, 7,298 of whom are multilingual learners. These years were selected based on data quality and availability, and to allow for studying long-term outcomes. Before 2010, K-12 data was inconsistent and unreliable for accurately identifying student program participation. The graduation year selected allows ERDC to use data from before the students entered high school to identify multilingual learners and generates enough post-high school data to meet the study’s goal of exploring long-term outcomes. See Table 1 for the school year that corresponds to the grade level for most students in the cohort. Not all students will be six years post high school in 2021, but most (those who graduated on time) are, just as not all students will follow the grade progression listed in the table, but most students in the cohort do.

Table 1: Cohort

School Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Grade Level	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	PS 1	PS 2	PS 3	PS 4	PS 5	PS 6

An important note about the multilingual learners in this study is that because the data only goes back to 2010, we are limiting our definitions of multilingual learners to newcomers⁶ and long-term program participants because the data does not support the inclusion of students who have transitioned out of services before middle school. Typically, in a given school year most students served by TBIP are in kindergarten through grade 3. Transition rates tend to be much higher for students in elementary grades than for students in middle or high school grades (OSPI, 2022d). If this study were able to capture students receiving TBIP from

⁵ Per the OSPI [CEDARS manual](#), students are expected to meet the requirements of graduation that are in place for their expected graduation year. If a student enters 9th grade in 2010, they would be expected to meet the graduation requirements for the class of 2013 even if they took longer than 4 years to graduate.

⁶ Students who have recently immigrated to the United States.

kindergarten to high school, the cohort would be much larger and have much higher transition rates.

Measurement

Several variables are included in this study for descriptive analysis.

Student characteristics includes gender, race, income level as measured by free or reduced-price meal eligibility, disability status, whether they had a 504 plan, received special education services, were considered homeless, were considered migrant, or obtained a high school diploma or GED.

TBIP participation variables include length of time in program, whether a student transitioned successfully out of the program, and at what grade level they began and ended their participation in TBIP.

Postsecondary education variables include enrollment, degree, and certificate completion at 2-or 4-year postsecondary institutions, length of time between last year of high school enrollment and first year of postsecondary enrollment, pre-college course taking, and types of credentials earned from postsecondary institutions.

Employment variables include employment, continuous employment throughout the year, income, hours worked, and participation in a registered apprenticeship program.

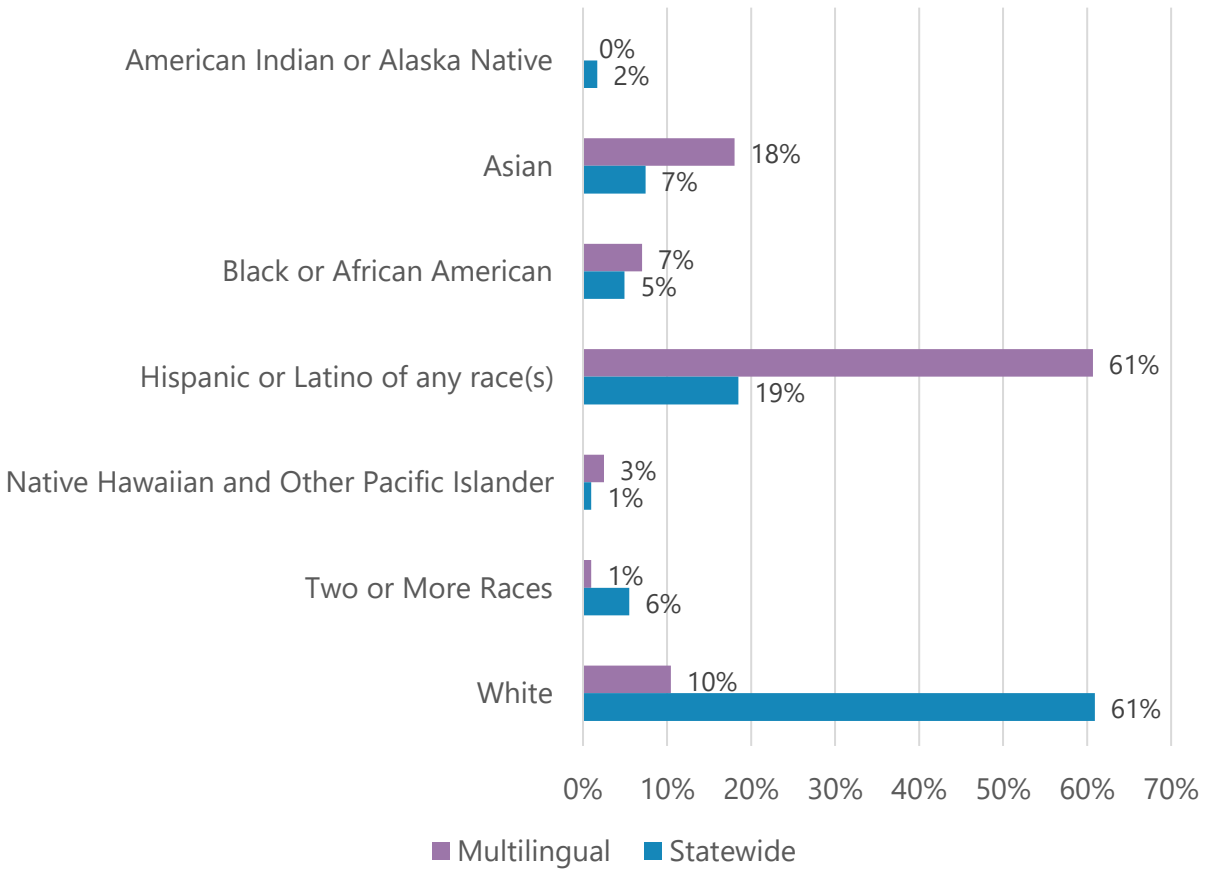
What did we learn?

Student Characteristics

What are the characteristics of this group of multilingual learners?

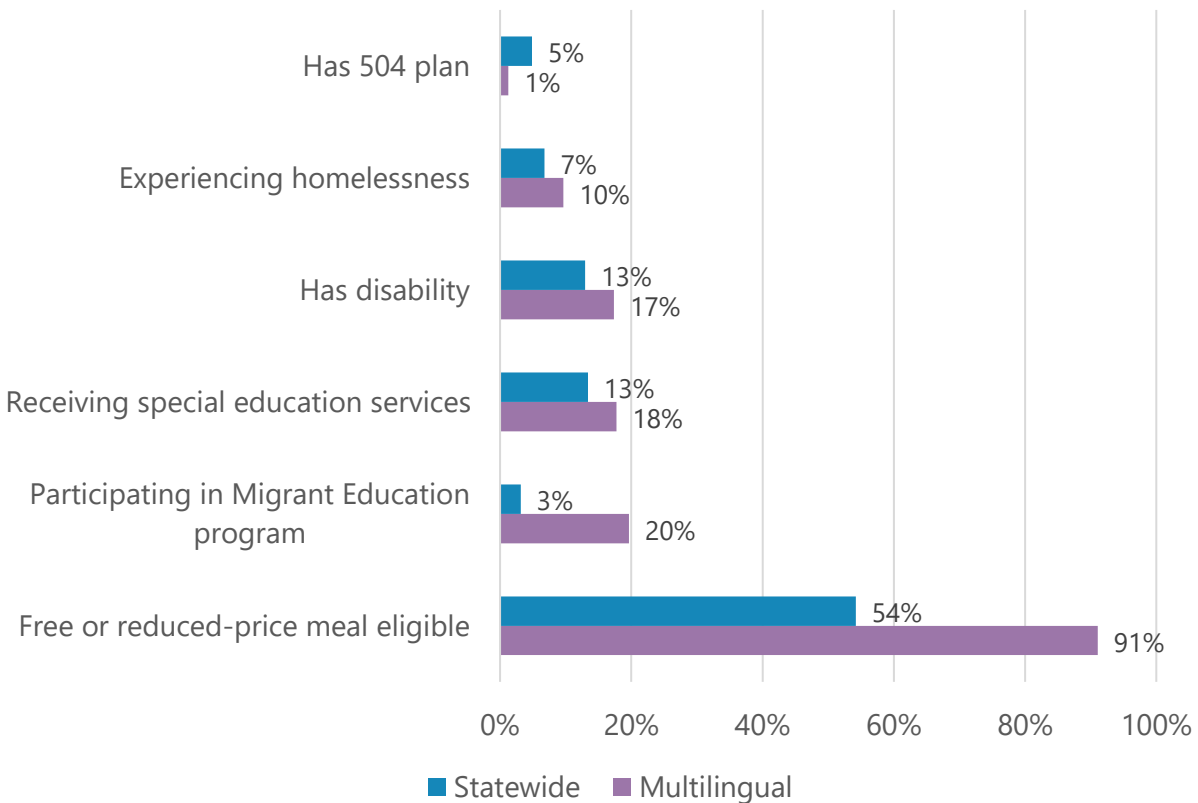
Gender & race. A slightly higher percentage of multilingual learners identify as male (55%) than in the overall statewide cohort (51%). Most multilingual learners in Washington identify as Hispanic or Latino (61%) (see Figure 1). In comparison with the statewide cohort, multilingual learners who identify as Hispanic or Latino, Asian, Black, or Native Hawaiian and Other Pacific Islander (NH/PI) are overrepresented compared to these student groups statewide, and there are lower percentages of students who identify as White, Multiracial, or American Indian or Alaska Native. See Table B-1 in appendix for additional cohort characteristics.

Figure 1: Race and ethnicity distribution for statewide and multilingual learners in 2015 cohort



Other student characteristics. Multilingual learners are more often free or reduced-priced meals eligible (91%), migratory (20%), receive special education services (18%)⁷, have a disability (17%), and experience homelessness (10%) than the statewide population (see Figure 2 and appendix Table B-1). A smaller percentage (1%) of multilingual learners had a 504 plan than their statewide peers. To understand these results, it is important to note that not all students with disabilities receive special education services, but all students in special education have a disability. Few students with a 504 plan have a disability, and few students with disabilities have a 504 plan. Eligibility for protection under Section 504 is a physical or mental impairment that limits at least one major life activity. Impairments could be permanent or temporary.

Figure 2: Characteristics for 2015 cohort multilingual learners compared to all students statewide



⁷ From the 2010 to 2017 school years, students were able to be removed from TBIP if their language needs were attributed to disability. During this time period there were 166 students that left TBIP for this reason which represents 2.3% of the cohort. This likely would not impact study results as this small group with significant cognitive impairments would have experienced little change in their instruction and experiences as a result of leaving TBIP and are not likely to transition out.

What are multilingual students’ length of time in TBIP, transition status, and grade level upon entering and leaving TBIP?

Length of TBIP participation. The average length of time in TBIP for all multilingual students was 3.3 years.⁸ Students who transitioned out averaged fewer years (2.8) and those who did not transition averaged slightly more years (3.4) than the whole group of multilingual learners. Those in TBIP for 6 or more years had lower transition rates than those who spent 5 or fewer years in TBIP during 2010 to 2021 (see Table 2). Most students captured in this study entered TBIP in grade 7 or earlier and the majority ended their participation (regardless of transition status) in grade 12 (see Table 3).⁹

Table 2: 2015 Cohort length of time in TBIP and transition rate during 2010 to 2021

Number of years in TBIP	Did not transition	Transitioned	Transition rate
1	1,210	594	33%
2	1,002	454	31%
3	721	275	28%
4	695	267	28%
5	535	224	30%
6	778	128	14%
7 or more	380	35	8%
Total	5,321	1,977	27%

Table 3: 2015 Cohort grade levels of TBIP participation during 2010 to 2021

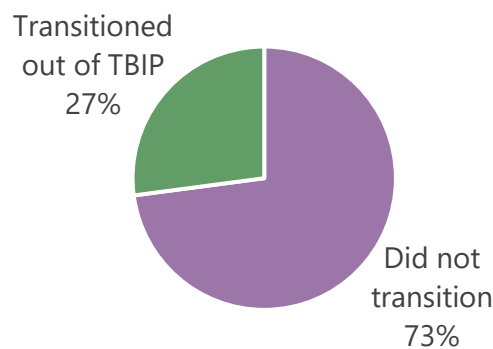
	Grade level of TBIP entrance		Ending grade level of TBIP participation	
	Count	Percentage	Count	Percentage
Grade 6 & under	41	1%		
Grade 7	4,138	57%	798	11%
Grade 8	646	9%	836	11%
Grade 9	1,139	16%	1,018	14%
Grade 10	555	8%	929	13%
Grade 11	481	7%	1,037	14%
Grade 12	298	4%	2,680	37%

⁸ The analysis considers participation between 2010 and 2021 only. Average length of participation estimates will be underestimated for students who participated both before and after 2010 since their participation will not be counted prior to 2010. Students who participated only prior to 2010 will not be included in calculations.

⁹ Data is limited to 2010-2021 school years only, so this does not represent a student’s entire K-12 experience in TBIP.

Transition Rates. As Figure 3 shows, a majority of participants in this cohort (73%) do not successfully transition out of TBIP. When a student transitions out of TBIP, they are reported by their district to have demonstrated English language proficiency on the annual English language proficiency assessment. However, as noted above, this transition rate does not reflect students who participated in and transitioned before their expected grade 7 year in 2010. Transition rates tend to be higher in grades K-3. For example, in the 2015-16 school year, transition rates were between 6% and 20% in grades K-3. In that same school year, transition rates were between 2% and 7% in grades 7-12 (OSPI, 2022d). The estimate in this analysis likely underestimates transition rates for the entire cohort.

Figure 3: Transition status of 2015 cohort multilingual students from 2010 to 2021



White students (33%) and Asian students (30%) have the highest transition rates. Native Hawaiian and Pacific Islander students (20%), especially males (14%) had the lowest transition rates. Female and male multilingual students had similar rates at 28% and 27% respectively (see Table B-2 in appendix).

What percent of multilingual students complete a high school diploma or GED?

High school completion. Students who transition out of TBIP have a higher graduation rate (78%) than those who do not (54%). Students who transition out of TBIP also have higher graduation rates than all students statewide (73%) (see Table 4). GED is an uncommon pathway for multilingual learners, as only 1.5% obtain a GED, whereas 3.4% of the statewide population obtains a GED. Multilingual learners who transition have a similar GED completion rate (1.4%) to those who do not transition (1.5%). Rates of obtaining a GED for multilingual students are similar by gender (see Table B-3 in appendix). The number of multilingual learners completing a GED is too small to report out by race.

Table 4: 2015 Cohort 7-year high school completion rates by transition status

	Statewide	All Multilingual	Did not transition	Transitioned
High school diploma	67,976 73%	4,421 61%	2,878 54%	1,543 78%
GED	3,221 3.40%	109 1.50%	82 1.50%	27 1.40%

Postsecondary Education Outcomes¹⁰

What percent of multilingual students enroll in a two-year or four-year institution?

Overall multilingual students enroll at postsecondary institutions at lower rates (47%) than all students statewide (57%). Those who transition out of TBIP enroll at similar rates (57%) as all students statewide (see Figure 4).

Figure 4: Postsecondary enrollment and completion by transition status of the 2015 cohort during 2010 to 2021

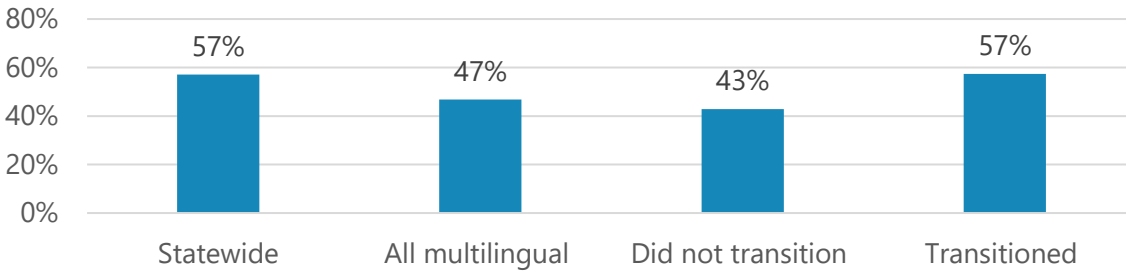
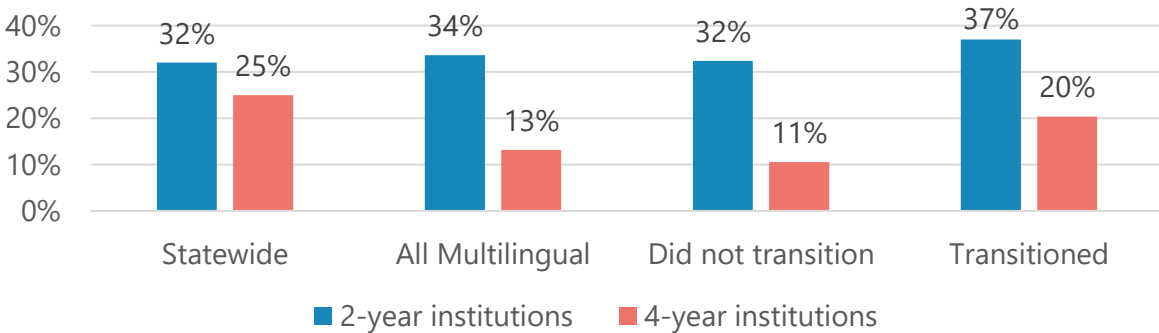


Figure 5 shows that multilingual students have higher enrollment rates (34%) at 2-year institutions than all students statewide (32%) and lower enrollment rates at 4-year institutions (13%). Students who transition out of TBIP have higher enrollment rates at both the 2- and 4-year levels than those who do not transition. Of those multilingual learners who obtain a GED, their enrollment rate in postsecondary institutions is higher (57%) than the rate for all multilingual students (likely because GED programs are administered by postsecondary institutions), but not enough students complete a postsecondary degree or certification to report (see Table B-4 in appendix).

Figure 5: Highest level of enrollment by institution type and transition status of the 2015 cohort during 2010 to 2021

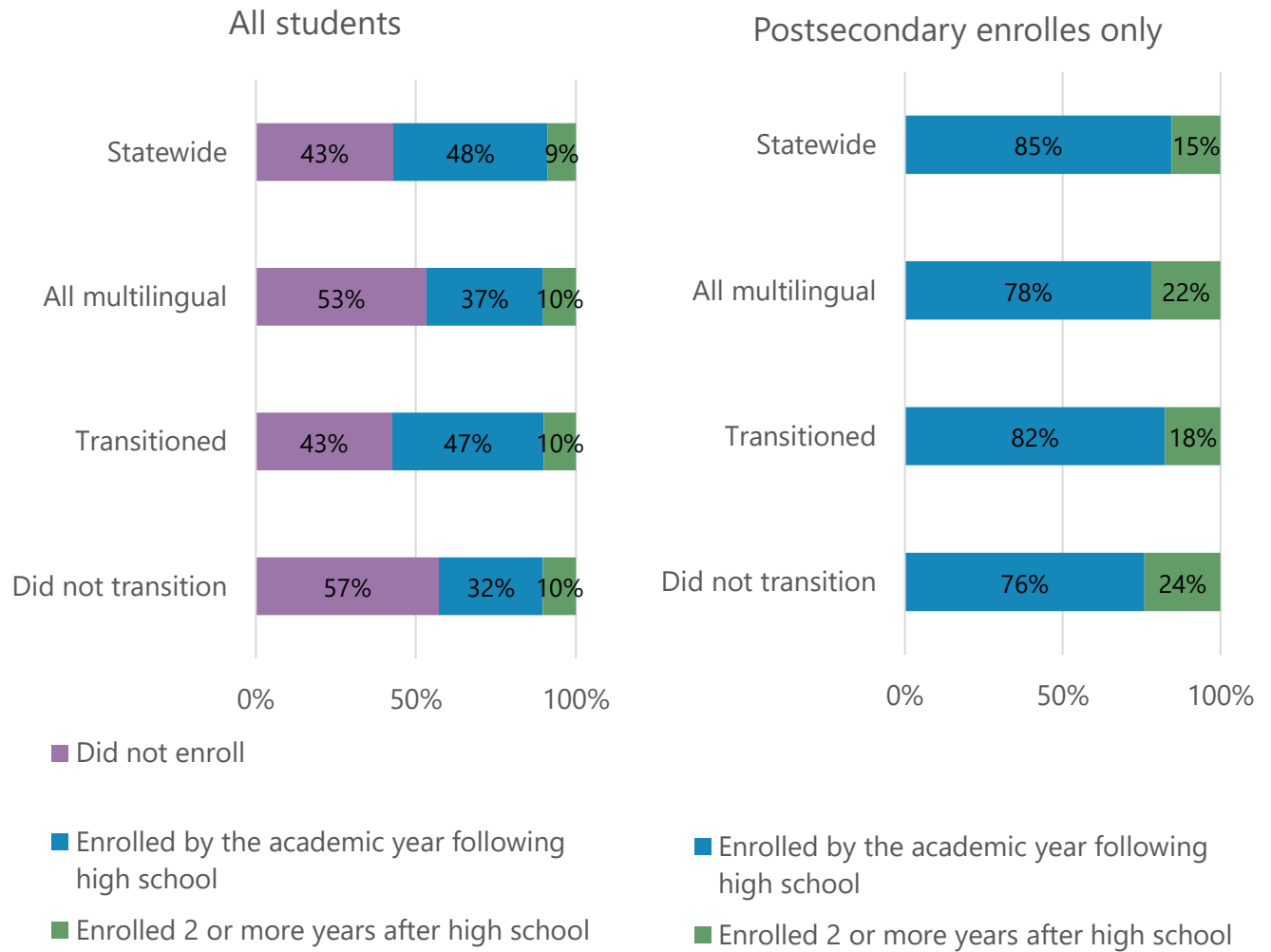


¹⁰ Postsecondary outcomes differ from the ERDC Graduate Outcomes dashboard due to differences in the measures used and the students included in the data.

When do multilingual students first enroll at 2- and 4- year post-secondary institutions?

Multilingual students who enroll at postsecondary institutions enrolled later after high school than their statewide peers. Seventy-eight percent of multilingual student enrollments occur by the academic year following high school, compared with 85% of students statewide (see Figure 6). Figure 6 also shows that 53% of multilingual learners did not enroll in a postsecondary institution by 2021, while 37% enrolled by the academic year following high school, and 10% enrolled two or more years after their last year of high school enrollment. Similarly to all students statewide, about half of students who transition out of TBIP enroll in a postsecondary institution within one year of high school graduation (47%), but only 32% of those who do not transition enroll by then (see Table B-5 in the appendix). During the 2020 and 2021 academic years, the pandemic impacted postsecondary enrollment, so this may have lowered enrollment figures (Causey et al., 2021).

Figure 6: 2015 cohort students who enroll in postsecondary institutions during 2010 to 2021 by length of time after last year of high school enrollment



What percent of multilingual students enrolled in pre-college math or English courses?

While enrolled, multilingual students tend to take pre-college courses at a higher rate than the statewide rate, especially in English. Thirty-two percent of multilingual students enrolled in pre-college English courses, while only 13% of all students statewide enrolled in English pre-college level coursework (see Table B-6 in appendix). This could suggest that multilingual students need more college readiness support during K-12. Those who transitioned out of TBIP services have higher rates of pre-college level course taking than those who do not, with 41% of those who transitioned enrolling in pre-college math and 35% enrolling in pre-college English courses. Those who do not transition enroll in pre-college math at a rate of 35% and in English at a rate of 30%.

Multilingual female students have higher pre-college course taking rates than male students in both subjects¹¹, while statewide, female students only have higher pre-college course taking rates in math. Among multilingual students, racial differences in English pre-college course taking rates were much smaller than in math. In comparison to statewide rates, Asian and White multilingual students tend to have larger gaps with their statewide peers than Black or Hispanic multilingual students, so Black or Hispanic multilingual students are performing closer to all Black or Hispanic students. Other racial groups are too small to report pre-college course taking.

¹¹ This gender trend could be due to perceptions of girls' abilities (Riegler-Crumb & Humphries, 2012).

What percent of multilingual learners complete a certificate or a degree from a 2-year or 4-year institution?

Overall, multilingual students complete degrees and certificates at postsecondary institutions at lower rates (16%) than all students statewide (23%). However, those who transition out of TBIP complete at similar rates (24%) as statewide (see Figure 7).

Figure 7: 2015 Cohort postsecondary completion attained by 2021 by transition status

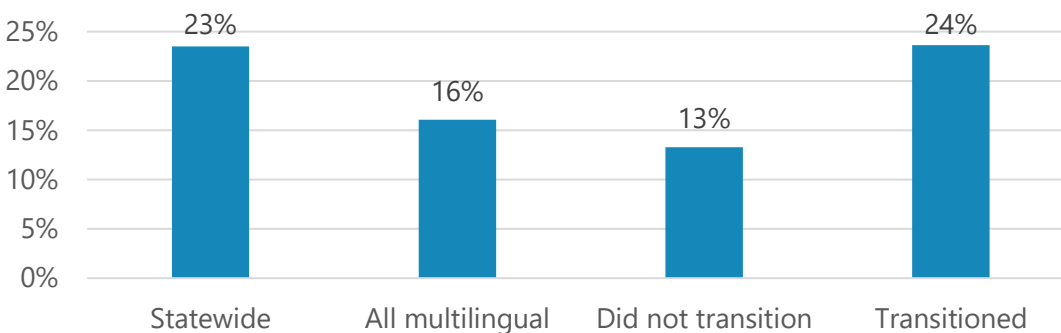
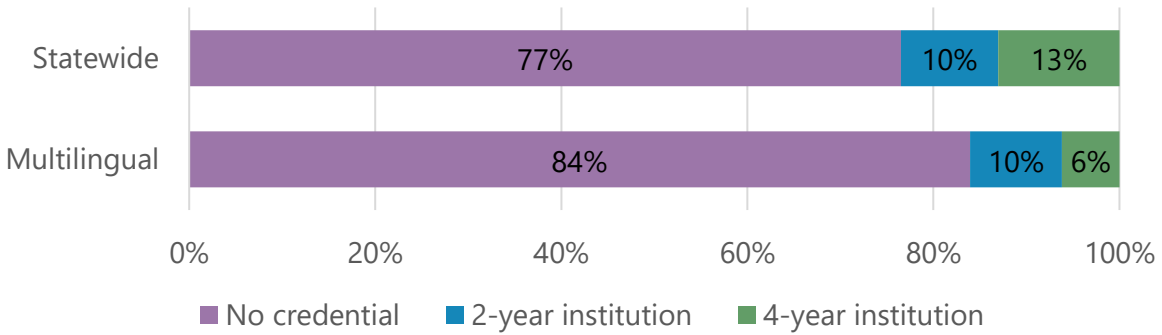


Figure 8 shows that by the 2021 academic year (six years after the expected graduation year), 84% of multilingual students did not earn a postsecondary credential in Washington, while statewide, 77% of students do not earn a postsecondary degree or certificate.¹² Ten percent of multilingual students complete at a 2-year institution and 6% complete at a 4-year institution. In comparison, 10% of all students statewide complete at a 2-year institution and 13% complete at a 4-year institution.

¹² These figures differ from the [ERDC High School Graduate Outcomes dashboard](#) due to differences such as the time period considered and the students included. The dashboard measures the completion rate over an eight year period of only students who graduate high school, while this study measures the completion rate over a six year period of students who graduate as well as those who do not.

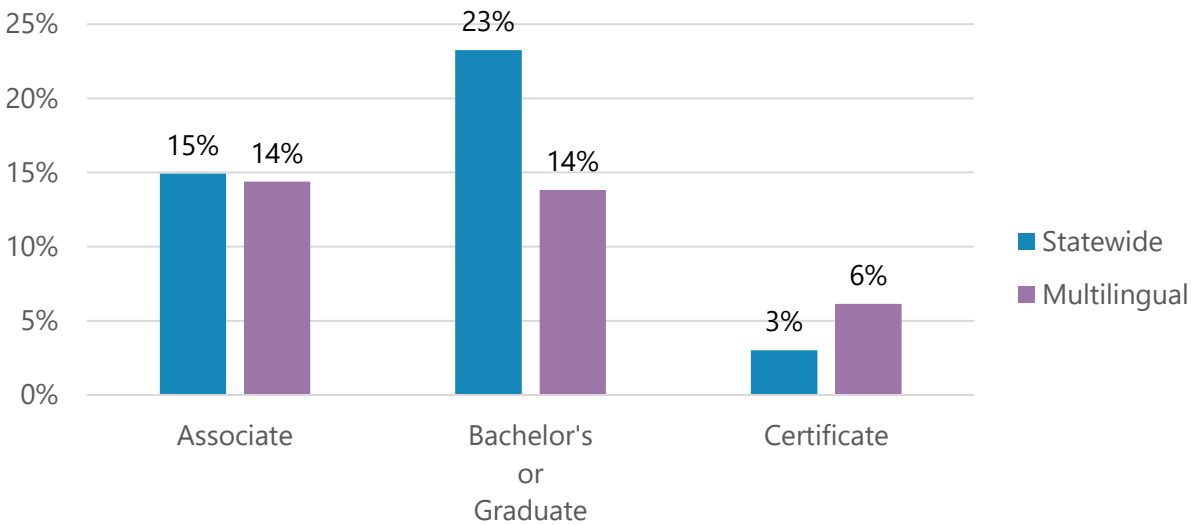
Figure 8: 2015 Cohort students who ever earned a credential from a postsecondary institution by 2021 by highest level of institution type



What types of postsecondary credentials are earned by multilingual students?

Although the overall rate of postsecondary completions is lower than the statewide percentage for multilingual students, they do complete certificates¹³ at higher rates (6%) than the statewide percentage (3%). The portion of multilingual students who earn 2-year degrees (14%) is very close to the statewide percentage (15%), but the gap is larger for bachelor’s and graduate degrees. Figure 9 shows that 14% of multilingual students earn a bachelor’s or graduate degree, compared with 23% of all students statewide.¹⁴

Figure 9: 2015 Cohort highest postsecondary degree attained by 2021

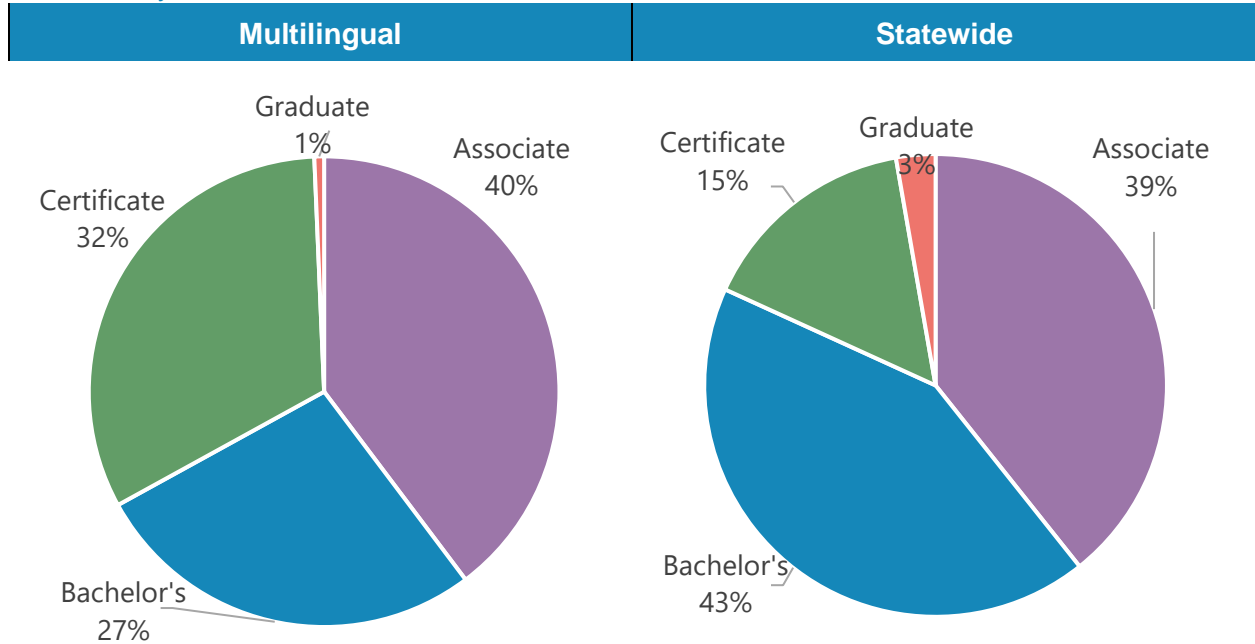


¹³ Examples of certificates: nursing assistant certificate, early childhood certificate, automotive technician certificate.

¹⁴ Figure 9 illustrates degree attainment rates among those who enroll in a postsecondary institution. This differs from Figure 8, which shows rates of postsecondary degree attainment for all high school students.

Multilingual learner certificate and postsecondary completion trends differ from the statewide population (see Figure 10). Specifically, multilingual students earn a larger proportion of certificates (32%) than all students statewide (15%) and a smaller proportion of bachelor’s and graduate degrees (27%) than all students statewide (43%). Rates of completion for Associate degrees (40%) are comparable to all students statewide (39%).

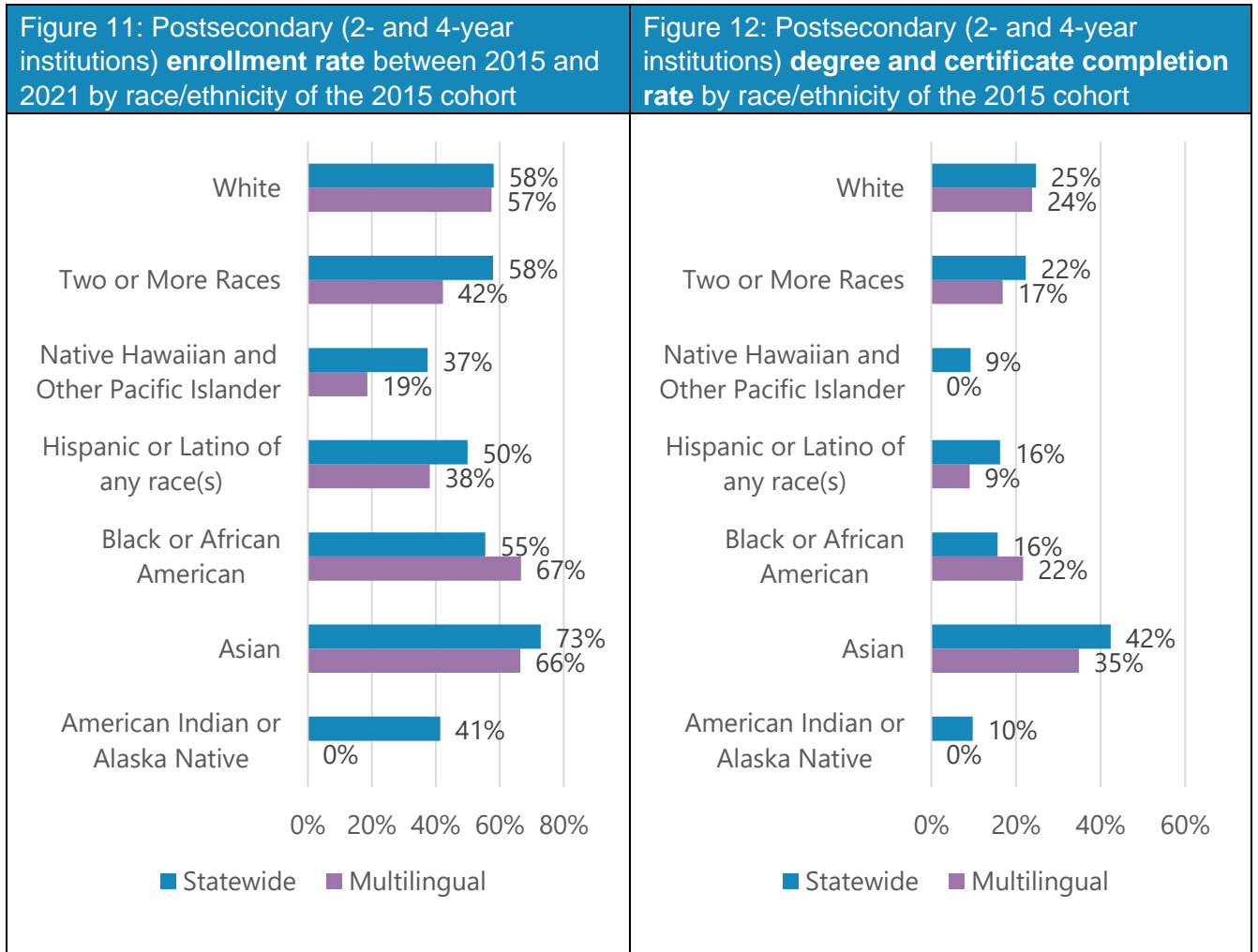
Figure 10: Proportion of certificates and degrees earned by 2015 cohort students by the 2021 academic year



What are the multilingual learner gender and race characteristics associated with postsecondary enrollment and completion?

With the exception of Black students, all other multilingual racial groups enroll at postsecondary institutions and complete credentials at lower rates than all students in their respective racial groups statewide (see Figures 11 and 12). Black multilingual students enroll in and complete postsecondary credentials at higher rates than Black students statewide. Statewide, 55% of all Black students enroll in postsecondary and 16% complete, while 67% of Black multilingual students enroll and 22% complete. Notably, while statewide Black students tend to have similar enrollment rates to other statewide racial and ethnic groups, rates for Black multilingual students are higher than most other racial and ethnic groups regardless of language status.

Gender trends for multilingual students follow the statewide pattern in which female students enroll in and complete at both 2- and 4-year institution levels at higher rates than male students (see Table B-7 in appendix).



As is consistent with statewide trends, female multilingual students who enroll in postsecondary institutions obtain degrees across all categories at slightly higher rates than their male peers, with 16% earning Associate degrees, 16% earning bachelor’s or graduate degrees, and 7% earning certificates. All groups except for Black multilingual learners obtained bachelor’s or graduate degrees at lower rates than their statewide counterparts, and all groups except for Hispanic or Latino multilingual students had higher rates of obtaining Associate degrees than their statewide peers. Black multilingual students obtain bachelor’s or graduate degrees at the same rate (15%) as their statewide peers. Asian multilingual students have a higher rate (28%) than all students statewide (23%) for obtaining bachelor’s or graduate degrees, but they are lower than all Asian students statewide (42%). All gender and racial groups of multilingual students obtained certificates at higher rates than their statewide peers (see Table 5).

Table 5: Highest postsecondary degree attained by 2021 for 2015 cohort students by gender, race/ethnicity and transition status

	Multilingual			Statewide		
	Associate	Bachelor's or Graduate	Certificate	Associate	Bachelor's or Graduate	Certificate
Did not transition	305 13%	257 11%	144 6%			
Transitioned out of TBIP	186 16%	215 19%	66 6%			
Female	265 16%	270 16%	121 7%	4,542 16%	7,115 25%	826 3%
Male	226 13%	202 12%	89 5%	3,434 14%	5,315 21%	786 3%
American Indian or Alaska Native	*	*	*	71 11%	64 10%	21 3%
Asian	164 19%	245 28%	50 6%	699 14%	2,127 42%	130 3%
Black or African American	38 11%	51 15%	22 6%	243 9%	383 15%	101 4%
Hispanic or Latino of any race(s)	180 11%	112 7%	110 7%	1,138 13%	1,308 15%	374 4%
Two or More Races	*	*	*	435 15%	645 22%	77 3%
White	99 23%	55 13%	28 6%	5,361 16%	7,857 24%	900 3%
Total	491 14%	472 14%	210 6%	7,976 15%	12,430 23%	1,612 3%

* suppressed

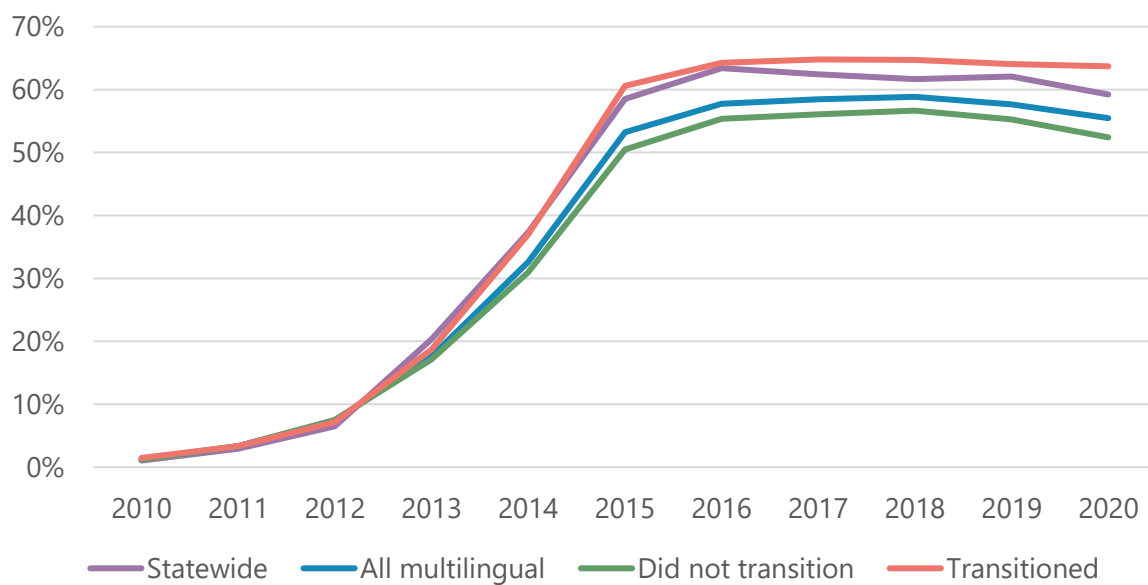
Employment Outcomes¹⁵

The following section presents data by calendar year, while previous sections used academic/school year. When interpreting the employment rate trend over time, it is important to consider that this cohort of students entered grade 9 in 2012 and were expected to graduate in the 2015 academic year.

What is the annual employment participation for multilingual learners?

Multilingual learners follow a similar trend as the statewide population in annual employment participation¹⁶ in Washington (see Figure 13). However, multilingual learners who transition out of TBIP have higher annual rates of employment post high school than statewide rates. In 2020, the year that the COVID-19 pandemic reached the United States, the employment rate of students who transition out of TBIP holds steady while the statewide rate and rates of students who do not transition decrease.

Figure 13: Percent of 2015 cohort students employed annually by transition status



The rate of annual employment does not differ much by gender between multilingual learners and the statewide population, but there is a larger gap between statewide and multilingual

¹⁵ Employment outcomes will differ from the ERDC Graduate Outcomes dashboard due to differences in the measures used and the students included in the data.

¹⁶ See appendix for definition.

female students than there is for male students. Statewide, female students have the highest employment rate of all groups, while multilingual female students have the lowest employment rate (see Figure 14). Most racial groups of multilingual students follow similar trends to statewide, but multilingual students who identify as two or more races have the largest gap with their statewide counterparts (see Figure 15). Black multilingual students have a slightly higher employment rate than their statewide peers for a few years leading up to the pandemic.

Figure 14: Percent of 2015 cohort students annually employed by gender

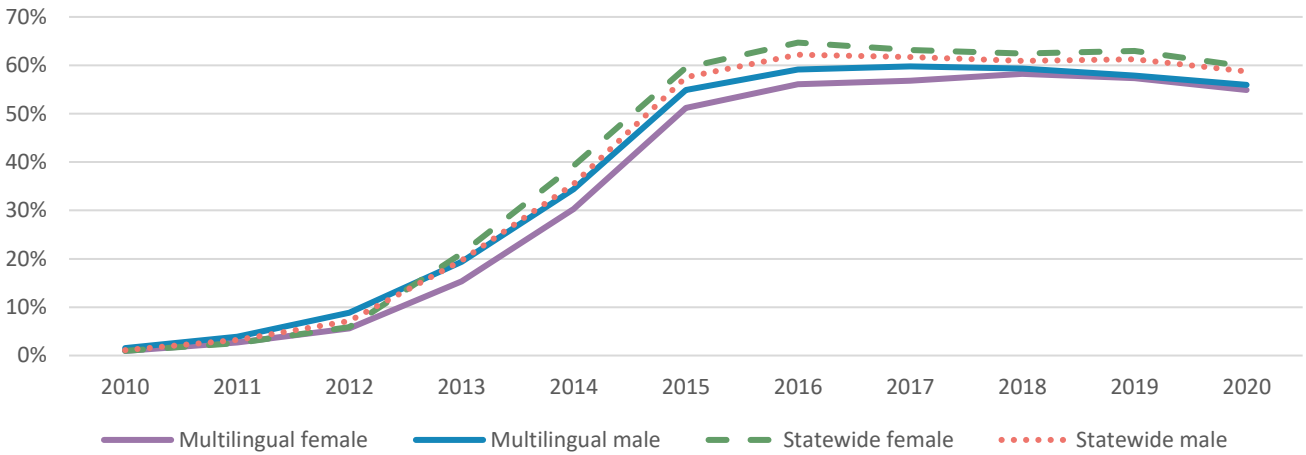
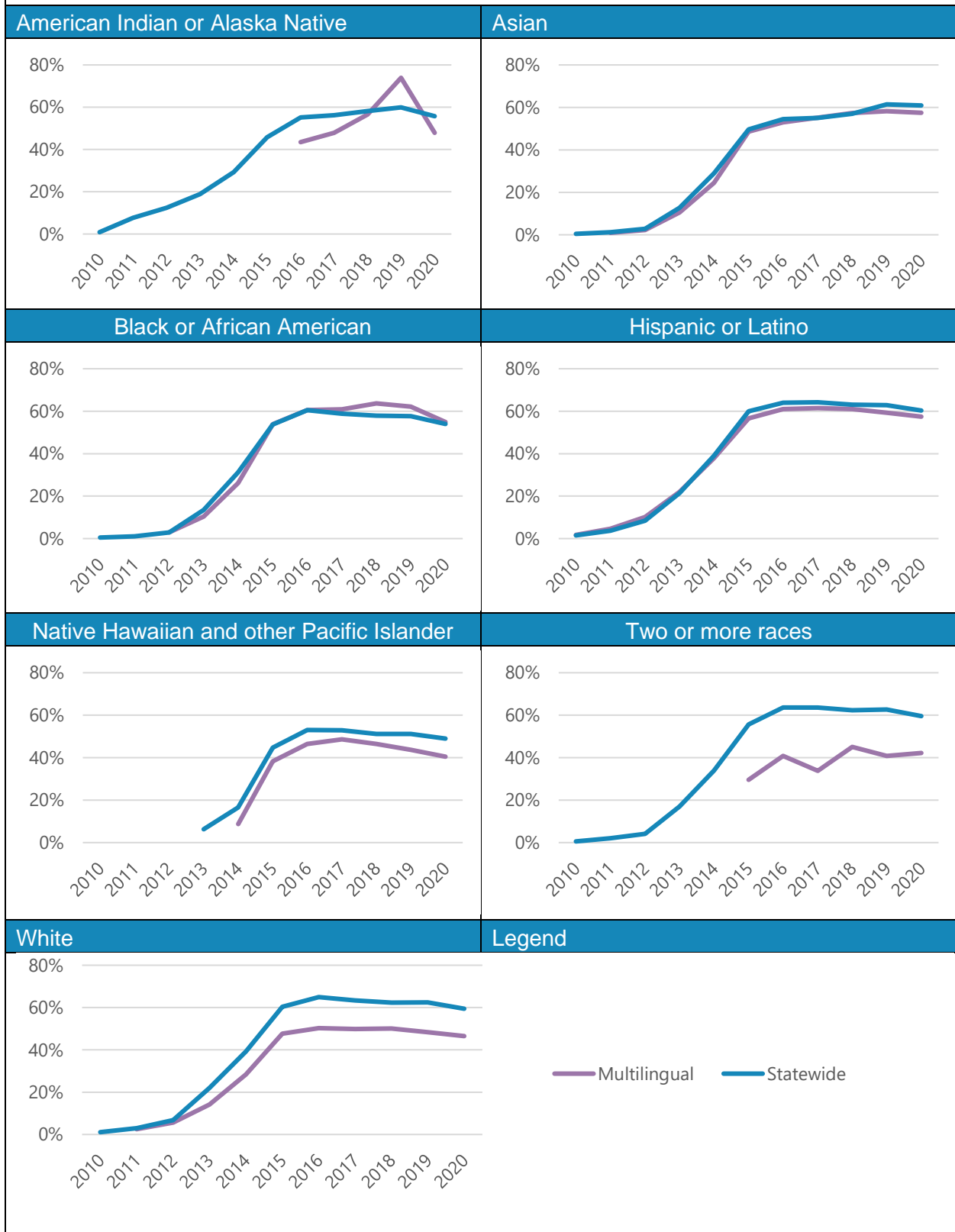


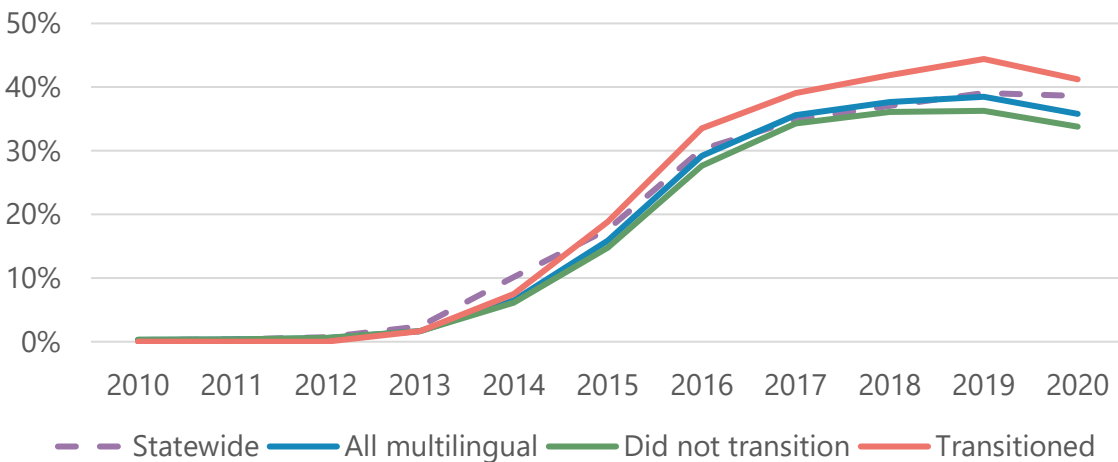
Figure 15: Percent of 2015 cohort students annually employed by race/ethnicity



What percent of multilingual learners are employed continuously?

Overall, multilingual students have similar rates of continuous employment¹⁷ to students statewide. Those who transition from TBIP services have higher rates of continuous employment than the statewide rate from 2015 and on, while those who do not transition have lower rates (see Figure 16). Among both statewide students and multilingual learners, Hispanic students had the highest rates of continuous employment (see Table B-8 in appendix). Table B-8 also shows that Native Hawaiian and multiracial students tended to have the lowest continuous employment rates of multilingual students. As expected, continuous employment rates were impacted by the pandemic beginning in 2020. For multilingual students, all racial groups experienced declines in continuous employment from 2019 to 2020, but Hispanic students had the smallest change. Statewide, all groups except for Asian students experienced declines. Both statewide and for multilingual learners, Black and Native Hawaiian and Pacific Islander students experienced the sharpest decline in continuous employment from 2019 to 2020.

Figure 16: Percent of 2015 cohort students continuously employed annually by transition status



Statewide, female students were continuously employed at higher rates than male students, but for multilingual learners, male students had higher rates than female students of continuous employment. Both male and female students experienced a decline in continuous employment from 2019 to 2020.

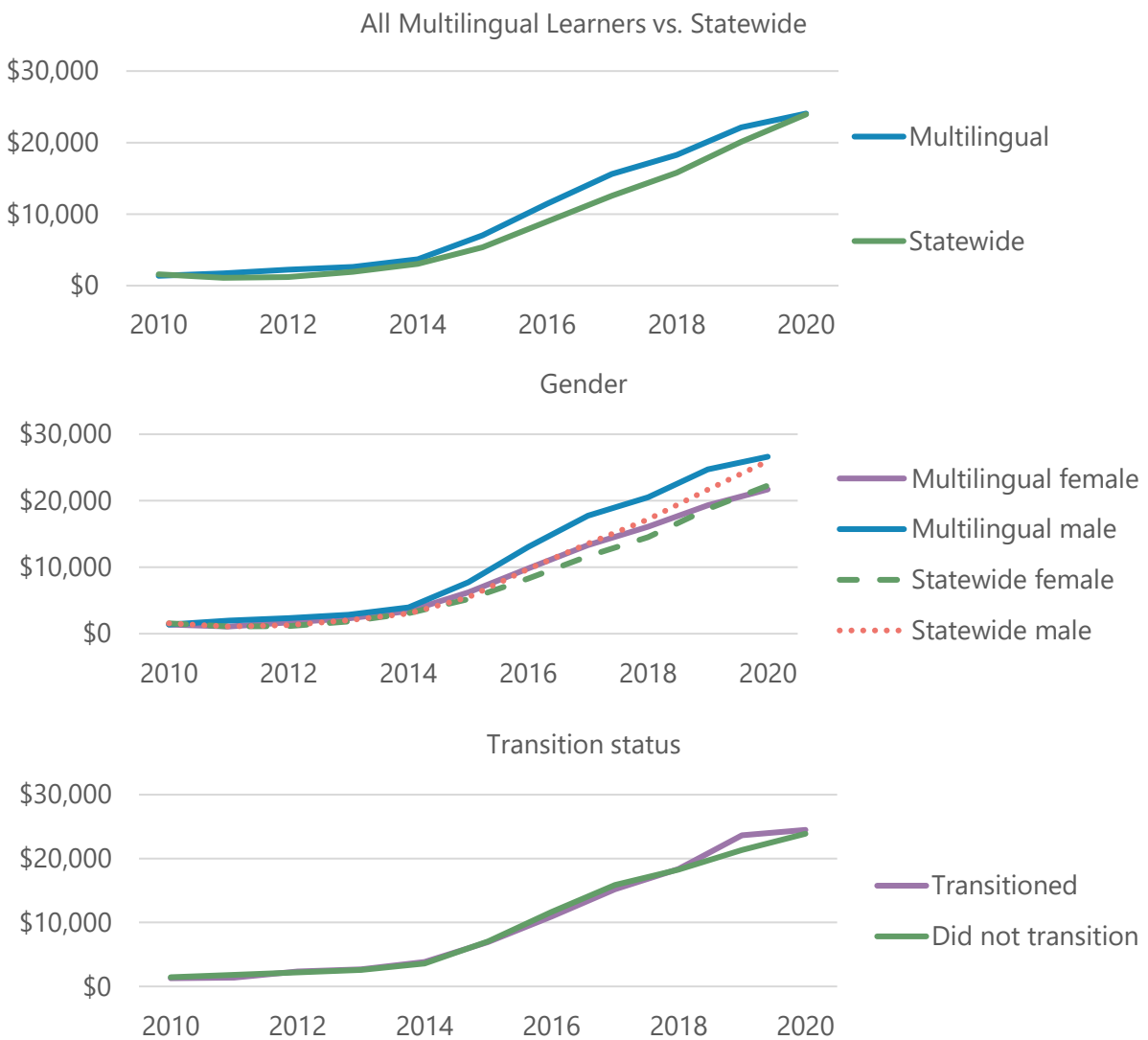
Multilingual learners do not work continuously while enrolled in high school more than all students statewide (see Table B-9 in appendix). There were no notable differences in continuous employment while enrolled in high school by gender or race/ethnicity for those who transition from TBIP and those who do not.

¹⁷ See appendix for definition.

What income are multilingual learners earning?

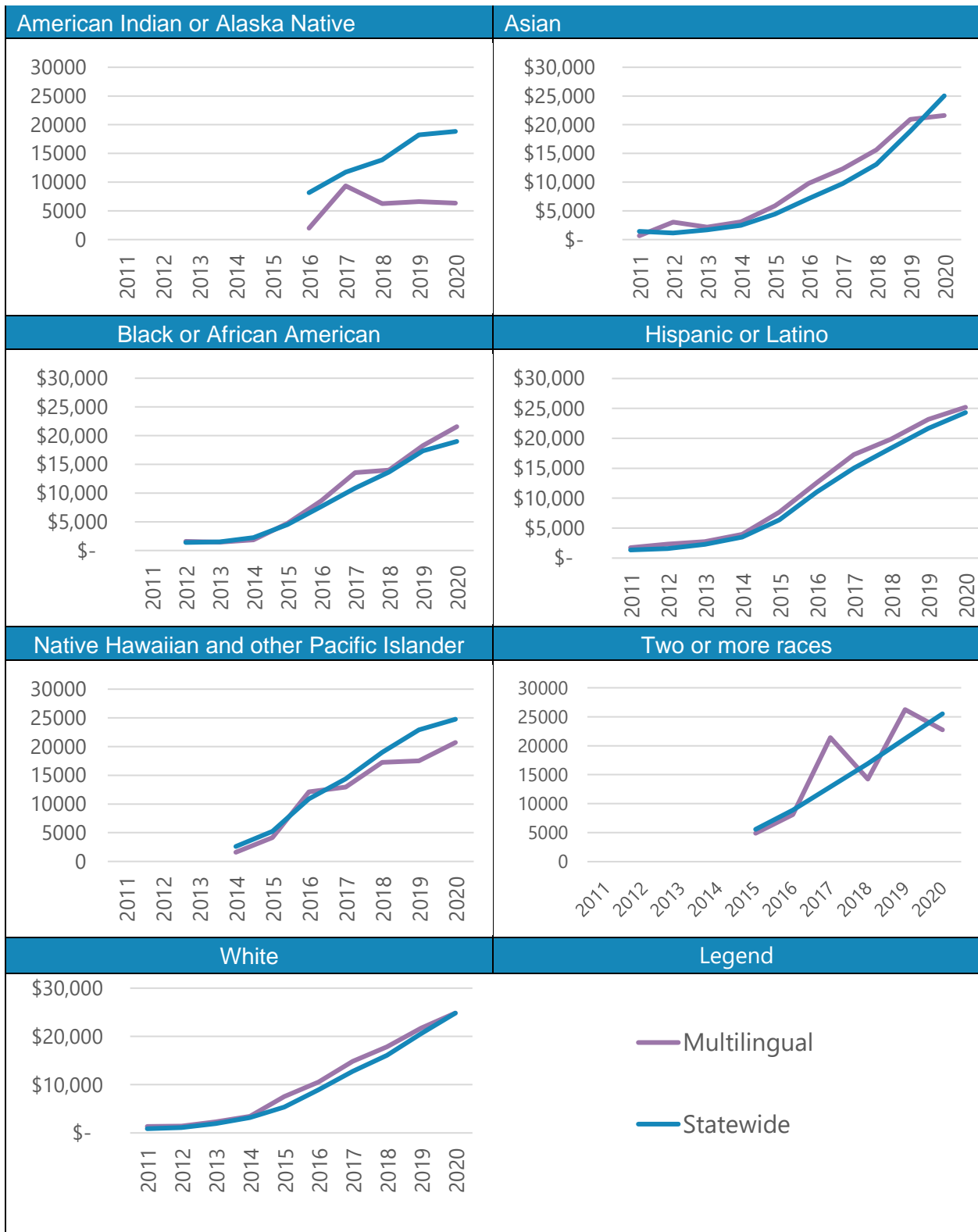
Median annual income¹⁸ for multilingual students tends to be a little higher than students statewide, but there is little difference between those who transition from TBIP and those who do not (see Figure 17a). Multilingual students' income trends are similar to statewide trends by gender, race and postsecondary completion status. Higher income for multilingual students is related to higher work hours and lower post-secondary enrollments as covered in other sections of this report.

Figure 17a: Annual median income of the 2015 student cohort across various characteristics



¹⁸ See appendix for definition.

Figure 17b: Annual median income of the 2015 student cohort across race/ethnicity groups



Earnings are adjusted to 2020 Consumer Price Index (CPI)

Some years are not displayed for student groups with suppressed data. For smaller student groups, trends are more volatile.

How many hours are multilingual learners working?

Median annual work hours are higher for multilingual students than all students statewide (see Figure 18a). Gender trends were similar statewide and for multilingual students, but multilingual female students who worked during years where most students are in middle and high school tended to work more hours than other groups (see Figure 18b). Multilingual students tended to work similar hours regardless of whether they transitioned out of services or not (see Figure 18c). Multilingual students follow similar patterns to students statewide based on postsecondary completion status. For both multilingual learners and all students statewide, those who did not earn a degree tended to work more hours than students who did. These gaps closed considerably by 2020, possibly as students complete their degrees and enter the workforce (see Figure 18d). Students who earned their highest degree from a 2-year institution worked more hours than those who earned degrees from 4-year institutions.

Figure 18a: Annual median hours worked of 2015 cohort students

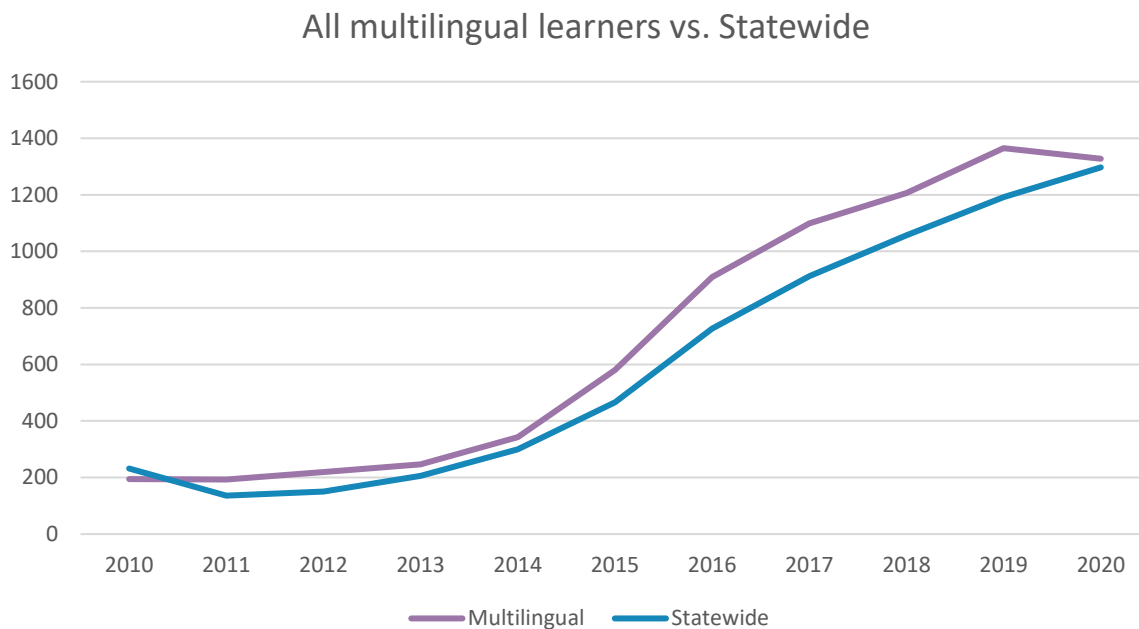


Figure 19b: Annual median hours worked of 2015 cohort students by gender

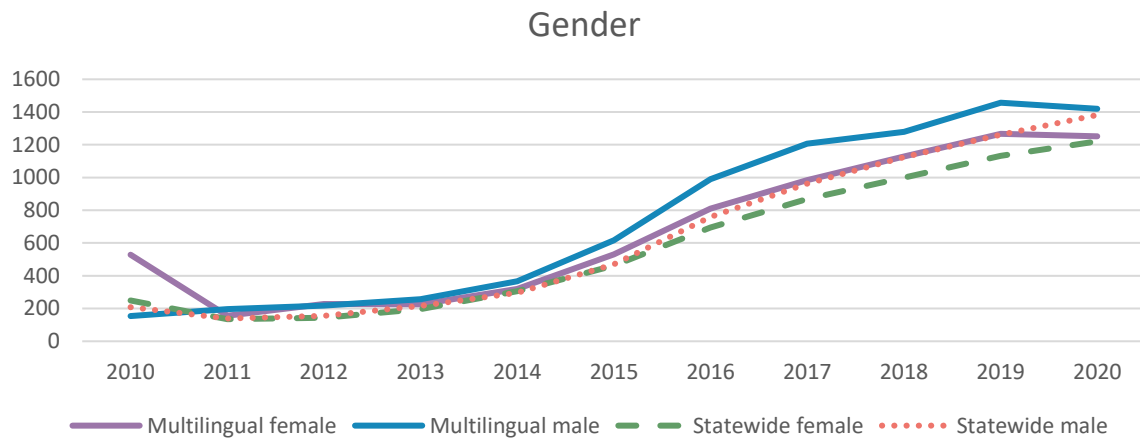


Figure 20c: Annual median hours worked of 2015 cohort students by transition from services status

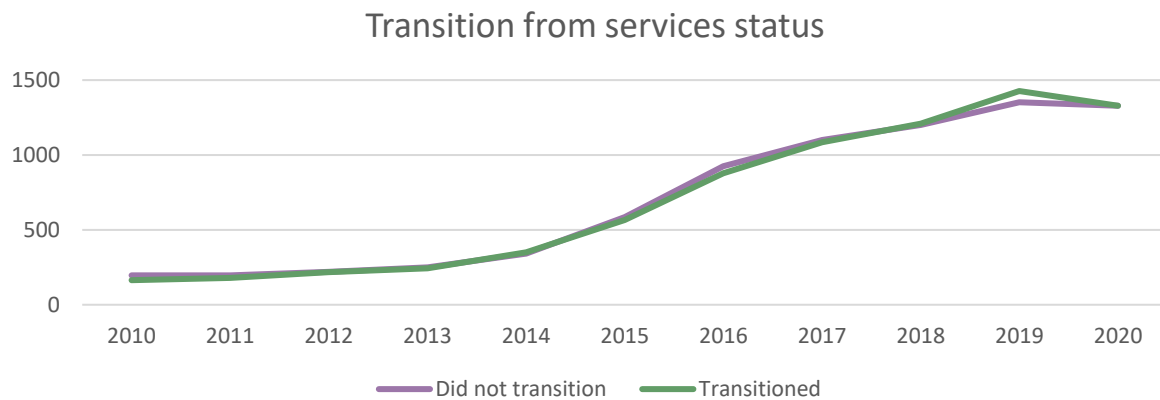
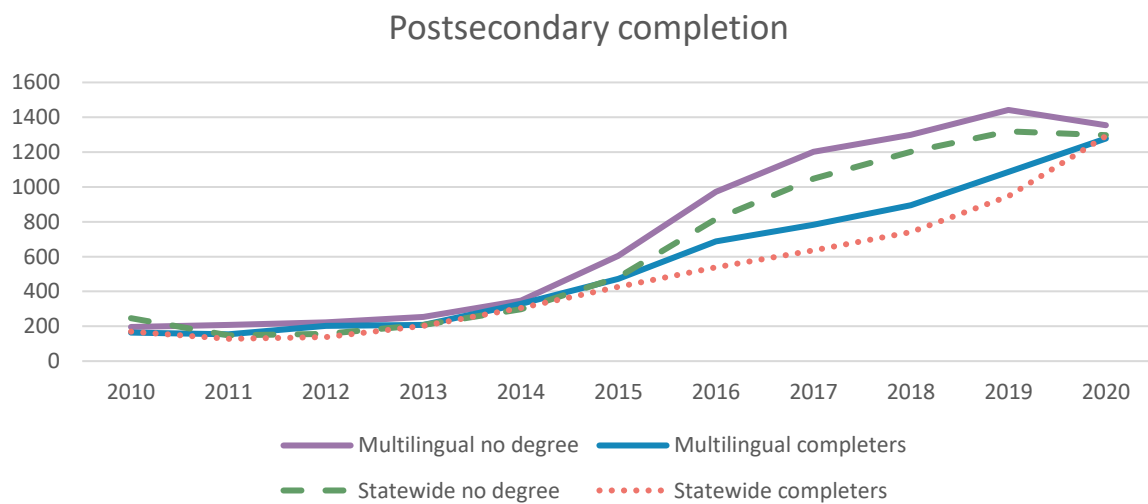
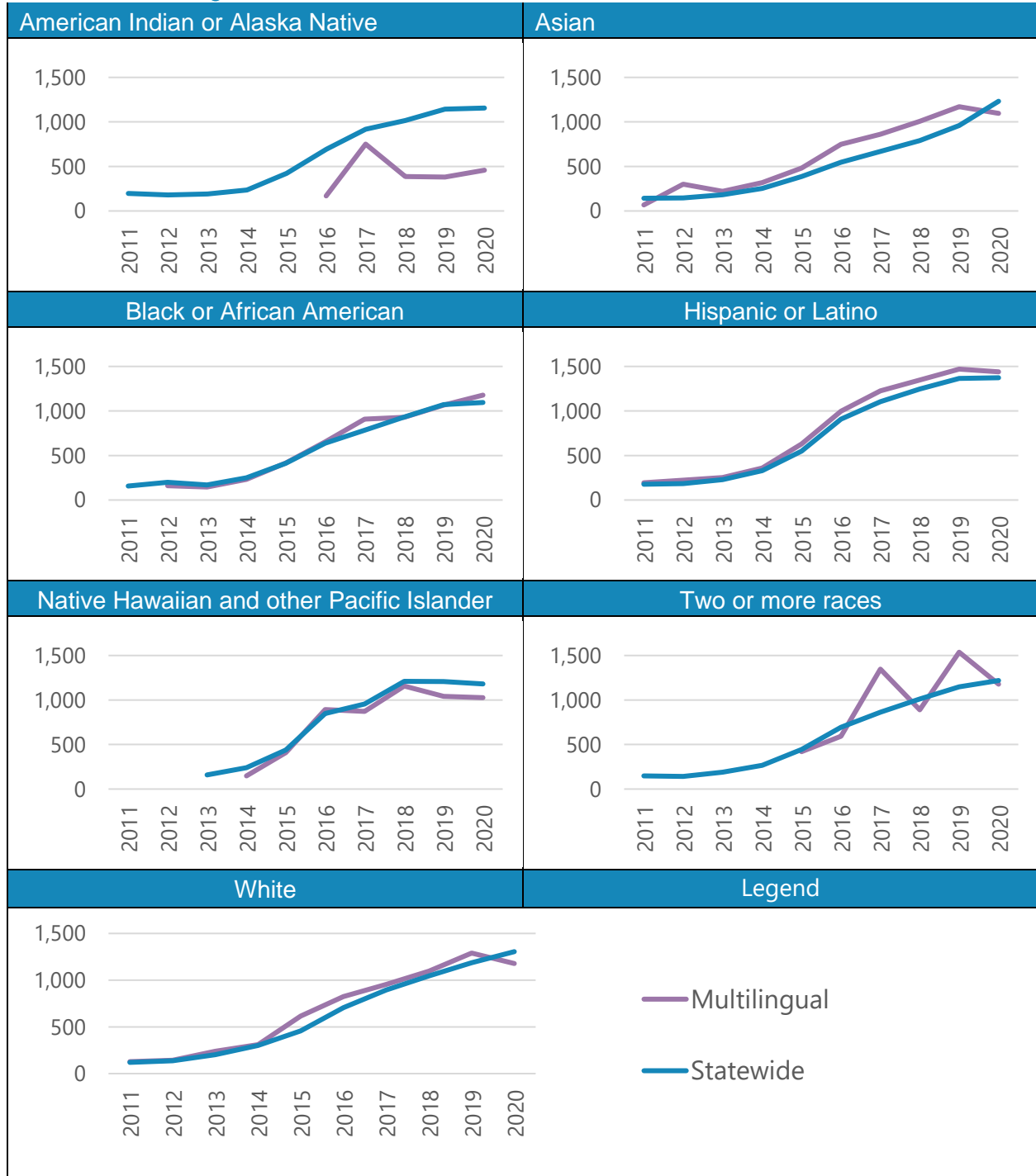


Figure 21d: Annual median hours worked of 2015 cohort students by postsecondary completion status



American Indian or Alaska Native multilingual students tended to work fewer hours than other groups. Consistent with statewide trends, Hispanic or Latino multilingual students tended to work more hours than other groups. See Figure 19 for work hour trends vary by race/ethnicity.

Figure 22: Annual median work hours by race/ethnicity of 2015 cohort students between 2011 and 2020, multilingual vs. statewide



Some years are not displayed due to student groups with suppressed data. For smaller student groups, trends are more volatile.

What percent of multilingual learners participate in and complete an apprenticeship?

A very small portion of the statewide cohort participated in registered apprenticeships. Multilingual students' rate of enrollment is similar to statewide rates. The percentage of multilingual students who enroll and persist to completion is higher (31%) than statewide (20%) (see Table B-10 in appendix).

What did we learn from this study?

Multilingual learners are more often students of color and have more overlapping participation or eligibility in other K-12 programs (Migrant education, Free-and Reduced-Price Meals, McKinney-Vento, Special Education) than all students statewide. Since this cohort of multilingual learners has more intersections with other programs, they likely have more complex needs than the overall statewide population. Furthermore, since multilingual students are mostly students of color, there is potential for exacerbating racial inequities if these complex needs are not met.

Most multilingual learners in this study do not transition out of program services. Due to limited data availability, the students captured in this study are likely to be mostly newcomers and long-term TBIP participants. The transition rates would be much higher if the cohort included students who transitioned out during elementary school. The data provide evidence that there is an opportunity to better meet the needs of students who remain in services throughout high school and to assist them in transitioning out of TBIP services before graduating. Students who do not transition out of TBIP graduate high school at lower rates, as well as enroll in and complete degrees at postsecondary institutions at lower rates. When they do enroll, they take longer to enroll, and they are employed at lower rates than their peers who do transition. This suggests that this group of students are not adequately prepared for their future and that TBIP services in Washington public K-12 schools may not be adequately resourced to meet the needs of multilingual learners who are not on track to transition. Additional supports may need to be made available to multilingual learners for completing high school and preparing for their post-high school pathway. Additionally, K-12 and postsecondary institutions may need to work together to increase rates of enrollment and completion for multilingual students who do not transition.

Increasing rates of transition can also potentially improve outcomes for multilingual learners as this analysis demonstrates that students who do transition out of TBIP tend to have postsecondary and employment outcomes that are similar to or slightly better than the statewide average. Students who transition out of TBIP services enroll in postsecondary institutions and complete degrees at similar rates to the statewide average, and they are employed and continuously employed at higher rates than their peers statewide. While this study is descriptive and cannot determine the impact of TBIP services, the findings suggest that students who transition out of TBIP tend to have better outcomes than their peers who do not transition.

Overall multilingual students enroll in postsecondary programs and complete¹⁹ degrees and certificates at lower rates than all students statewide. A smaller percentage of multilingual students complete a degree or certificate than all students statewide, but the gap is larger at the

¹⁹ For students who graduate high school on-time and enroll at a postsecondary institution the year following high school, this represents a 6-year completion rate.

4-year institution level. This suggests that educational leaders examine barriers and invest resources into improving access to educational opportunities and support at 4-year postsecondary institutions for multilingual learners.

This analysis showed that multilingual Black students enroll in postsecondary institutions at higher rates than all Black students statewide. Immigrant status as a potential protective factor for Black students in US preK-12 and postsecondary educational settings has been documented in other studies (Ruiz-de-Velasco & Fix, 2000; Calzada et al., 2015; Hudley, 2016). These results could be occurring because of differences in types of experience with and exposure to racism in Washington between immigrant and nonimmigrant Black students. Further research can help determine whether the education system might alleviate or exacerbate these differences.

Overall, as a group, multilingual learners have similar rates of annual employment and continuous employment as students statewide but tend to have higher income and work more hours than students statewide. Differences in characteristics— such as industry — where multilingual students are employed may explain this difference. Multilingual students also have lower postsecondary enrollment and completion than all students statewide allowing them to work more hours during the years when other students are attending college.

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Appendix A: Definition of measures

Student characteristics

504- a student who received a section 504 accommodation at any point during high school.

Disability- a district has identified a student as having a disability at any point during high school.

FRPM eligible- a student who, at any point since the 2010 school year, was eligible for free or reduced-price meals.

Gender- the gender reported with a student's first high school enrollment record.

High school graduation- whether a student obtains a high school diploma by the end of the 2021 school year.²⁰

Homeless- a student who was considered homeless as defined in McKinney-Vento Act, Section 725(2) at any point during high school.

Migrant student- a student who participated in the Migrant Education Program at any point since the 2010 school year.

Multilingual learner- a student who, at any point since the 2010 school year, received State Transitional Bilingual Instruction Program services, excluding Title III services for American Indian or Alaska Native students.

Race and ethnicity- the race and ethnicity reported with a student's first high school enrollment record, using federal race and ethnicity categories.

Special education- a student who, at any point since the 2010 school year, received special education services.

Transition out of services- when a student successfully exits out of TBIP, they are reported by their district to have demonstrated English language proficiency on the annual English language proficiency assessment. This measure uses CEDARS data to determine transition status, not assessment data.

²⁰ The high school graduation rate used in this study refers to the percentage of students with a graduation requirement year of 2015 and graduated by the end of the 2021 school year. The denominator of the calculation is the total number of students with a graduation requirement year of 2015 and the numerator is the total number of the same cohort who have a high school graduation record from 2015-2021 CEDARS historical data. This calculation does not remove from the denominator anyone who transfers out of the Washington public school system. This rate should not be compared with the one from the OSPI report card.

Postsecondary outcomes

2-year institution- publicly funded 2-year Washington postsecondary institutions only. This does not include out of state or private institutions.

4-year institution- publicly funded 4-year Washington postsecondary institutions only. This does not include out of state or private institutions.

Associate degree- completion of all types of Associate degrees (Direct Transfer Agreement, Transfer Degree, Applied Sciences, etc.) from a Washington 2-year public institution.

Bachelor's degree- completions of a 4-year degree at a publicly funded Washington 4-year institution or an Applied Baccalaureate Degrees offered at some 2-year institutions.

Certificate- any completion of a certificate program at a 2-year public Washington institution.

Did not enroll- a for-credit enrollment record was not found in any Washington public 2-or 4-year institution. Students who enroll in apprenticeship programs administered by the Washington State Department of Labor & Industries are not included in this group.

Ever enrolled- students were counted as having enrolled in a postsecondary institution if they had an enrollment record at any point between the 2010-2021 academic years. Students were not counted as enrolled if they were enrolled with zero credits or as a Life Long Learner enrollment only. Basic skills²¹ enrollments were not excluded due to current data limitations.

Graduate degree- any post baccalaureate degree (Masters, Professional Doctoral Degrees [J.D., M.D.], Academic Doctoral Degrees [Ph.D.] earned at a publicly funded 4-year Washington institution.

Postsecondary completion - having earned a degree or certificate at a Washington public postsecondary institution by the 2021 academic year. If a student earns more than one degree or certificate, the highest degree level attained is reported.

Pre-college courses²²- also referred to as remedial or developmental courses, these are courses used by institutions to prepare students for college-level Math and English courses. If a student enrolls at a Washington public 2-year and a 4-year institution in the academic year, they are only counted at the 4-year institution.

²¹ Define basic skills

²² For records from PCHEES data, pre-college courses in math were identified by course CIP code "320104" as well as remedial course flag "Y" combined with CIP code "27" (27.0101 through 27.9999). Records of pre-college courses in math from SBCTC data are identified by CIP code "330101." Pre-college English is from CIP code "320108" and remedial course flag "Y" combined with CIP code "23" (23.0101 through 23.9999). Records of pre-college course in English are identified by CIP codes "330102," "330103," and "330104."

Employment outcomes

Annual median work hours- median work²³ hours per calendar year.

Annual continuous employment rate- whether a student was employed¹⁸ during all four quarters of a calendar year.

Annual employment rate- whether a student was employed¹⁸ at any point during the calendar year.

Annual median income- median income¹⁸ during a calendar year. Earnings are adjusted for inflation to 2020 dollars using annual CPI-W for the Seattle-Tacoma-Bellevue Area (BLS Series ID CWURS49DSA0).

²³ For students who are employed in Washington, have wage records (federal employees, independent contractors, and others do not have UI wage records) who earned more than \$100 or worked more than 40 hours in a quarter. See [Washington State P20W Longitudinal Data System Research Handbook](#) for full list of exclusions.

Appendix B: Tables

Table B- 1 Characteristics of 2015 cohort students

	Multilingual	Statewide
Female	3,268 45%	45,661 49%
Male	4,030 55%	48,076 51%
American Indian or Alaska Native	23 0%	1,597 2%
Asian	1,316 18%	6,965 7%
Black or African American	512 7%	4,642 5%
Hispanic or Latino of any race(s)	4,429 61%	17,350 19%
Native Hawaiian and Other Pacific Islander	183 3%	907 1%
Two or More Races	71 1%	5,171 6%
White	764 10%	57,095 61%
FRPM eligible	6,647 91%	50,810 54%
Migrant	1,434 20%	2,950 3%
Special education	1,293 18%	12,541 13%
504	91 1%	4,560 5%
Disability	1,268 17%	12,166 13%
Homeless	704 10%	6,348 7%
Total	7,298	93,737

See appendix A for definitions

Table B- 2 Transition rates by gender and race/ethnicity of 2015 cohort students during 2010 to 2021

	Did not transition	Transitioned	Transition rate
Female	2,364	904	28%
Male	2,957	1,073	27%
American Indian or Alaska Native	*	*	*
Asian	916	400	30%
Black or African American	412	100	20%
Hispanic or Latino of any race(s)	3,259	1,170	26%
Native Hawaiian and Other Pacific Islander	147	36	20%
Two or More Races	*	*	*

	Did not transition	Transitioned	Transition rate
White	513	251	33%
Female-American Indian or Alaska Native	*	*	*
Female-Asian	408	174	30%
Female-Black or African American	197	42	18%
Female-Hispanic or Latino of any race(s)	1,420	532	27%
Female-Native Hawaiian and Other Pacific Islanders	65	23	26%
Female-Two or More Races	*	*	*
Female-White	232	126	35%
Male-American Indian or Alaska Native	*	*	*
Male-Asian	508	226	31%
Male-Black or African American	215	58	21%
Male-Hispanic or Latino of any race(s)	1,839	638	26%
Male-Native Hawaiian and Other Pacific Islanders	82	13	14%
Male-Two or More Races	*	*	*
Male-White	281	125	31%
Total	5,321	1,977	27%

* suppressed

Table B- 3 Postsecondary enrollment during 2010 to 2021 of 2015 cohort multilingual learners by GED completion and gender

	Completed GED	
	n	%
Female	40	1.20%
Male	69	1.70%

Table B- 4 2015 Cohort postsecondary enrollment and completion for GED completers during 2010 to 2021

	Ever enrolled		Completed degree/certificate	
	n	%	n	%
Multilingual	62	56.9%	*	*
Statewide	1,906	59.2%	247	7.7%

* suppressed

Results cannot be disaggregated by institution type due to suppression

Table B- 5 2015 cohort students who enroll in postsecondary institutions during 2010 to 2021 by years after graduation and transition status, gender, race

	Multilingual			Statewide		
	Did not enroll	Enrolled by the academic year following high school	Enrolled 2 or more years after high school	Did not enroll	Enrolled by the academic year following high school	Enrolled 2 or more years after high school
Did not transition	3,041 57%	1,728 32%	548 10%			
Transitioned	842 43%	935 47%	199 10%			
Female	1,564 48%	1,330 41%	373 11%	17,535 38%	24,039 53%	4,070 9%
Male	2,319 58%	1,333 33%	374 9%	22,723 47%	21,124 44%	4,206 9%
American Indian or Alaska Native	*	*	*	936 59%	477 30%	183 11%
Asian	442 34%	778 59%	94 7%	1,893 27%	4,604 66%	466 7%
Black or African American	171 33%	287 56%	54 11%	2,069 45%	2,050 44%	514 11%
Hispanic or Latino of any race(s)	2,741 62%	1,169 26%	516 12%	8,694 50%	6,851 40%	1,793 10%
Native Hawaiian and Other Pacific Islander	*	*	*	567 63%	261 29%	79 9%
Two or More Races	*	*	*	2,175 42%	2,515 49%	478 9%
White	325 43%	372 49%	67 9%	23,921 42%	28,399 50%	4,762 8%
Total	3,883 53%	2,663 37%	747 10%	40,258 43%	45,163 48%	8,276 9%

* suppressed

First enrollment if multiple enrollments

Includes postsecondary enrollments that occur while enrolled in high school

Table B- 6 2015 Cohort students who ever enroll in pre-college English and Math courses during 2010 to 2021 by transition status, gender, race

	Multilingual learner		Statewide	
	Math pre-college course	English pre-college course	Math pre-college course	English pre-college course
Did not transition	859 35%	753 30%		
Transitioned	484 41%	413 35%		
Female	718 40%	599 33%	9,288 32%	3,846 13%
Male	625 34%	567 31%	7,419 28%	3,519 13%
American Indian or Alaska Native	*	*	223 30%	107 14%
Asian	263 29%	284 32%	1,053 20%	650 13%
Black or African American	152 42%	103 29%	982 36%	567 21%
Hispanic or Latino of any race(s)	742 40%	632 34%	3,620 39%	2,056 22%
Native Hawaiian and Other Pacific Islander	*	*	113 32%	54 15%
Two or More Races	*	*	932 30%	432 14%
White	167 37%	132 29%	9,783 28%	3,499 10%
Total	1,343 37%	1,166 32%	16,707 30%	7,365 13%

* suppressed

Table B- 7 2015 Cohort students who enroll at a 2-year and 4-year postsecondary institutions during 2010 to 2021 by transition status, gender, race

	did not enroll	Multilingual		did not enroll	Statewide	
		At least 2 but less than 4 years	4 or more years		At least 2 but less than 4 years	4 or more years
Did not transition	3,041	1,721 32%	559 11%			
Transitioned	842	732 37%	403 20%			
Female	1,564	1,178 36%	526 16%	17,535	15,096 33%	13,030 29%
Male	2,319	1,275 32%	436 11%	22,723	14,577 30%	10,776 22%
American Indian or Alaska Native	*	*	*	936	485 30%	176 11%
Asian	442	500 38%	374 28%	1,893	1,926 28%	3,146 45%
Black or African American	171	237 46%	104 20%	2,069	1,697 37%	876 19%
Hispanic or Latino of any race(s)	2,741	1,322 30%	366 8%	8,694	5,511 32%	3,145 18%
Native Hawaiian and Other Pacific Islander	149	32 17%	2 1%	567	226 25%	114 13%
Two or More Races	41	17 24%	13 18%	2,175	1,716 33%	1,280 25%
White	325	338 44%	101 13%	23,921	18,106 32%	15,068 26%
Total	3,883	2,453 34%	962 13%	40,258	29,673 32%	23,806 25%

* suppressed

Highest level of enrollment if multiple enrollments

2-year enrollments are higher for multilingual learners than statewide which may be due to basic skills enrollments included in the data. Due to current data limitations, basic skills enrollments are not accurately identifiable.

Table B- 8 Percent of 2015 cohort students who are continuously employed during all quarters each year, by gender and race

	Multilingual									Statewide								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2012	2013	2014	2015	2016	2017	2018	2019	2020
Female	1%	2%	6%	15%	27%	33%	37%	37%	36%	1%	3%	12%	20%	31%	36%	38%	40%	39%
Male	1%	2%	7%	17%	31%	37%	38%	39%	36%	1%	2%	9%	16%	29%	34%	37%	39%	38%
American Indian or Alaska Native	*	*	*	*	*	*	*	*	*	*	2%	5%	11%	23%	27%	31%	35%	34%
Asian	*	1%	7%	15%	27%	32%	37%	39%	35%	0%	1%	7%	13%	23%	28%	31%	35%	39%
Black or African American	*	*	5%	13%	26%	34%	34%	37%	29%	0%	1%	7%	16%	27%	32%	33%	35%	31%
Hispanic or Latino of any race(s)	1%	2%	7%	17%	32%	39%	41%	41%	39%	1%	2%	9%	18%	33%	39%	42%	43%	41%
Native Hawaiian and Other Pacific Islander	*	*	*	*	24%	26%	24%	25%	20%	*	*	3%	8%	26%	28%	31%	33%	30%
Two or More Races	*	*	*	*	*	20%	25%	30%	25%	0%	2%	9%	17%	30%	35%	37%	39%	38%
White	*	3%	9%	17%	25%	29%	30%	31%	27%	1%	3%	12%	19%	31%	35%	37%	39%	39%
Total	1%	2%	6%	16%	29%	36%	38%	38%	36%	1%	2%	10%	18%	30%	35%	37%	39%	39%

* suppressed

Table B- 9 2015 Cohort student continuous employment while enrolled in high school by transition status, gender, race

	Multilingual								Statewide								
	2010	2011	2012	2013	2014	2015	2016	2017	2010	2011	2012	2013	2014	2015	2016	2017	2018
Did not transition	0%	0%	0%	1%	5%	2%	2%	1%									
Transitioned	*	*	*	2%	7%	3%	2%	1%									
Female	*	0%	0%	1%	5%	2%	1%	1%	0%	0%	1%	2%	10%	2%	1%	1%	0%
Male	0%	0%	0%	1%	5%	3%	2%	1%	0%	0%	1%	2%	7%	2%	1%	0%	0%
American Indian or Alaska Native	*	*	*	*	*	*	*	*	*	*	*	1%	4%	2%	1%	1%	*
Asian	*	*	*	1%	5%	2%	1%	1%	0%	0%	0%	1%	6%	1%	1%	0%	*
Black or African American	*	*	*	*	4%	*	2%	*	0%	*	0%	1%	6%	2%	2%	1%	*
Hispanic or Latino of any race(s)	0%	0%	1%	1%	5%	3%	2%	1%	0%	0%	1%	1%	7%	2%	2%	1%	0%
Native Hawaiian and Other Pacific Islander	*	*	*	*	*	*	*	*	*	*	*	*	3%	*	*	*	*
Two or More Races	*	*	*	*	*	*	*	*	*	*	0%	1%	8%	2%	1%	0%	*
White	*	*	*	2%	7%	2%	*	*	0%	0%	1%	2%	10%	1%	1%	0%	0%
Total	0%	0%	0%	1%	5%	3%	2%	1%	0%	0%	1%	2%	9%	2%	1%	1%	0%

Table B- 10 Apprenticeship enrollment and completion

	Multilingual	Statewide
Ever enrolled	39 0.5%	593 0.6%
Ever completed	12 0.2%	120 0.1%
Completion rate for enrollees	30.8%	20.2%