Tracing Postsecondary Pathways in Washington

Early Insights from the Sequences to Success in Washington State Project

AUGUST 2026

Brit Henderson
Rebekah O'Donoghue
Betsy Tessler
(MDRC)

KC Deane
(Washington Student Achievement Council)

Today's young adults face a complex range of choices as they navigate the transition from K-12 education, through postsecondary education or vocational training (or both), and ultimately into the workforce. A great deal of research has been dedicated to the outcomes of more "standard" routes, such as graduating from high school, immediately starting a four-year degree program, and then entering the labor market. Less is known about the experiences and outcomes of students who take different approaches. This lack of information on the actual range of pathways students follow makes it harder for policymakers and practitioners to design better and more targeted support for them.

To paint a full picture of the postsecondary landscape, MDRC collaborated with the Washington Student Achievement Council (WSAC) and the Washington Education Research & Data Center (ERDC) to conduct the Sequences to Success in Washington State project. This mixed-methods study sheds light on the most commonly followed pathways among young adults in Washington state and lays the groundwork for more rigorous evaluation of promising interventions that align with their real journeys.

It is designed to help Washington achieve its goal of having 70 percent of adults in the state earn postsecondary degrees or credentials.[1] The project team used sequence analysis to identify the most commonly followed postsecondary pathways and their associated labor market outcomes.[2] Additional analyses will explore how the percentages of students following each pathway vary across subgroups and geographic regions identified by WSAC, as well as the role of dual enrollment and apprenticeships within the pathways.[3]

This brief offers four early findings to policymakers and practitioners:

1. **Multiple pathways lead to credentials and solid labor market outcomes.** There is not one standard pathway after high school. Rather, the analysis identified many different pathways, which the team distilled into 12. Many of these paths are associated with higher median earnings and rates of stable employment.

2. **Pathway 2: Some College, No Credential offers considerable opportunity for the state to raise the percentage of adults who earn credentials.** To reach the goal described above of having 70 percent of adults hold a credential, Washington can focus attention on students whose postsecondary journeys get derailed or delayed. Over one in three students who graduated high school in 2017 enrolled in college but did not earn a credential within the next 6.5 years:

    - The nearly 30 percent of 2017 graduates who followed Pathway 2 (also referred to as "the Some College, No Credential Pathway" in this project, describing students who enroll in postsecondary education but stop attending before earning a credential)

    - The 6 percent who were still enrolled but had not yet earned a credential as of December 2023[4]

3. **Labor market outcomes exhibit complex patterns across all pathways, but those that involve earning bachelor's degrees or certificates stand out in terms of median earnings.**

    - Labor market outcomes vary widely across all 12 pathways. The range between the twenty-fifth percentile and seventy-fifth percentile earnings was narrowest for Pathway 1: No College Enrollment and widest for Pathway 8: Bachelor's Degree.

    - Pathways that include earning a bachelor's degree are associated with the highest median earnings.

    - Among pathways that included enrollment in community and technical colleges, the two non-degree certificate pathways (3 and 4) had the strongest labor market outcomes. Compared with associate's degrees, certificate programs require fewer credits, which may allow some students to enter the labor market faster or work while attending school more easily. This additional time in the labor market may partially explain the higher earnings associated with the certificate pathways. To determine whether people who follow these pathways continue to earn more, one would need data that cover a longer observation window.

4. **There is room for students to take greater advantage of the postsecondary support Washington State offers.** When reflecting on the types of support they received along their postsecondary pathways, few students mentioned formal support programs. Instead, they highlighted informal sources such as their own resilience or advice from trusted adults. However, Washington does have a variety of formal programs and initiatives aimed at young people transitioning to adulthood, and some of these programs and initiatives span multiple systems: K-12 education, postsecondary education, and workforce training and placement.[5] More work is needed to raise students' awareness of these options.

Project Overview

Researchers have noted an increasing heterogeneity in young people's experiences during their transition to adulthood, the critical period during which they leave high school and begin to take on adult roles and statuses. This transition can include enrolling in postsecondary education, leaving their parents' home, entering the full-time labor market, marrying, and becoming parents.[6] Traditionally, these markers of adulthood were expected to occur sequentially, but young people coming of age during the 2000s and beyond have transition periods during which they pursue steps in a variety of orders, sometimes combining steps in tandem or forgoing them altogether. Naturally, much of this diversity in trajectories is reflected in their postsecondary experiences as well.

In recognition of the many options today's young adults face after high school, the research team identified the most commonly followed postsecondary pathways among 2017 graduates of Washington state public high schools and then described the labor market outcomes associated with each pathway. The team also explored dual enrollment and participation in nondegree programs across pathways. The project addresses the research questions in Box 1.

Box 1. Research Questions

1. What are the most common pathways taken by young adults after graduating from high school?
2. What are the labor market outcomes (for example, median earnings, percentage employed) associated with each of these pathways?
3. Does participation in school-to-work pathways vary across demographic subgroups or regions?
4. Do the labor market outcomes associated with each pathway vary across demographic subgroups?
5. Is dual enrollment associated with particular pathways?
6. Which pathways include nondegree enrollments?
7. How do former Washington state high school students describe their experiences navigating postsecondary education and training?

Note: Questions 3 and 4 will be addressed in a future report.

Data

The team used data provided by ERDC, which oversees Washington's longitudinal data system. This longitudinal system connects data systems at the person level, including the early childhood, K-12 education, postsecondary education, and unemployment insurance systems (the last of which supplies wage records used to gauge labor market outcomes). The data elements used in the analyses described in this brief are shown in Table 1. The team used data from 2017 through 2023 to define subgroups, set states for the sequence analysis (explained below), and create outcomes.

Table 1. Data Elements Included from the Washington State Education Research and Data Center State Longitudinal Data System

Data Provider	Data Source	Purpose
Office of the Superintendent of Public Instruction	Comprehensive Education and Data Research System	K-12 student enrollment, graduation, courses, and other administrative academic information
State Board for Community and Technical Colleges	Public Community and Technical Colleges	Student program and course enrollments and completions at public community and technical colleges in Washington
Education Research and Data Center	Public Centralized Higher Education Enrollment System	Student program and course enrollments and completions at four-year public institutions in Washington
National Student Clearinghouse	Private and Out-of-State Institutions	Postsecondary enrollment and graduation data for students who enrolled at private institutions and out-of-state public institutions
Labor and Industries	Registered Apprenticeships	Cumulative participation records for each apprenticeship program participant by program/occupation enrollment segment
Employment Security Data	Workforce Data	File of unemployment insurance wage records for individuals employed in wage-paying positions for employers based in Washington

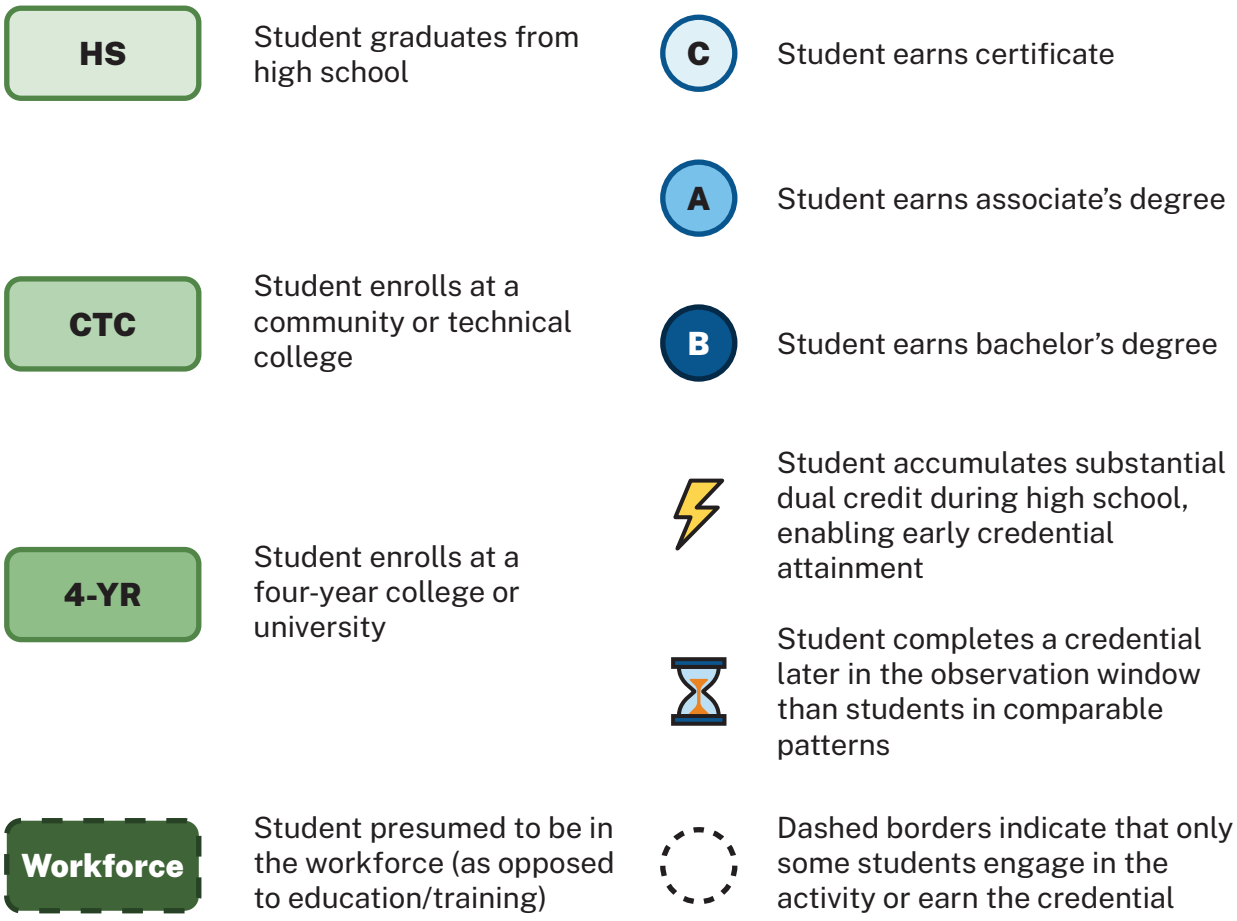
SOURCE: Education Research and Data Center, "Data Availability" (website: https://erdc.wa.gov/data-resources/submit-data-request/data-availability, 2024).

Methods

To define the pathways, the team used social sequence analysis paired with cluster analysis. Social sequence analysis involves defining a set of states that describe an individual's status or activity during a given period. These activities could include being enrolled at a community college or a four-

year college or university. The states also reflect when a credential was earned during a period. The team explored multiple configurations of states (for example, states that considered both enrollment and employment versus states that only considered enrollment patterns), and in collaboration with WSAC, decided on the set of states shown in Figure 1, as these were deemed most useful for WSAC's current goals.[7] More information on the analysis can be found on the project's GitHub page, which includes code and guidance for others hoping to conduct their own pathways research using state longitudinal data.[8]

Figure 1. Sequence Analysis States



Qualitative Data Collection

The team also conducted an initial round of 13 semistructured, virtual interviews with people who graduated from Washington high schools between 2011 and 2023.[9] These interviews explored the factors, experiences, and challenges influencing students' transitions from high school to postsecondary education and employment. Topics included postsecondary education/training, dual enroll-

ment, nondegree enrollments, the support available to students, the support they needed, and major turning points. Interview transcripts were manually coded to identify themes and patterns.

The 2017 Graduating Class

In selecting a cohort (a group of students who started ninth grade during the same term and graduated from high school on time), the research team considered multiple priorities, including Washington's expansion of dual-enrollment options in recent years, interest in its growing number of nondegree options, and the amount of data necessary to measure labor market outcomes meaningfully.[10] To balance these priorities, the team opted to analyze pathways for the 2017 cohort, whose members entered high school early in the expansion period for dual enrollment and nondegree options but who still graduated long enough ago that over six years of post–high school data were available.[11]

The 2017 cohort of on-time graduates consists of nearly 64,000 students who entered high school in 2013 and graduated from a Washington state public high school in the spring of 2017. As shown in Table 2, this cohort exhibits demographic diversity in a variety of categories of characteristics. The 2017 cohort looks similar to the cohorts immediately preceding and following it in terms of demographic and academic characteristics (not shown).[12] Like their peers in adjacent cohorts, roughly 60 percent of students in the 2017 cohort enrolled in postsecondary education in the first year after high school graduation.[13]

Table 2. Demographic Composition of the 2017 Cohort of On-Time Graduates from Washington State Public High Schools

Characteristic	Number	Percentage
Racial/ethnic identity		
American Indian or Alaska Native	721	1.1
Asian	5,295	8.3
Black	2,733	4.3
Hispanic or Latino	11,733	18.4
Native Hawaiian or Pacific Islander	534	0.8
Two or more racial identities	4,120	6.4
White	38,777	60.7
Gender		
Female	32,399	50.7
Male	31,514	49.3
High school county population density		
Rural	7,787	12.2
Suburban	26,013	40.7
Town	8,080	12.6
Urban	22,033	34.5
Free and reduced-price lunch eligibility		
Eligible	32,106	50.2
Total		63,913

(continued)

Table 2 (continued)

SOURCE: Authors' calculations based on ERDC administrative data.

NOTE: The gender variable was created based on K-12 data, which were available for the full population but were limited to only two options for gender. The postsecondary education data include a more expansive set of gender identities, but were missing this information for nearly a third of the population.

Students who enrolled and persisted in four-year degree programs directly after high school would have been midway through their junior years when the COVID-19 pandemic began in March 2020. Students who had delayed postsecondary enrollment would have been even earlier in their journeys. However far they had progressed in their degree programs, those who were enrolled when the pandemic began faced a choice between continuing their education online or stopping their enrollment. Continuing online required a sudden pivot to an unfamiliar learning format. Stopping enrollment meant delaying or even forgoing earning a credential.

Those who graduated from postsecondary programs before the pandemic began faced their own set of challenges. For example, students who enrolled in associate's degree or certificate programs in the fall of 2017 may have been seeking their first full-time jobs in the spring of 2020 when the economy suddenly shut down. There were mass layoffs across the country, and industries that often serve as the first rung in the workforce ladder, such as retail and restaurants, were badly hurt.[14] Further complicating the situation, in Washington, COVID-19 case rates spiked dramatically in the fall of 2020, and young adults ages 18-34 had the highest case rates of any age group during this time.[15]

Despite these unprecedented challenges, 2017 high school graduates still earned postsecondary credentials at rates similar to previous cohorts.[16]

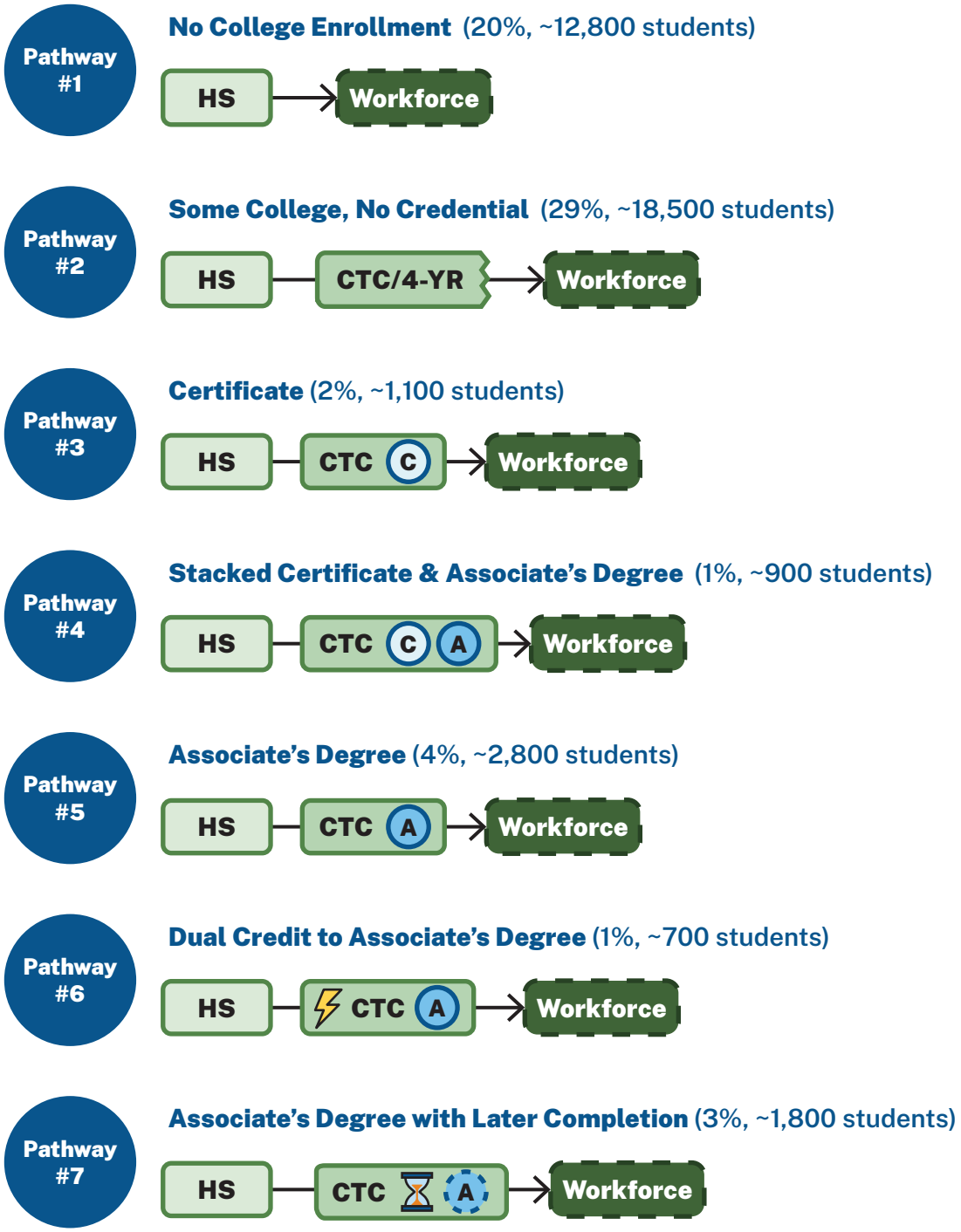
Four Early Findings to Guide State Action

Several iterations of the sequence analysis and an initial round of qualitative data collection have led to four major lessons thus far. These lessons will not only inform analyses conducted on more recent cohorts and within subgroups but also provide a roadmap that the Washington State government can follow as it turns research findings into action.

1. Students Pursue Many Different Pathways at Varied Paces

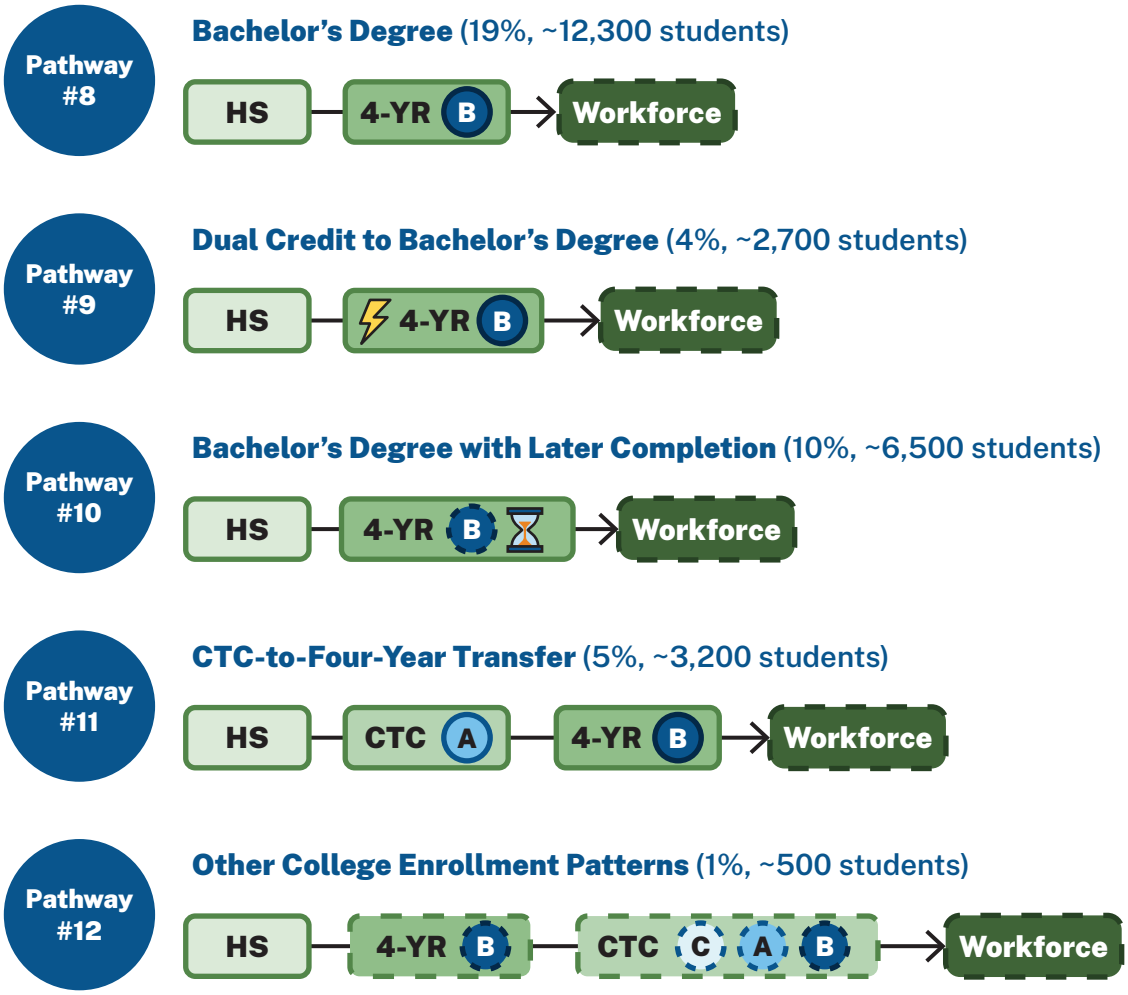
The analysis results aligned with the research team's expectations: Washington's students take a variety of different pathways through college and into the workforce. Specifically, the analysis identified 12 such pathways capturing differences in credential attainment, institution type, and length of postsecondary enrollment during the first 6.5 years following high school graduation. These pathways are shown in Figure 2, using the symbols introduced in Figure 1.

Figure 2. The 12 Postsecondary Pathways



(continued)

Figure 2 (continued)



Source: Authors' analysis of ERDC state longitudinal data.

- No College Enrollment (Pathway 1) includes the 20 percent of people in the cohort who did not enroll in postsecondary education or training, according to the state longitudinal data. Many of these people went directly into the workforce. Others engaged in activities such as caregiving or military service.
- The Some College, No Credential Pathway (2) is the most traveled and includes the nearly 30 percent of people who enrolled in postsecondary education or training but stopped attending before earning a credential. This pathway is the focus of a separate brief.

- The next five pathways (3 through 7) describe students who enrolled in community and technical college. These pathways are differentiated by type of credential earned and length of enrollment.
- Three pathways (8 through 10) include students who enrolled in four-year institutions and completed their credentials in varying numbers of terms.
- Two final pathways (11 and 12) include students who enrolled at both community and technical colleges and four-year institutions, in keeping with ongoing research into transfer patterns across types of institutions.[17]

More information on each of the 12 pathways can be found in a previously published infographic.[18]

The analysis only incorporated three elements of students' postsecondary journeys: credential attainment, institution type, and length of enrollment. Even so, it has already described a wide variety of paths and highlighted the fact that most students do not follow the simple, expected path from high school to four-year college to work. Across the pathways, only about one in three students complete a two-or four-year degree within two or four years. These findings suggest an opportunity to provide students with more information about the time it takes to complete credentials and to legitimize pathways that involve longer enrollment periods. Students may benefit from knowing that others are following trajectories and timelines that deviate from what is often portrayed as the norm; this knowledge may help them to feel more confident and maintain momentum toward their intended credentials. Moreover, students facing barriers to postsecondary enrollment and credential attainment may especially benefit from examples of other students who successfully complete credentials at different paces in response to other demands in their lives.

Fortunately, in Washington State, several initiatives aiming to provide students with additional information on a wider range of postsecondary options are already underway. For example, in the OTTERS project, MDRC teamed up with WSAC to redesign OtterBot, a student chatbot that provides information on financial aid and postsecondary options, and that primarily serves students in College Bound, a program that pays tuition and some fees for students from low-income backgrounds who meet eligibility requirements and attend a Washington state college within one year of high school graduation.[19] In the first phase of the OTTERS project, the OTTERS research team reviewed the messages the chatbot was already delivering and conducted focus groups with students. The focus groups revealed that students wanted information on a variety of postsecondary options, not just the "traditional" four-year college pathway. In response, the research team redesigned the chatbot's messages to better highlight the wide variety of postsecondary options available, including apprenticeships and offerings at community and technical colleges. A test showed that compared with the standard messages, the redesigned messages resulted in higher rates of student engagement.[20]

In three related projects, WSAC has continued to focus on how best to design statewide outreach that is usable and directly addresses common barriers identified by students and families.

- As part of the Lumina Foundation's Great Admissions Redesign effort, WSAC worked with ideas42 and three regions in the state to develop a guide on how to coordinate the messages delivered across existing state, K-12, and postsecondary communication channels.[21] The guide emphasizes the power of clear and consistent language delivered by trusted messengers.

- The Changing the Narrative initiative (a partnership among WSAC, Lumina Foundation, and Sandbox, Inc., alongside partner college Central Washington University) resulted in the creation of CollegeToolkit, an interactive website that models how institutions can communicate critical information to prospective students and their families.[22]

- WSAC, MDRC, and a variety of other partners are working with CampusEvolve as part of the Pathways AI Project, an initiative that includes building an AI-powered interactive tool that will help high school students and their advisers navigate the many routes to earning postsecondary credentials.[23] The tool will not only provide information on options, but is intended to help students develop plans, apply for financial aid, and even find additional support that can help them stay enrolled in their postsecondary education and training.

WSAC is also testing other ways to help high school students navigate the transition from high school into postsecondary education. For example, with funding from Axim Collaborative, WSAC is pilot testing a regionally customized version of OtterBot.[24] Early findings on this version's effects will be available in the fall of 2026. In another regional pilot test, WSAC began hiring state work-study students in the spring of 2026 to help high school students and families in their communities navigate their postsecondary options.[25] These work-study students receive training from WSAC, and then collaborate with local high school counselors and other high school staff members to ensure students and families know the pathways available to them and how to receive financial aid that enables them to follow these pathways.

Last, the pathways show a large percentage of learners moving between education and employment, which suggests many of those students could benefit from Academic Credit for Prior Learning (ACPL): college credits for work experience. Increasing the number of students who receive ACPL could raise awareness of alternative pathways to college credentials and increase the number of learners who benefit from them. WSAC has several projects focused on ACPL.[26] In one pilot project involving WSAC, CollegeAPP, and InsideTrack, the partner organizations are working closely with two colleges to direct coaching to students whose work experience might make them eligible for such credits. Additionally, starting July 1, 2026, recipients of the Paraeducator Conditional Scholarship program will be able to use scholarship dollars to cover fees associated with assessing their work experience for ACPL.[27] This seemingly minor adjustment will make it more affordable for paraeducators who start at community or technical colleges to receive this type of credit.[28]

2. Boosting Credential Attainment Requires Focusing on Both Students Who Do Not Enroll and Students Who Enroll and Then Stop Enrollment

Washington's 2025 credential-attainment rate of 62 percent among Washingtonians ages 24 to 44 is still below the state's 70 percent target.[29] To increase the percentage of adults who earn credentials, the state can (1) enroll more students who would otherwise not enroll in postsecondary education after high school, and (2) graduate more students who do enroll but do not earn credentials. Collectively, students in these two categories comprise half of the 2017 high school cohort. Specifically, one in five students (20 percent) did not enroll in postsecondary education during the 6.5 years following high school graduation (Pathway #1), and approximately 30 percent of students enrolled in postsecondary education at some point during the 6.5 years following high school graduation but left before earning a credential (Pathway #2).[30]

Boosting credential attainment by focusing on nonenrolling students is necessary to ensure equitable access to higher education.[31] That said, access initiatives that target nonenrolling students may have modest effects, because there are many reasons why students opt against postsecondary education. Some students may be able to get on-the-job training in a profitable career.[32] Others may find their way to apprenticeships. Regardless of the reason, the absence of a central institution, program, or process that unites these students makes it difficult to identify a single strategy to boost their postsecondary enrollment after high school.

In contrast, a strategy that focuses on students on the Some College, No Credential pathway has the advantage of a foundation of existing institutional support and processes. Almost 30 percent of the 2017 cohort is on this pathway. These students have already demonstrated a desire to pursue postsecondary education. Many enrolled for multiple quarters, potentially accumulating enough credit to get them close to earning a certificate or even an associate's degree.

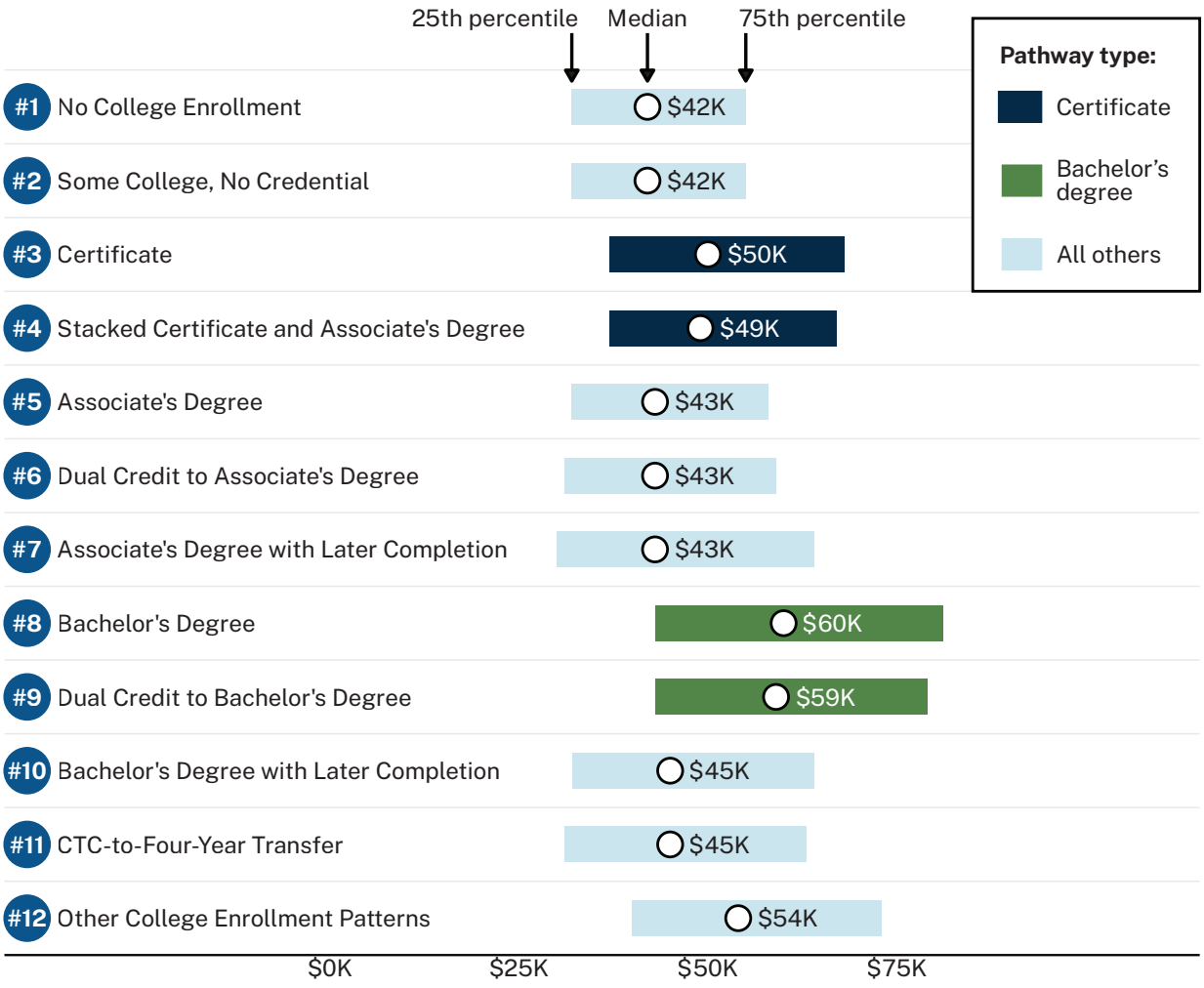
In a nationwide survey, students cited financial difficulty most often as their reason for leaving college without a degree.[33] Washington is working to address students' financial needs through several initiatives. Washington's 2023 Postsecondary Basic Needs Act established a Benefits Navigator program at selected community and technical colleges and pilot tested a free and reduced-price meal program at selected four-year and community and technical colleges. The state also has financial aid options aimed at students from low-income households. Together, these strategies for reducing financial burden could increase the number of students who stay enrolled and boost credential attainment. An upcoming brief will explore the Some College, No Credential Pathway in more detail.

3. Short-Term Earnings Paint a Complex Picture

When making decisions about postsecondary education, students are strongly influenced by the perceived return on their investment.[34] They want to know whether the time spent pursuing a credential will pay off in the labor market. As an initial inquiry into the return on investment that students experience, the research team computed several labor market outcomes for each of the 12

pathways, including the twenty-fifth-percentile, median, and seventy-fifth-percentile earnings shown in Figure 3. The outcomes were measured for 2023 and do not reflect cumulative earnings or longer-term patterns. The earnings are not adjusted for time in the labor market and are limited to those students who were stably employed (defined as being employed in a job covered by unemployment insurance wage data at some point in every quarter of 2023, and earning at least $14,000). The percentage who were stably employed in 2023 is shown for each pathway in Table 3.

Figure 3.Distribution of Earnings by Pathway, Among Those Stably Employed, Q1-Q4 2023



SOURCE: Authors' calculations using Washington State longitudinal data.

NOTES: In the figure above, the twenty-fifth percentile is indicated by the left boundary of each bar and the seventy-fifth percentile is indicated by the right boundary. The median, or fiftieth percentile, is indicated by the white circle. The earnings were limited to those students who were stably employed, that is, employed in a job covered by unemployment insurance wage data at some point in every quarter of 2023 and earning at least $14,000.

Table 3. Percentage Stably Employed by Pathway, Q1-Q4 2023

Pathway		Percentage Stably Employed
1	No College Enrollment	49.5
2	Some College, No Credential	50.5
3	Certificate	65.4
4	Stacked Certificate and Associate's Degree	62.1
5	Associate's Degree	58.2
6	Dual Credit to Associate's Degree	49.0
7	Associate's Degree with Later Completion	57.1
8	Bachelor's Degree	44.4
9	Dual Credit to Bachelor's Degree	52.8
10	Bachelor's Degree with Later Completion	44.6
11	CTC-to-Four-Year Transfer	48.3
12	Other College Enrollment Patterns	56.0
	Sample size	63,913

SOURCE: Authors' calculations using Washington State longitudinal data.

NOTE: "Stably employed" means the person was employed in a job covered by unemployment insurance wage data at some point in every quarter of 2023 and earned at least $14,000.

Four patterns in the labor market outcomes for the 12 pathways are notable:

- **The earnings distribution is wide for all pathways.** For all pathways, the ranges between the seventy-fifth percentiles and the twenty-fifth percentiles are relatively wide, with magnitudes from about $22,700 for Pathway 1: No College Enrollment to about $38,400 for Pathway 8: Bachelor's Degree.

  Another way to think about the range in earnings is to divide the seventy-fifth percentile by the twenty-fifth percentile, which helps adjust for the fact that the range is larger in absolute terms for pathways with higher earnings. Using this metric, Pathway 1: No College Enrollment still has the lowest ratio of top-seventy-fifth earners to bottom-twenty-fifth earners, which could be indicating the existence of an earnings ceiling for people who do not earn a postsecondary creden-

tial. This ratio is highest for Pathway 10: Bachelor's Degree with Later Completion. Earners in the top seventy-fifth percentile on this pathway make over twice as much as earners in the lowest twenty-fifth percentile. This relatively large ratio may in part reflect a difference in time in the labor market, as some people on Pathway 10 began working earlier than others.

- **The two pathways that include earning a bachelor's degree either early or within four or five years are associated with the highest median earnings.** Pathway 8: Bachelor's Degree and Pathway 9: Dual Credit to Bachelor's Degree have the highest median earnings, at about $60,000 and $59,000, respectively. For both pathways, the twenty-fifth-percentile earnings (about $40,000) are similar to the median earnings associated with Pathway 5: Associate's Degree. This finding suggests that the more normative high-school-to-four-year-institution pathways are still linked to better labor market outcomes in the short term, despite the growth in alternative credential types and routes. It will be important to examine whether this immediate economic advantage continues in the long term.

- **Median earnings are similar among community and technical college pathways that lead to associate's degrees only (Pathways 5, 6, and 7) and those that do not feature credential attainment (Pathways 1 and 2).** In the short term, it appears that earnings among students who either do not enroll in college or who stop attending college without a credential (a median of $42,000) are similar to earnings for students who complete associate's degrees, but not certificates, at community and technical colleges (median of $43,000). The similarity in earnings raises important questions about the return on investment of associate's degree programs.

- **Median earnings for the two pathways that feature certificate attainment are higher than those of associate's-only pathways.** Pathway 3: Certificate and Pathway 4: Stacked Certificate and Associate's Degree have median earnings that are around $7,000 more than those for other community and technical college pathways (Pathways 5, 6, and 7). Median earnings for Pathways 3 and 4 are just under $50,000, compared with only $43,000 for Pathways 5, 6, and 7. For students whose priority is to support themselves and their families as quickly as possible after high school, certificates and other short-term options to earn credentials may be an important alternative to a four-year degree.[35] However, it is important to note that while the certificate pathways have strong earnings potential, they do not currently include large numbers of students. It may not be possible for larger numbers of graduates to earn similar amounts if there is not strong labor market demand for their skills. Additionally, as for all the pathways, the earnings distributions for the certificate pathways span wide ranges, and the certificate's program of study matters a lot. For example, the research team explored earnings for the top 15 most common Classification of Instructional Programs codes among people who traveled Pathway 3: Certificate, who were employed in each quarter of 2023, and who earned at least $14,000 in that year.[36] This analysis revealed that earnings were highest for those who earned certificates in "Electrical and Power Transmission Installation," "Electrician," "Instrumentation Technology," and "Heating, Air Conditioning, Ventilation and Refrigeration Maintenance." Certificate earners in each of these fields had median earnings of over $70,000 in 2023. Meanwhile, median earnings were under $40,000

among their counterparts in fields such as "Medical Office Assistant," "Phlebotomy Technician," "Nursing Assistant," and "Early Childhood Education and Teaching."

Importantly, the measures are observed for January through December 2023, and earnings comparisons are across students who had had varying lengths of time in the workforce at that time. Those who went straight into the workforce following graduation are compared with students who worked while enrolled and with those who did not work while enrolled. Some of the earnings differences may reflect gains from time in the workforce and from experience. Additional data are needed to compare long-term labor market outcomes.

4. Interviewees Mentioned a Variety of Informal and Relational Sources of Support, but Rarely Formal Support

As part of the first round of qualitative data collection, the research team interviewed 13 former Washington high school students. Their experiences following high school represent several of the 12 pathways described above. Most of the interviewees (9) attended a four-year college or university soon after high school and earned a bachelor's degree. One interviewee earned an associate's degree at a community college before transferring to a four-year university and earning a bachelor's degree. Another interviewee experienced a nonlinear pathway, transferring between four-year and community colleges multiple times and eventually earning an associate's degree. Finally, two interviewees went directly into the workforce after high school.

Don't limit yourself just because you don't like something or feel like you're not good at it, because other people see other things in you.

—Interviewee sharing encouragement she received from teachers

When these students were asked to reflect on the types of support they used in the years immediately following high school graduation, a common theme emerged. While interviewees relied on a mixture of internal and external sources of support to persevere through challenges, much of this support was informal and based on individual relationships or personal characteristics, rather than structured support systems. Several interviewees attributed their success to support from family, teachers, supervisors, mentors, advisers, or a professional network. They noted that these connections helped them get internships, clarify career paths, navigate uncertainty, and gain access to opportunities that might not have been available otherwise. For example, one student said that her "teachers were all like, 'You're perfectly capable of being able to excel in these classes.' … Don't limit yourself just because you don't like something or feel like you're not good at it, because other people see other things in you." Other interviewees highlighted their own internal qualities—such as self-advocacy, determination, independence, and adaptability—as keys to their success. They described how "being the one to make things happen" and "not giving up" enabled them to adapt to new situations and continue forward even when facing uncertainty.

Although these findings suggest that informal support is critical, it is still important to understand why more students are not availing themselves of the formal support that exists in Washington state. One possibility is that institutions are not effective in communicating to students what sup-

port is available; another is that the support itself is not the right sort. WSAC is actively engaged in projects that aim to illuminate the role that formal support does or does not play in students' navigation of postsecondary pathways. In one study led by WSAC and Community College Research Initiatives at the University of Washington, interviews with transfer students will seek to identify barriers that students experience when transferring or intending to transfer from a two- to a four-year institution; how factors such as institution type, geographic location, student background, program of study, credit portability, and campus life shape their transfer experiences; and the types of support that would address their challenges. Additionally, as part of the Complete College America Accelerator project, institutions in Washington will receive technical assistance in areas they identify as critical to helping students stay enrolled.[37]

Together, these qualitative findings highlight additional complexity in students' already complex postsecondary journey. Students are not only choosing among a variety of options for continuing their education or training beyond high school. They also have to make additional calculations to determine how each of these routes fits their unique characteristics and needs. While some students are getting information and support through their personal relationships and networks, others need a better overview of the postsecondary landscape and information on how to get to different destinations.

Conclusion

Initial quantitative and qualitative analyses for the Sequences to Success in Washington State project have already revealed several valuable insights about the early postsecondary and workforce journeys of young people in Washington, and many of these lessons are likely to apply to young adults across the United States. There are no longer only a handful of pathways to a credential, nor do students move through college at a single speed. Some students take advantage of dual-enrollment opportunities to earn credentials faster. Others combine enrollment in four-year colleges and community and technical colleges. Some students have earned short-term certificates that have translated into relatively high early earnings, while other students have forgone college and found opportunities to earn as much as — sometimes more than — some of their peers in associate's degree programs. This work has laid the foundation for a variety of more rigorous studies that would explore which types of programs and interventions could best serve students across a range of different postsecondary pathways.

Notes and References

1. See Washington Student Achievement Council, "2026 Strategic Action Plan" (website: https://wsac.wa.gov/strategic-action-plan, 2026).
2. See the methods section for a description of sequence analysis.
3. Dual enrollment refers to earning college credit while in high school.
4. See Rebekah O'Donoghue, Brit Henderson, Annabel Utz, Joshua Vermette, and KC Deane, "Some College, No Credential: The Path Taken by the Most Washington High School Graduates (MDRC, forthcoming).
5. See WSAC's website for examples of some of the formal programs and resources Washington offers to young people: https://wsac.wa.gov/.
6. See, for example, Jeffrey Jensen Arnett. "Emerging Adulthood: A Theory of Development from the Late Teens Through the Twenties," *American Psychologist* 55, 5 (2000): 469–480; Douglas Hartmann and Teresa Toguchi Swartz, "The New Adulthood? The Transition to Adulthood from the Perspective of Transitioning Young Adults," *Advances in Life Course Research* 11 (2006): 253–286; Michael J. Shanahan, "Pathways to Adulthood in Changing Societies: Variability and Mechanisms in Life Course Perspective," *Annual Review of Sociology* 26, 1 (2000): 667–692; Jennifer M. Silva, "Constructing Adulthood in an Age of Uncertainty," *American Sociological Review* 77, 4 (2012): 505–522.
7. For this set of states, enrollment in four-year institutions and community colleges is given preeminence over working. Therefore, if a person is both working and enrolled, that person's state is coded as "enrolled at a four-year college" or "enrolled at a community college." If the individual is only working, either part time or full time during a given quarter, that person's state for that quarter is coded as "working." Credential receipt indicates whether a student received a certificate, associate's degree, or bachelor's degree during a specific quarter, and this status state can either happen alone or in tandem with an enrollment quarter or employment quarter.
8. Brit Henderson and Sufiyan Syed, "Sequences to Success in Washington State Project Code Repository" (website: https://github.com/MDRCNY/Sequences_to_Success/tree/main, 2026).
9. In a semistructured interview, the interviewer asks the interviewee open-ended questions from a protocol/list of formal questions that align with the research questions.
10. Washington Student Achievement Council, "Dual Credit" (website: https://wsac.wa.gov/college-credit-high-school, n.d., accessed July 3, 2026); Ilan Levine, "Interest Surging in Nondegree Credentials but How Do Students Finance Them?" Pew Charitable Trusts (website: https://www.pew.org/en/research-and-analysis/articles/2025/10/23/interest-surging-in-nondegree-credentials-but-how-do-students-finance-them, 2025); Tristan Stein, "Identifying Nondegree Credentials of Value — Lessons from the States," Bipartisan Policy Center (website: https://bipartisanpolicy.org/article/identifying-nondegree-credentials-of-value-lessons-from-the-states/, 2025).
11. Six years represents 150 percent of the expected time to complete a bachelor's degree and is a common metric used to monitor credential-attainment rates. The team had slightly more data, extending forward to six and a half years.
12. See WSAC's Strategic Action Plan dashboard for demographic characteristics of recent high school cohorts: Washington Student Achievement Council, "SAP Dashboard" (website: https://wsac.wa.gov/sap-dashboard, 2026). For more information on academic outcomes across recent high school cohorts, see Education Research & Data Center, "High School Graduate Outcomes" (website: https://erdc.wa.gov/data-dashboards/high-school-graduate-outcomes, 2026).
13. Washington Student Achievement Council, "SAP Dashboard" (2026).

14. Richard Kochhar, "Young Workers Likely to Be Hard Hit as COVID-19 Strikes a Blow to Restaurants and Other Service Sector Jobs," Pew Research Center (website: https://www.pewresearch.org/short-reads/2020/03/27/young-workers-likely-to-be-hard-hit-as-covid-19-strikes-a-blow-to-restaurants-and-other-service-sector-jobs/, 2020).
15. Washington State Department of Health, "COVID-19 Annual Report 2020" (Washington State Department of Health: 2023), available at: https://doh.wa.gov/sites/default/files/2023-05/421038-2020Covid19AnnualReport.pdf.
16. Washington Student Achievement Council, "SAP Dashboard" (2026): "Graduation rate (150 percent of normal time)."
17. On one of these two pathways, students earn their associate's degrees at community and technical colleges and then transfer to four-year institutions where they earn their bachelor's degrees. On the other pathway, students pursue a variety of credentials (a certificate, an associate's degree, a bachelor's degree, or all three) and switch between institution types. Some enroll in four-year institutions and then switch to community and technical colleges where they earn applied bachelor's degrees. Others "stack" credentials (apply credits from one to earn the next) across institution types.
18. Brit Henderson, Audrey Yu, Xavier Alemañy, and KC Deane, "What School-to-Workforce Pathways Are Washington Students Taking After High School?" (MDRC, 2026), available at: https://www.mdrc.org/work/publications/what-school-workforce-pathways-are-washington-students-taking-after-high-school.
19. For more information on the OTTERS project, OtterBot, and the College Bound program, see Erika Lundquist, Brit Henderson, Sophia Sutcliffe, Laura Cojocaru, Kasey Eickmeyer, Annabel Utz, Sufiyan Syed, and Audrey Yu, *Improving a Chatbot to Increase Financial Aid Applications: Findings from the Optimizing Texting Technology through Engagement Research with Students (OTTERS) Project* (MDRC, 2025), available at: https://www.mdrc.org/sites/default/files/Optimizing_Texting_Text_Report.pdf.
20. See pages 38–42 of Lundquist et al. (2025).
21. Washington Student Achievement Council, "Media Release: Great Admissions Redesign" (website: https://wsac.wa.gov/media-2024-02-29-Great-Admissions-Redesign, 2024).
22. Washington Student Achievement Council, *Changing the Narrative: New Strategies to Enhance Access to Postsecondary Education in the Age of Digital Media and Technology: Final Research Report* (Washington Student Achievement Council, 2025) available at: https://wsac.wa.gov/sites/default/files/2025-Changing.the_.Narrative-Research.Report.pdf; @CollegeToolkit, "Build Your Tomorrow," (website: https://college-toolkit.com/, n.d., accessed July 3, 2026).
23. CampusEvolve, "Highline Public Schools Join the Groundbreaking Washington Pathways AI Project" (website: https://www.campusevolve.ai/highline, 2026).
24. Axim Collaborative, "Washington Student Achievement Council (WSAC): Enhancing College and Financial Aid Access with Community-Centered Chatbots" (website: https://www.axim.org/community-centered-chatbots, n.d., accessed July 3, 2026).
25. For more information on the state work-study program, see Washington Student Achievement Council, *State Work Study Program Manual for Financial Aid Administrators, 2025–26* (Washington Student Achievement Council, June 2025), available at: https://wsac.wa.gov/sites/default/files/2025-26_SWS_Program_Manual.pdf.
26. See Washington Student Achievement Council, "Academic Credit for Prior Learning" (website: https://wsac.wa.gov/assessments-prior-learning, 2026).

27. Paraeducators work in K-12 classrooms alongside licensed teachers and provide various forms of support. Washington Student Achievement Council, "Credit Mobility Brief" (Washington Student Achievement Council, 2026) available at: https://wsac.wa.gov/sites/default/files/2026-05-12-0741-Credit.Mobility.Brief_.pdf.
28. For more on the paraeducator conditional scholarship program, see: https://wsac.wa.gov/teachers#ppcs.
29. For more information on the 2026 Strategic Action Plan see Washington Student Achievement Council, "2026 Strategic Action Plan" (website: https://wsac.wa.gov/strategic-action-plan, 2026).
30. An upcoming brief will explore the Some College, No Credential pathway.
31. Cindy Le, Elizabeth Davidson Pisacreta, James Dean Ward, Jesse Margolis, and Heidi Booth, "Policies to Ensure Equitable Access to Well-Resourced Colleges and Universities," *Ithaka S+R* (website: https://sr.ithaka.org/publications/access-to-well-resourced-colleges-and-universities/, 2026); Anna Shaw-Amoah and David Lapp, "Unequal Access to Educational Opportunity in the United States" (Research for Action, 2022), available at: https://www.researchforaction.org/wp-content/uploads/2022/10/RFA-UnequalAccesstoEducationalOpportunityintheUnitedStates-2022.pdf.
32. One of the interviewees for this project was able to do so, for example.
33. Estefanie Aguilar Padilla, Rachel B. Baker, Hana Lahr, and Veronica Minaya, *Why Did They Leave? Learning From the Experiences of Former Community College Students* (Community College Research Center, Teachers College, Columbia University, 2025), available at: https://ccrc.tc.columbia.edu/wp-content/uploads/2025/11/why-did-they-leave-experiences-former-community-college-students.pdf.
34. See Lundquist et al., page 15.
35. The relatively strong earnings potential of the certificate pathways shown here is specifically associated with credit-bearing programs. Noncredit credentialing options such as apprenticeships and industry certifications and licenses are another promising pathway not explored in depth here. Noncredit education may become increasingly valuable if Workforce Pell Grant implementation efforts successfully inform students of programs that prepare them for "high-skill, high-wage" jobs and "in-demand industry sectors or occupations." See Lydia Franz and Christopher Madaio, "Preparing to Implement Workforce Pell Grants: States Should Legislate to Solidify Student Protections" (website: https://ticas.org/accountability/workforce-pell-state-model-legislation/, 2025).
36. Classification of Instructional Programs codes are the national classification standard developed by the U.S. Department of Education. See National Center for Education Statistics, "What Is the CIP?" (website: https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55, n.d.).
37. Complete College America, "Washington State Cohort Accelerator: 2026 Progress Update" (prepared for the Washington Student Achievement Council, 2026), available at: https://wsac.wa.gov/sites/default/files/2026-05-12-0742-Accelerator.Institution.Update.pdf.

Acknowledgments

The authors are grateful to Dani Fumia and Katie Weaver Randall from the Education Research and Data Center for sharing their time, insights, and data for the Sequences to Success in Washington State project. The team also thanks Isaac Kwakye, Daniel Oliver, Abby Chien, Rathi Sudhakara, and Inez Olive from the Washington Student Achievement Council. This work would not be possible without their dedication to the project and willingness to share their experiences and insight.

The authors thank many MDRC colleagues for their contributions to this project, including Richard Hendra, Rebecca Unterman, Annabel Utz, Sufiyan Syed, Joshua Vermette, DeShawn Preston, Kianna Medina, Lorena Lizarralde, Ashley Alvarez, and Mary Bambino for their work as project team members. We also thank Colleen Sommo and Alyssa Ratledge for serving as project advisers. We are deeply indebted to Audrey Yu for her countless hours designing the visual language of the pathways, and Xavier Alemañy for his work bringing the vision to fruition. We thank Joshua Malbin for reviewing and editing the brief, and Carolyn Thomas for preparing the brief for publication.

The authors also thank Richard Dorsett for his keen analytic guidance, and David Selby and Olivia Pinney for their contributions to the analyses. Finally, and most importantly, we thank the Washington high school graduates who were willing to participate in the study and share their experiences and perspectives with us, generating insights that we hope will illuminate the postsecondary education landscape for students across the state and country.

The research and the preparation of this brief were supported by the Gates Foundation. The opinions expressed are those of the authors and do not represent the views, positions, or policies of this funder.

The research presented here uses confidential data from the Education Research and Data Center (ERDC) in the Washington Office of Financial Management (OFM). ERDC maintains a statewide, longitudinal data system that includes deidentified data about people's preschool, educational, and workforce experiences. The views expressed here are those of the authors and do not necessarily represent those of OFM or other data contributors. Any errors are attributable to the authors.

The following organizations support dissemination of MDRC publications and our efforts to communicate with policymakers, practitioners, and others: Arnold Ventures, Ascendium Education Group, Yield Giving/MacKenzie Scott, and earnings from the MDRC Endowment. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

For information about MDRC and copies of our publications, see our website: www.mdrc.org.

Copyright © 2026 by MDRC®. All rights reserved.

mdrc
BUILDING KNOWLEDGE TO IMPROVE SOCIAL POLICY

WASHINGTON STUDENT ACHIEVEMENT COUNCIL
EDUCATION · OPPORTUNITY · RESULTS

New York
200 Vesey Street, 23rd Flr.
New York, NY 10281
Tel: 212 532 3200

Washington, DC
750 17th Street, NW
Suite 501
Washington, DC 20006

Oakland
475 14th Street, Suite 750
Oakland, CA 94612
Tel: 510 663 6372