WASHINGTON STUDENT ACHIEVEMENT COUNCIL
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Title	Roadmap Update: Draft Issue Briefs
Staff lead	Randy Spaulding
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Synopsis	Staff will provide an overview of the issue briefs on high school graduation and postsecondary success. These briefs are intended to give context for the indicators and core measures selected for the 2015 Roadmap update; and explain the factors, according to research, that affect high school graduation and postsecondary success. These documents will be referenced in the Roadmap update and will be available on the WSAC website to provide more detailed information. Council members will have an opportunity to review drafts of the issue briefs, learn about the issues in greater depth, and provide guidance for the final drafts.
Guiding questions	1. What are the key issues and barriers that impact student success in high school? 2. What are the key issues and barriers that impact student success in postsecondary education? 3. How can these issues and current activities, occurring nationally or in Washington, inform the Roadmap update?
Possible council action	☒Information/Discussion ☐Approve/Adopt ☐Other:
Documents and attachments	☒Brief/Report ☒PowerPoint ☒Third-party materials ☐Other

2015 Roadmap Update: High School Graduation and Postsecondary Success

Washington Student Achievement Council Meeting

August 2015

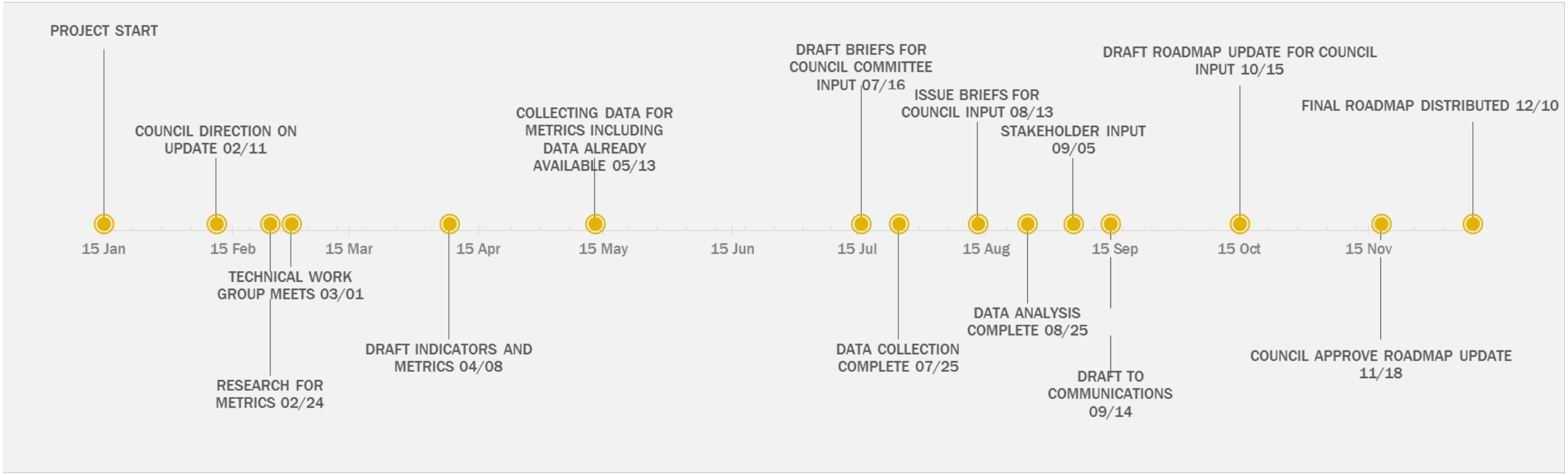
Randy Spaulding, WSAC
Barbara Ritter, Educational Consultant
Mark Bergeson, WSAC
Noreen Light, WSAC

Why write issue briefs for the 2015 Roadmap update?

High School Graduation and Postsecondary Success

- Context for the indicators and core measures selected for the 2015 Roadmap update.
- Explain the factors and barriers that affect high school graduation and postsecondary success.
- These documents will be referenced in the Roadmap update and made available on the WSAC website to provide more detailed information.

THE ROADMAP
A Plan to Increase Educational Attainment in Washington


PROJECT START
COUNCIL DIRECTION ON UPDATE 02/11
TECHNICAL WORK GROUP MEETS 03/01
RESEARCH FOR METRICS 02/24
DRAFT INDICATORS AND METRICS 04/08
COLLECTING DATA FOR METRICS INCLUDING DATA ALREADY AVAILABLE 05/13
DRAFT BRIEFS FOR COUNCIL COMMITTEE INPUT 07/16
DATA COLLECTION COMPLETE 07/25
ISSUE BRIEFS FOR COUNCIL INPUT 08/13
DATA ANALYSIS COMPLETE 08/25
STAKEHOLDER INPUT 09/05
DRAFT TO COMMUNICATIONS 09/14
DRAFT ROADMAP UPDATE FOR COUNCIL INPUT 10/15
COUNCIL APPROVE ROADMAP UPDATE 11/18
FINAL ROADMAP DISTRIBUTED 12/10
15 Jan
15 Feb
15 Mar
15 Apr
15 May
15 Jun
15 Jul
15 Aug
15 Sep
15 Oct
15 Nov

Factors Influencing High School Graduation

Washington Student Achievement Council Meeting

Barb Ritter, Educational Consultant

General Approach

(pages 2-3 in issue brief)

- The question that guided the research:
  - ***What are the most important factors that influence an on-time graduation?***
  - ***Factors compartmentalized into five categories:***
    - Economic Factors and High School Graduation
    - The Importance of Ninth Grade on High School Graduation
    - The Attendance Factor and Student Engagement with School
    - Course Failure Factor as an Indicator of High School Graduation
    - Demographic data

Context

(pages 3-4 in issue brief)

- Graduation rates have improved in WA and US over last 10 years.
- In 2012, the nation reached the 80% threshold for the first time.
- Reasons for dropping out and graduating have changed little over the last ten years.
- Primary reasons for dropping out (not in priority order):
  - High absenteeism
  - Low GPA
  - Retained one or more years
  - Failed one or more classes in freshman year
  - Family characteristics
  - Issues related to poverty
  - School experiences
  - Being off-track to graduate on time

1. Economic Factors and High School Graduation

(pages 4-5 in issue brief)

- Low socio-economic status has strongest relationship to who drops out of school.
- Data:
  - Low-income 8th graders are more than 40% more likely to have had 3 or more absences/month.
  - Poor children in grades 1-3 are nearly 3 times more likely to repeat a grade.
  - Poor children in K-3 are more than twice as likely to have an IEP.
  - Youth from families in the bottom quintile of the income distribution are more than four times as likely as those from families in the top quintile to have dropped out of school in the past year.
  - In 2009, *poor* (bottom 20 % of all family incomes) *students were five times more likely to drop out of high school than high-income* (top 20% of all family incomes) *students*.
  - In 2011, more than *20% of all school-age children were living in poor families* (bottom 20% of all family incomes).
  - *Poverty rates for Black and Hispanic families* are three times the rates for White families.

2. Importance of Ninth Grade on High School Graduation

(pages 5-6 in issue brief)

Facts:

- One-third of nation's recent high school dropouts never were promoted beyond ninth grade.
- 4 Theories (Neild) about why 9th grade poses difficulties:
  1. Ninth grade coincides with life-course changes, such as reduced parental supervision and increased peer pressure.
  2. Moving to a new school, students must break the bonds they have formed with their middle-school teachers and peers.
  3. Some students are inadequately prepared for high school.
  4. The organization of some high schools is a major source of difficulty (course length, number of courses per day, movement to classes, start-and end-time of school day).
- High expectations and rigor in 9th grade and high school influence graduation rates.

3. Attendance Factor and Student Engagement with School

(page 6 in issue brief)

- The number of absences per student can be monitored early in the first year of high school.
- Attendance in the first few weeks or month of freshman year is related to whether students will graduate.
- Attendance is the fundamental indicator of student engagement with school.
- 9th grade is connected to both attendance and engagement.
- Missing more than 10% of instructional time is cause for concern.

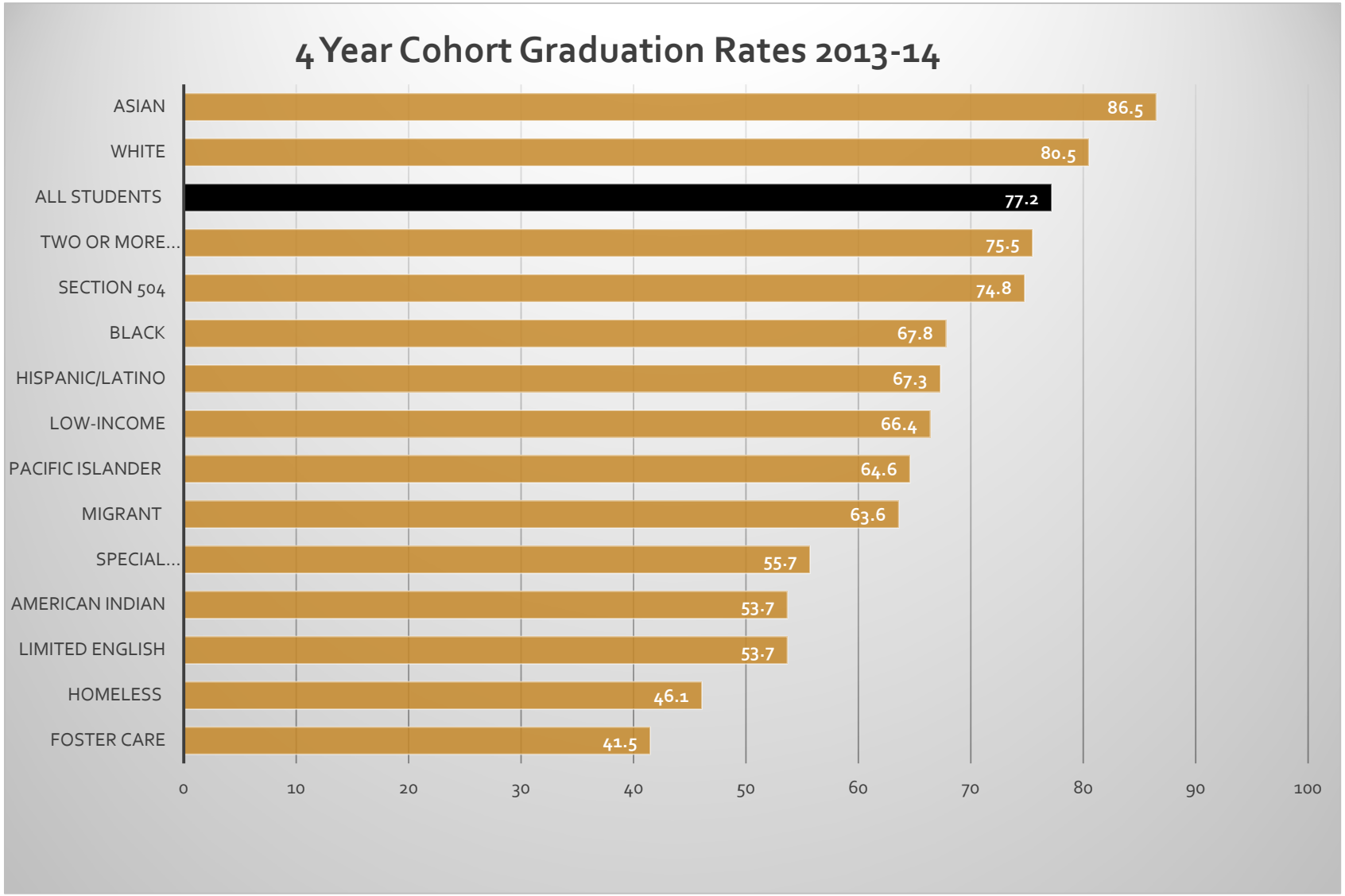
4. Course Failure Factor as an Indicator of high School Graduation

(pages 6-7 in issue brief)

- Students who earn a 2.0 or less in grade 9 have significantly lower graduation rates than those who earn a 2.5 or higher (4.0 scale).
- Therefore, students with 2.0 or less at the end of freshman year should be considered at risk of dropping out.
- Students who fail one or more core courses OR accumulate fewer credits than the number required for promotion to tenth grade are off-track for graduation.
- At the end of 9th grade, students must have no more than one semester F and no fewer than the number of credits required to be promoted to 10th grade to predict likelihood of graduating.

5. Demographic Data and High School Graduation

(pages 8-10 and Appendix in issue brief)



Source: OSPI Graduation and Dropout Statistics

Effective Practices

(page 10 in issue brief)

Research Based Practices and What's Being Implemented in Washington State

- An integrative approach that identifies and addresses multiple factors and at various educational levels is necessary to support increased graduation likelihood.

- While each factor needs attention, many factors are present in each individual.

3 Effective Efforts in Washington:

- Lindbergh High School, Renton School District (suburban district)
- Tacoma Public Schools (urban district)
- Spokane Schools (urban district)

➢ All 3 districts fit the demographic and drop-out data described in this brief.

Lindbergh High School, Renton School District

(pages 11-12 in issue brief)

Demographics:

- School of 1,294 students
- In the last ten years, Lindbergh High School has had
  - A decrease in enrollment of less than 4%.
  - A 20.5% increase in students receiving free and reduced lunch.
  - A 4.1% increase in English Language Learners.
  - A 1% increase in Special Education students.
  - A 15% increase in students of color.
  - A drop of almost 5% in the number of classroom teachers.
  - In 2014, a count of 81% of students remaining in the same school throughout the entire school year.

Renton School District: Lindbergh High School

- Established a 5-year School Improvement Plan to address increased student achievement and graduation rates.
- Laid out the District Foundation Beliefs, including (but not limited to) the following : A focus on eradicating the achievement gap; A belief in the potential of all students ; The expectation that all administrators be instructional leaders; Use of data as a tool; An increase in expectations; Ensuring all students are prepared for post-secondary education and training.
- One goal for high school: Each student will graduate with the necessary skills and an appropriate plan to continue to post-secondary options.
- The district set measurable targets in order to reach this goal.
- Strategies for achievement included creating and implementing a Pre K-12 Early Warning Indicators System so school districts can use data to keep students on the right track.
- Another strategy was to create a Pre K-12 system to support:
  - ✓ educational planning
  - ✓ exploration of post-secondary options
  - ✓ access to post-secondary options, and
  - ✓ enrollment in post-secondary programs

Tacoma Schools

(pages 12-13 in issue brief)

- Tacoma Public Schools presented highlights of their efforts in *Academic Excellent-Graduation Tacoma Public Schools, Strategic Plan Benchmarks 2013.*
- Tacoma demographics:
  - The graduation gap for students of poverty (those receiving Free and Reduced Lunch) is 21% higher than the rest of the student population.
  - 23% more Special Education students drop out of school than the general population.
  - 29% of students transferred after grade 9 drop out of high school.
  - Asian and Whites graduate 15% more than other groups.
  - 1362 senior students were eligible to submit a Collection of Evidence (COE) as a state alternative to passing a High School Proficiency Exam (HSPE) or End-of-Course (EOC) exam in reading, writing, math 1 and/or math 2; Students may choose to retake the tests.

Tacoma Schools

- Tacoma Public Schools presented highlights of their efforts in *Academic Excellent-Graduation Tacoma Public Schools, Strategic Plan Benchmarks 2013.*
- Steps toward accomplishing raising their graduation rate:
  - Ensuring students have multiple opportunities to demonstrate mastery of standards.
  - Collaborating with other departments to ensure more timely follow-up with students.
  - Developing new initiatives.
  - One intervention is an initiative, "Fresh Focus" which targets 9th grade students and helps them gain the study and academic skills they need to succeed in high school courses.
    - Eligible students are identified as at-risk in 8th grade.

Spokane Schools

(pages 13-14 in issue brief)

- In a document presented to the Gates Foundation, *Dropout Reduction in Spokane*, a community-based public health focus to address high school dropout rates was described.
- Engaging the community, Spokane believed, would create change.
  - Under-educated students would lead to the continued cycle of poverty.
  - The district and community leadership collaborated to design a plan for increased graduation and student on-going success.
  - The effort was led by Priority Spokane.
- A 2012 longitudinal study conducted by Mary Beth Celio on 7000 Spokane students was described in the presentation.
- The study found that:
  - 809, or 46% of the students who dropped out of high school could be predicted before a student entered high school.
  - 707, or 40% could be predicted while in high school.
  - only 251, or 14% of student dropouts could not be predicted.

Spokane Schools

- Three objectives guided the work of the Spokane Schools and community at large:
  - (1)Identify risk factors that lead to students dropping out of school.
  - (2) Describe evidence-based school and community strategies for improving each risk factor.
  - (3) Understand policy and system changes needed to improve student attendance.
- Each objective and the student indicator led to strategies that involved the community and the school system.

Conclusion

(pages 14-15 in issue brief)

- Important to acknowledge and act on known factors of whether or not a student will graduate from high school.
- These factors are based in:
  - Child's family characteristics
  - Race/ethnicity, economic status
  - Success in school from early grades going forward
  - Being on track in grade nine
  - Being connected to school
  - Success in academics
    - A need exists to continue to address demographic differences in schools as in society.
    - As the nation becomes more diverse, so do our school populations.
    - Understanding cultural differences and economic disparities must remain a priority in order to educate all students.

Conclusion

(Continued)

- Economics is a two-fold factor:
    1. First, students living in poverty are at high risk of dropping out of school.
    2. Second, students who drop out of high school continue the cycle of poverty as their future economic and career outlook is much dimmer than those who graduate.
- The ninth grade year is critical for students and a predictor of high school graduation.
    - Falling behind during this crucial year means a student not only begins to lag in credit accumulation and academics, but causes personal discouragement that leads to absenteeism, personal feelings of stress, and disconnection from school.
    - These other non-academic factors become forces against graduation.
- Finally, absenteeism and grades remain crucial to a student staying on track for graduation. A student's connection to school is tied to both of these factors.
- An integrated approach that looks at multiple indicators will address the complex composite of why students do not succeed in school.
- While each indicator and predictor needs attention, many factors are present in each individual.
- Additional studies need to be done in the field of predicting and supporting high school graduation. The results of studies need to be acted upon in order to support student success.

Postsecondary Success

Washington Student Achievement Council Meeting

August 2015

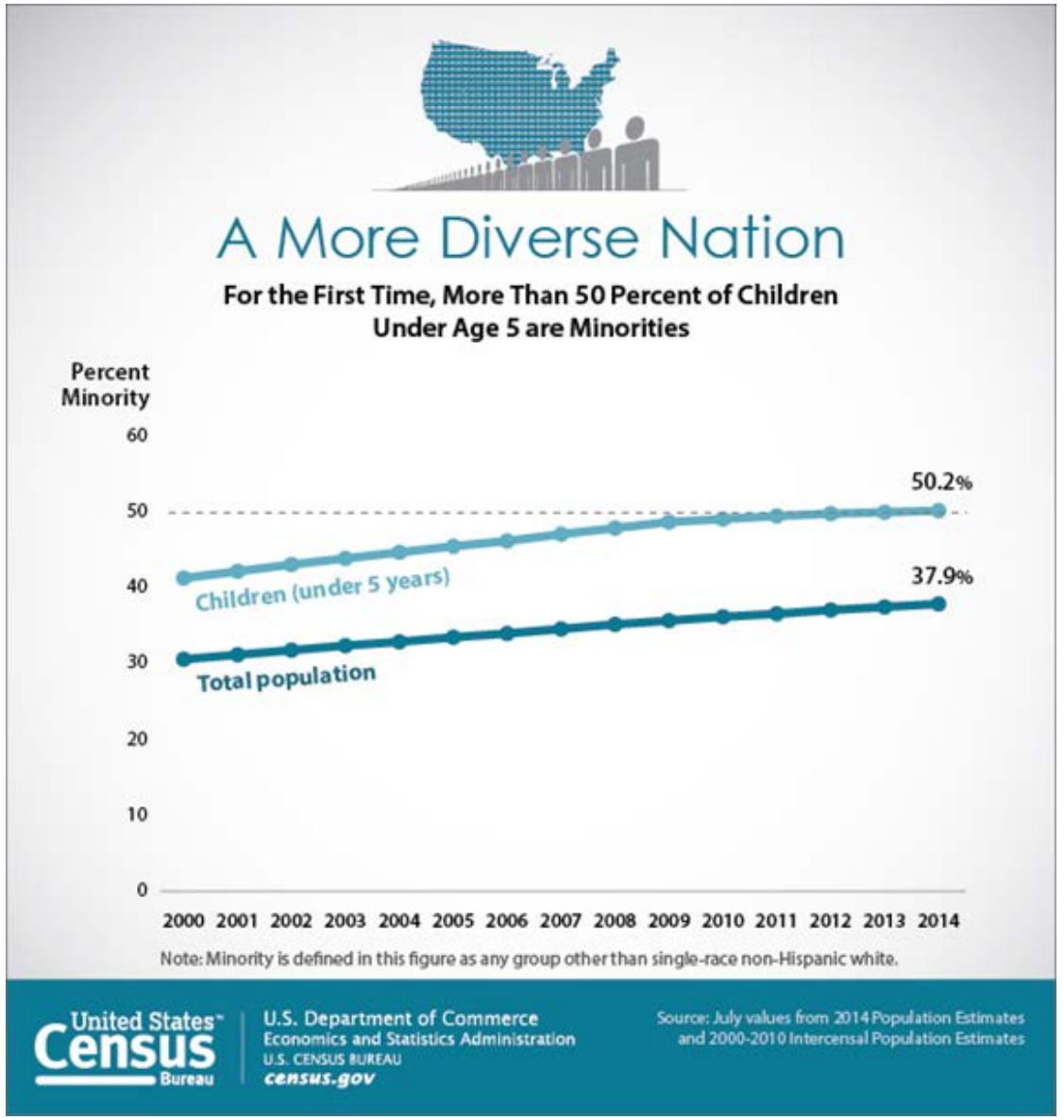
Noreen Light
Associate Director
Academic Affairs and Policy

Mark Bergeson
Associate Director
Academic Affairs and Policy

Key terms

- **Successful transition to college.**
- **Postsecondary completion.**
- **Postsecondary credential.**
- **Postsecondary institution.**
- **Opportunity gap.**

Shifting demographics

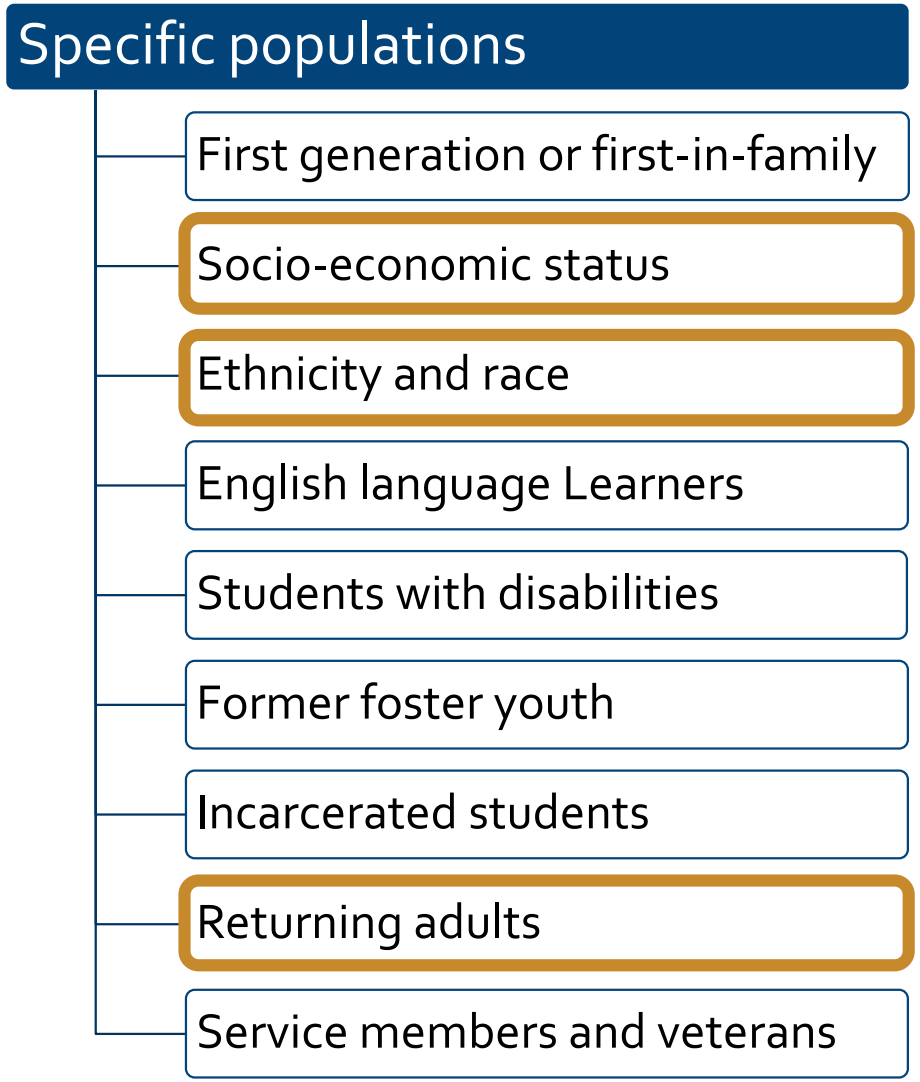


Opportunities to support students

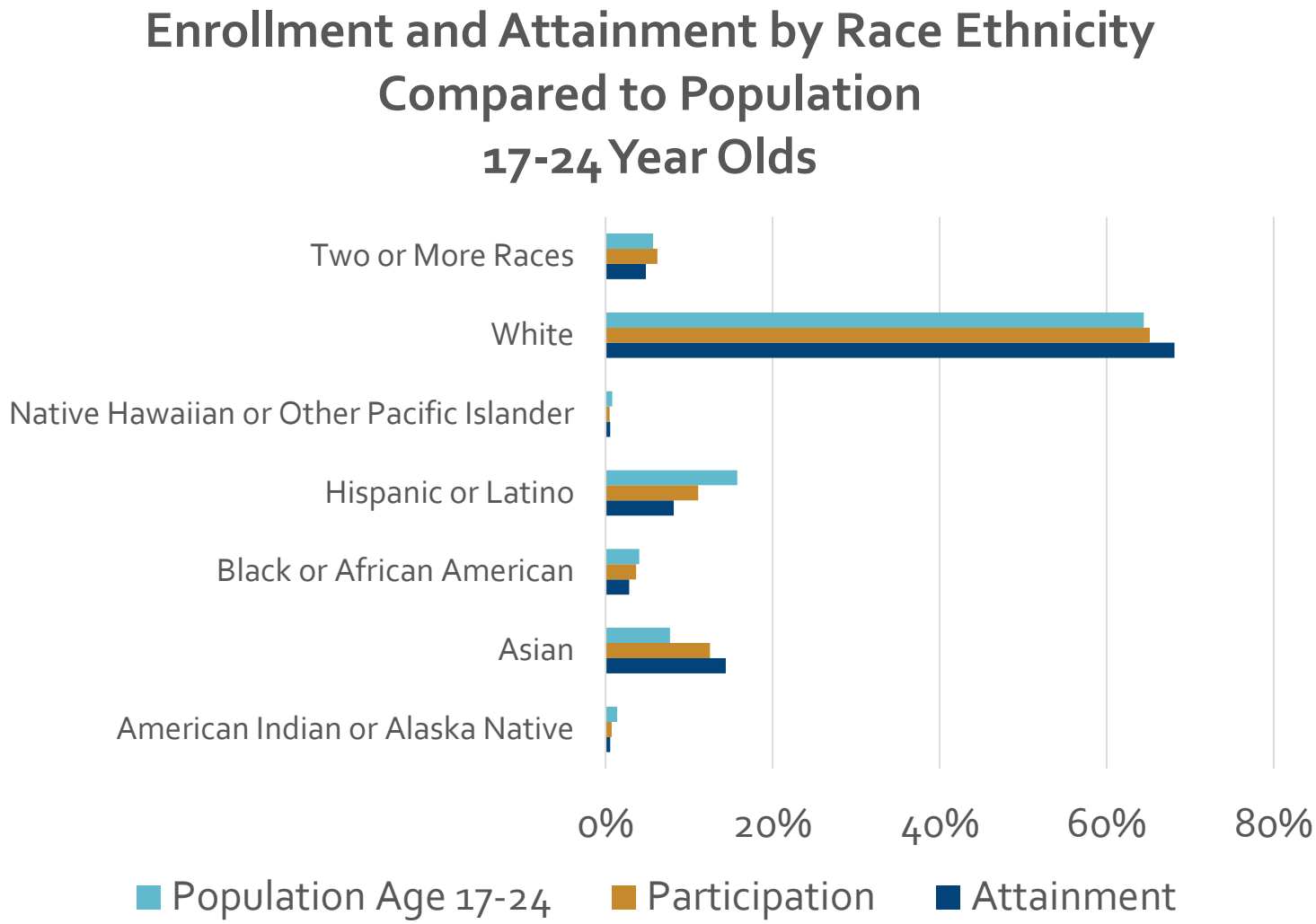
Across all populations

1. College Readiness
2. Postsecondary placement
3. First year experiences
4. Academic momentum
5. Pathways to completion

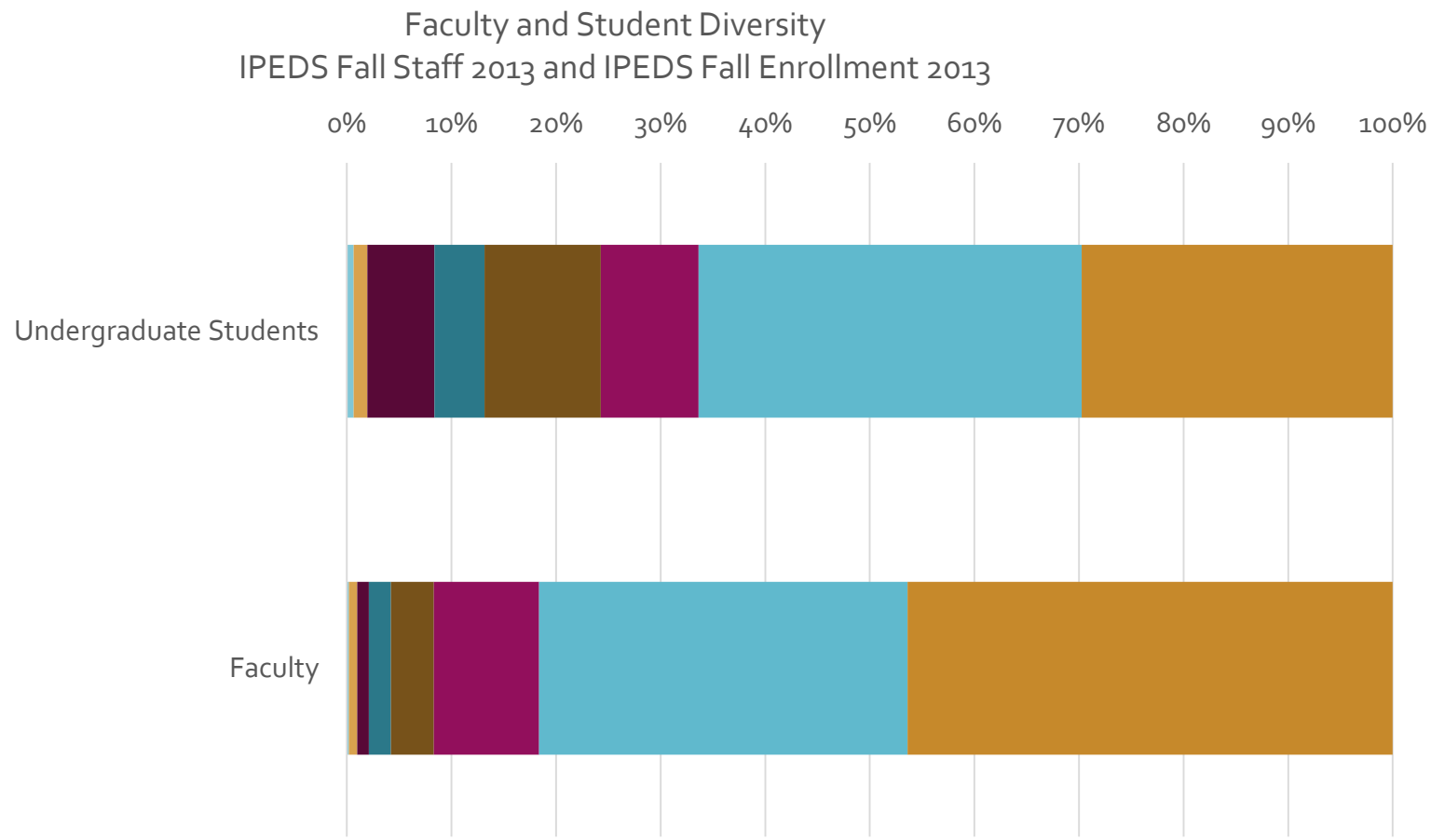
Increase support for all students.



Students of color



Faculty diversity does not mirror student diversity.



	Faculty	Undergraduate Students
Native Hawaiian or Other Pacific Islander	0%	1%
American Indian or Alaska Native	1%	1%
Two or More Races	1%	6%
Black or African American	2%	5%
Hispanic or Latino	4%	11%
Asian	10%	9%
White Female	35%	37%
White Male	46%	30%

Roadmap-related current efforts

Statewide and system-wide strategies

1. Ensure access
2. Enhance learning
3. Prepare for future challenges

Roadmap-related current efforts

Institutional strategies:

- Pre-college interventions
- Postsecondary placement
- Student support
- Transfer improvements

Discussion

What would make these briefs more useful?

Were there any important factors or challenges that were not included in the briefs?

What issues or groups would you like to learn more about?

Of the issues discussed today, which would be most important to highlight in the Roadmap update?

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Roadmap Update: Draft Issue Briefs

Council Action: Discussion

Description

Council members will review drafts of issue briefs on High School Graduation and Postsecondary Success. These briefs are intended to give context for the indicators and core measures selected for the 2015 Roadmap update; and explain the factors, according to research, that affect high school graduation and postsecondary success. These documents will be referenced in the Roadmap update and will be available on the WSAC website to provide more detailed information. At this meeting, Council members will have an opportunity to review the draft issue briefs, learn about the issues in greater depth, and provide guidance for the final drafts.

Overview

The 2013 Roadmap report established long-term attainment goals for the state's population through 2023. The report also identified specific policy and programmatic strategies endorsed by the Council to increase educational attainment. The Roadmap Report, which the Council is required to update every other year, also serves as the basis for development and implementation of a Strategic Action Plan between each Roadmap cycle.

For the 2015 Roadmap update, the Council agreed on a key priority to measure system-wide progress toward the participation and attainment goals. Council members also directed staff to examine the addition of *leading indicators* for the core measures, and to highlight areas where state policymakers can make an impact.

At the Council's February meeting, members directed staff to focus the 2015 Roadmap update on measuring progress toward meeting the state's attainment goals. The Council asked staff to include indicators WSAC can influence; and that can impact attainment.

At the June meeting, Council members heard from Technical Work Group (TWG) members, comprising Council staff and representatives from OSPI and the two-year and four-year college systems. The TWG recommended indicators and metrics. Further refinements for some indicators and metrics are still underway. Analysis will include disaggregation by age group, race/ethnicity, and special programs.

At the August meeting, authors of the issue briefs will present their findings on factors that affect high school graduation and postsecondary success. These briefs are intended to provide context for the indicators and metrics selected, as well as to provide a broader discussion of the factors the can impact education attainment.

These issue briefs will be referenced in the Roadmap Update and available on WSAC's website to provide more detailed information for policymakers and other stakeholders who wish to explore these issues in more depth.

Below is a timeline of the process for developing the Roadmap Update in 2015.

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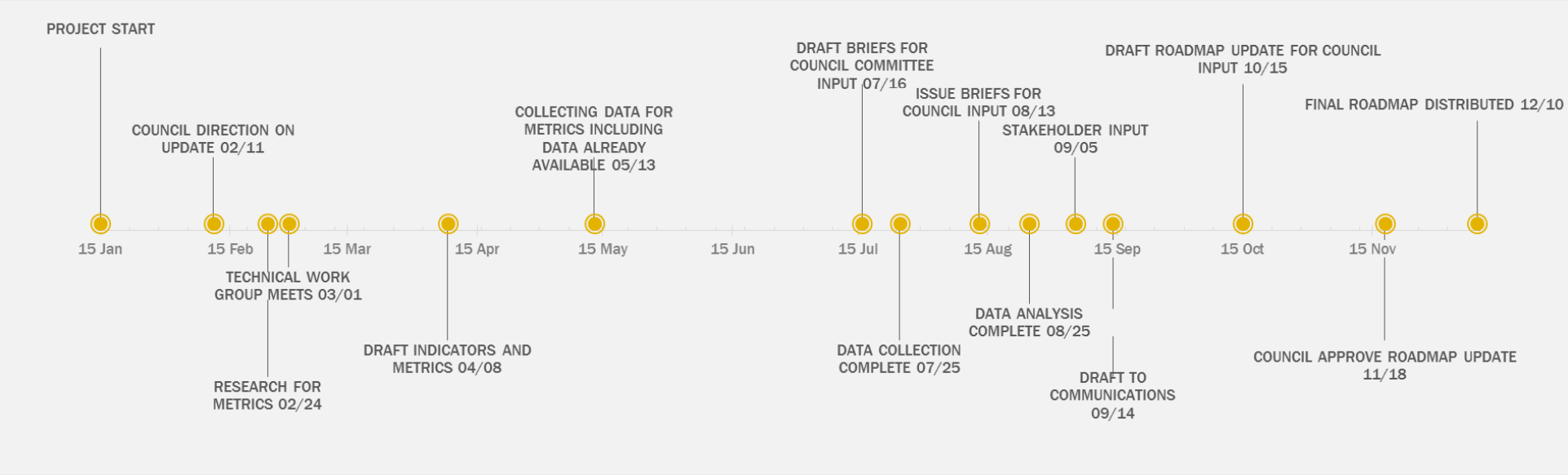


Factors Influencing High School Graduation

Issue Brief Prepared for the
Washington Student Achievement Council

Spring 2015

By Barbara Ritter

CONTENTS

EXECUTIVE SUMMARY

Research shows that although graduation rates have fluctuated over time, the factors that influence high school graduation have remained the same. These include: 1) economic factors 2) demographic factors 3) ninth grade factor 4) the attendance factor and student engagement and 5) course failure factor. There have been state and local efforts to address these challenges and improve graduation rates across the state. Some that have been successful have taken an integrated approach that looks at multiple factors across educational levels to support increased graduation likelihood. Others have used early intervention systems to help students early who are falling off track. Overall, as our student population grows and becomes more diverse, there is a need to better understand demographic differences and the specific needs of student populations.

INTRODUCTION

The purpose of this brief is to provide information to the Washington Student Achievement Council (WSAC), a state agency. WSAC provides strategic planning, oversight and advocacy to support increased student success and higher levels of educational attainment in Washington. The council proposes improvements and innovations to meet the evolving needs of students, employers and the educational community. The information in this issue brief is intended to support the Council's 2015 Roadmap Report update.

The information gathered here is intended to be helpful for Washington school district personnel, government and non-government agencies, public policymakers, and entities that support increased performance goals and achievement resulting in high school graduation for all students in the State. It looks, therefore, at research that identifies current graduation (and drop-out) rates, who graduates from high school and why, and factors that influence students who do not graduate. With this information, stakeholders can better structure their efforts to assure all students receive the rigor, support, and interventions necessary to graduate from high school ready for further education and career success.

GENERAL APPROACH

The question that guided this research was: What are the most important factors that influence an on-time high school graduation[a]?

This research began by reviewing recent studies that identify who graduates and who drops out of high school and the factors that characterize student success or failure. More research is available on the numbers and percentages of students who graduate both statewide and nationally than the characteristics of those students, and the factors that improve their success. Some data, however, are available that show several various elements repeated across the state and nation regularly. The categories of data for this brief include: 1) Economic 2) Demographic and 3) Student. It should be noted that these three factors cannot be considered singularly. Most students who successfully graduate from high school on time share characteristics from more than one of the categories; most students who are drop-outs also share more than one and possibly all three factors.

To focus the research, key terms included: *factors that predict high school graduation; risk factors for dropping out of high school; and high school completion rates. As factors were identified, key terms included: absenteeism and high school graduation; ninth grade as a critical*

[a] See Appendix A for definitions.

year for high school graduation; high school course failure; poverty and economic factors; and on-track for high school graduation.

The question guiding this research, What are the most critical factors that influence high school graduation? is addressed in this brief by looking at five categories of factors within the categories of data mentioned above. They are:

1. Economic Factors and High School Graduation
2. The Importance of Ninth Grade on High School Graduation
3. The Attendance Factor and Student Engagement with School
4. Course Failure Factor as an Indicator of High School Graduation
5. Demographic Data

Again, these categories are not comprehensive nor exclusive to one another. Many students share multiple factors.

CONTEXT

Data shows that graduation rates have improved for both the nation and Washington State from the year 2003 to 2010[1] [2b]. This holds true for all ethnicities and for both males and females. Some years the rates dropped, but the overall trend during this timeframe is improvement in the graduation rate from 2003 to 2010[3c]. In 2012, the nation reached, for the first time in history, the 80 percent threshold, up about 10 percentage points from the beginning of the decade[4]. Research shows that the primary reasons for improved graduation rates and the reasons for dropping out of high school have remained the same for that period of time[5] [6] [7] [8]. These include, primarily: high absenteeism; low GPA; having been retained one or more years in school; having failed one or more classes in the freshman year; family characteristics; issues related to poverty; school experiences; and being off-track to graduate on time[5] [6] [9] [10]. More studies are now emphasizing the freshman year as most critical for students when it comes to establishing an on-track record for graduation as all factors (absenteeism, course failure, connection to school, and demographic factors) all seem to combine, or conspire, in a critical way[7].

Researchers summarize, more specifically, that on-time graduation was higher for students who were on track for Grade 10 promotion. They had a Grade 9th grade GPA of 2.5 or higher, passed Algebra 1 with a C or higher by Grade 8, failed one or fewer semester courses, were absent

[b] This was the most recent longitudinal data available.
[c] See Appendix B for graduation rates tables.

fewer than eight days, were continuously on-track for grade 9 promotion, were never suspended prior to Grade 9, and never moved between schools during middle school. Being eligible for special education services decreased the odds of graduating on time. Other factors that were statistically significant but had a small or negligible effect were: Free and Reduced-price Meals System (FARMS) status, suspension, number of days absent during Grade 9, and school mobility. These factors decreased the likelihood of graduating on time[5 6 7 9 10].

1. Economic Factors and High School Graduation

The strongest predictors that a student is likely to drop out are family characteristics such as: socioeconomic status, family structure, family stress (death, divorce, family moves), and the mother's age. Students who come from low-income families, who are the children of single, young, unemployed mothers, or who have experienced high degrees of family stress are more likely than other students to drop out of school. Of those characteristics, low socioeconomic status has been shown to bear the strongest relationship to students' tendency to drop out[5 7 11].

Academic achievement disparities by family income influence who does and does not graduate on time. Using eligibility for free or reduced-price school meals as a proxy, low-income students in eighth grade score lower than non-low-income students on the National Assessment of Educational Progress mathematics, reading, and science tests[12]. The same data collection system shows low-income eighth graders are more than 40 percent more likely to have had three or more absences in the past month[13]. The National Household Education Survey uses receipt of food stamp (SNAP) benefits as a poverty proxy; data from that source show poor children in grades one through three are nearly three times more likely to repeat a grade[14]. This data set also shows that poor children in kindergarten through third grade are more than twice as likely to have an individualized education plan for special education needs[14]. Finally, youth from families in the bottom quintile of the income distribution are more than four times as likely as those from families in the top quintile to have dropped out of school in the past year[15]. Disparities in test scores between poor and wealthier students have grown in the past ten years; this gap is now larger than the black-white achievement gap in the U.S.[10].

It is likely that children and students living in poverty will drop out of school and continue the poverty cycle. In 2009, the bottom quintile of low-income students (bottom 20 percent of all family incomes) were five times more likely to drop out of high school than high-income (top 20 percent of all family incomes) students. Child poverty is rampant in the U.S., with more than 20 percent of school-age children living in poor families. And poverty rates for Black and Hispanic families are three times the rates for White families[5].

Dropouts face extremely bleak economic and social prospects. Compared to high school graduates, they are less likely find a job and earn a living wage, and more likely to be poor and to suffer from a variety of adverse health outcomes[16]. Moreover, they are more likely to rely on public assistance, engage in crime, and generate other social costs borne by taxpayers[16].

Rumberger, in his article on poverty and high school dropouts, states that family poverty is associated with a number of adverse conditions, including high mobility and homelessness; hunger and food insecurity; parents who are in jail or absent; domestic violence; drug abuse; and other problems[17]. These are called “toxic stressors” because they are severe, sustained,

and not buffered by supportive relationships[18]. Drawing on medical, biological and social science, Shonkoff and Garner show how toxic stress in early childhood leads to lasting impacts on learning (linguistic, cognitive and social-emotional skills), behavior, and health. These impacts likely lead to dropping out, low achievement, chronic absenteeism and misbehavior, and poor behaviors and attitudes ("non-cognitive skills")[19].

2. Importance of Ninth Grade on High School Graduation

Evidence is growing that students who fall off track during the freshman year have very low odds of earning a high school diploma[7]. Analysis of the progression of students through high school suggests that approximately one-third of the nation's recent high school dropouts never were promoted beyond ninth grade. For policymakers and educators, the task of increasing high school graduation rates means carefully studying which students experience trouble in ninth grade and the reasons for their difficulty[6 7 20].

Neild examines four theories about why ninth grade poses difficulties for some students[20]. The first is that ninth grade coincides with life-course changes, such as reduced parental supervision and increased peer influence. The second is that in moving to a new school, students must break the bonds they have formed with their middle school teachers and peers. The third is that some students are inadequately prepared for high school. The final theory is that the organization of some high schools is itself a major source of students' difficulty (class length, number of courses per day, movement to classes, start-and end-time of the school day). Each theory, says Neild, suggests a particular type of policy response. The strongest evidence, he and others observe, finds inadequate preparation for high school and the organization itself of high schools[20].

Reform efforts, to this point, have tended to address high school organization, such as number of classes, block scheduling, movement of students or of teachers in the building, early start times and end times of the school day, and time allotment per class, with or without a focus on instructional quality or helping students to catch up on academic skills. Evaluations of these reforms suggest that both school organization and instructional improvement are necessary to keep ninth graders on track to graduation[20].

High expectations and rigor have been suggested as factors influencing high school graduation and success beyond high school. A rigorous high school curriculum requires challenging instruction and support for each student to meet high standards. Components of a rigorous high school curriculum include higher expectations for all students, with support for low-performing students through intervention programs and extended learning opportunities, and a requirement that each student complete a college- or work-ready curriculum in order to graduate from high school[21]. Rigor includes well-managed classrooms, the expectation to enroll in college-prep courses, academic demands, orderly student behavior, and challenging instruction[22]. The National Council of State Legislators report that the rigor of the high school curriculum is one of the top indicators for whether a student will graduate from high school and earn a college degree. It reports that a study by the U.S. Department of Education in 2005 found the rigor of high school coursework is more important than parent education level,

family income, or race/ethnicity in predicting whether a student will earn a postsecondary credential. The report goes on to say that, unfortunately, most recent high school graduates report being only moderately challenged in high school. In the 2005 survey of almost 1,500 recent graduates, just 24 percent of graduates said they were significantly challenged during high school. One in five recent high school graduates said that "expectations were low and…it was easy to slide by[21]."

Furthermore, Funds of Knowledge report that a critical assumption in educational institutions is "they do not view working-class minority students as emerging from households rich in social and intellectual resources. Rather than focusing on the knowledge these students bring to school and using it as a foundation for learning, schools have emphasized what these students lack in terms of the forms of language and knowledge sanctioned by the schools. This emphasis on so-called disadvantages has provided justification for lowered academic expectations and inaccurate portrayals of these children and their families[23]."

3. Attendance Factor and Student Engagement with School

The number of absences per student can be monitored very early in the first year of high school—attendance even in the first few weeks or month of the freshman year is related to whether students will eventually graduate[24].

A study by John Hopkins University identifies attendance as the fundamental indicator of student engagement with school[25]. They connect the ninth grade factor to both attendance and engagement: Though many students fall off-track to success for the first time in ninth grade, poor attendance patterns often begin increasing in middle school and become worse in high school. Recent studies indicate higher rates of chronic absenteeism in grade 8 than in earlier middle grades. They also found that rigorous research on interventions to improve student attendance is in early stages. Evaluation of out-of-school time programs (summer, before- and after-school programs) have found mixed results on school attendance. Their research shows that missing school during the secondary grades can often be traced to low levels of motivation[25].

Recent discussions of non-cognitive factors affecting academic performance have emphasized the importance of developing an academic mindset to influence academic behaviors such as attendance and exerting effort in class and on homework assignments[19].

Information about absences may be the most practical indicator for identifying students in need of early interventions[26]. In general, research suggests that missing more than 10% of instructional time is cause for concern. This percentage translates to roughly 2 weeks (10 days) of school per semester in most high schools[26].

4. Course Failure Factor as an Indicator of High School Graduation

Grades earned are clearly related to students' likelihood of successfully graduating from high school. On average, students who earn a 2.0 GPA or less in their freshman year have significantly lower graduation rates than students who earn a 2.5 or higher (on a 4-point scale).

Therefore, students with a GPA of 2.0 or less at the end of their first year of high school should be considered at risk for dropping out[27]. Students who fail one or more core courses OR accumulate fewer credits than the number required for promotion to 10th grade are, at that point, off track for graduation[27].

The table below, taken from Heppen and Therriault's research, shows how course failures and credit accumulation combine to identify individual students as on track or off track for high school graduation.

Number of Semesters with Fs in Core Courses	Number of Credits Accumulated Freshman Year	
	Less than 5.0	**5.0 or more**
2 or more	Off Track	Off Track
0 or 1 semester	Off Track	On Track

In short, during their freshman year, students must meet the following criteria in order to predict the likelihood of successfully graduating from high school:

1) No more than one semester F
2) No fewer than the number of credits required to be promoted to 10th grade.

5. Demographic Data and High School Graduation

In Washington, males drop out more frequently than females. American Indian students have the highest drop-out rate of all race/ethnicities, followed by Pacific Islander students, Hispanic students, and Black students. Other student populations with high drop-out rates include students in foster care, students in special education, students with limited English, and students who are homeless. Asian students have the lowest drop-out rate.

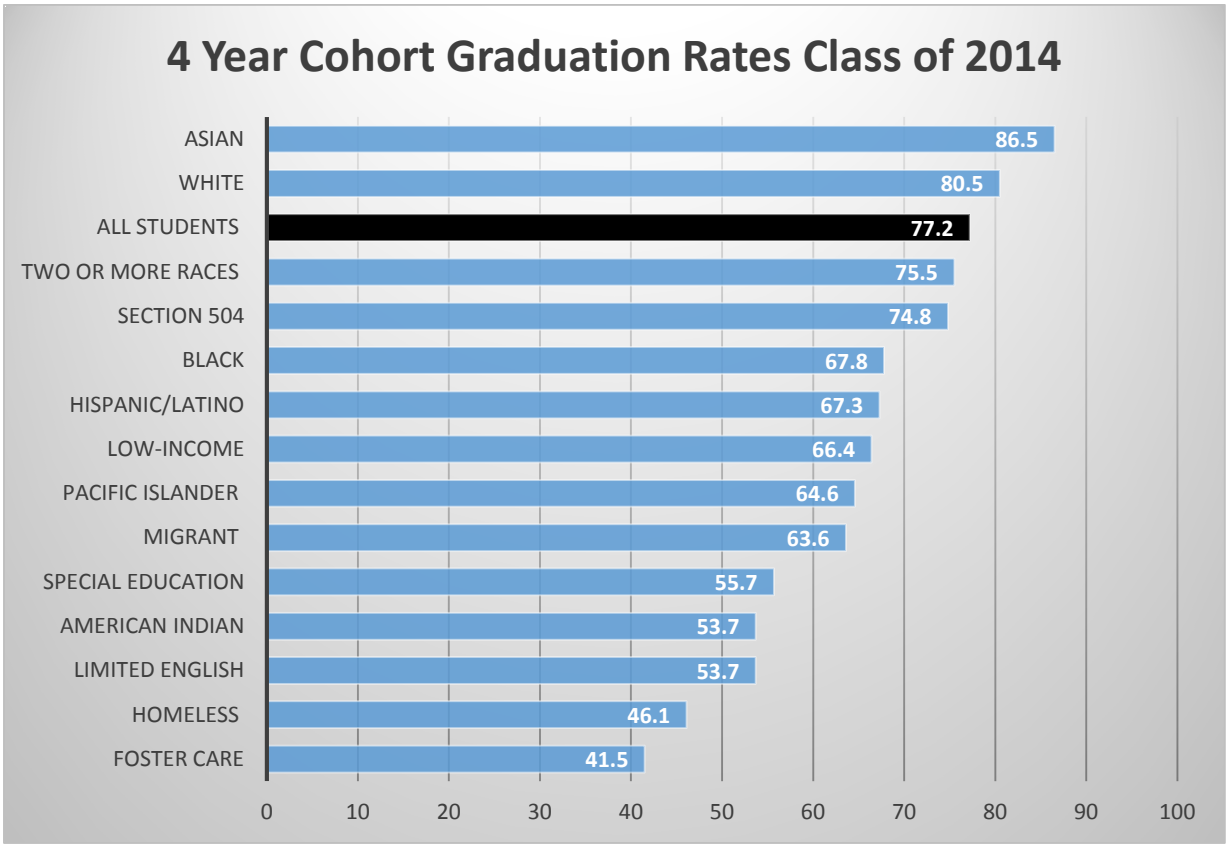
Table 3: Adjusted Cohort Dropouts (4-year)

Student Group	Dropouts Year 1	Dropouts Year 2	Dropouts Year 3	Dropouts Year 4	Total Dropouts	Adjusted 4-Year Cohort Dropout Rate
All Students	610	1,104	2,288	5,668	9,670	**12.3%**
Amer. Indian	22	48	100	177	347	**26.6%**
Asian	37	52	74	199	362	**6.0%**
Pacific Islander	10	12	26	78	126	**19.0%**
Black	48	61	121	339	569	**15.1%**
Hispanic	153	275	559	1,412	2,399	**17.7%**
White	317	603	1,249	3,129	5,298	**10.8%**
Two or More Races	23	53	159	331	566	**13.3%**
Special Education	69	177	411	1,005	1,662	**18.2%**
Limited English	97	130	218	577	1,022	**23.5%**
Low Income	339	785	1,735	4,345	7,204	**18.2%**
Migrant	14	45	101	239	399	**19.9%**
504 Plan	19	24	104	293	440	**11.9%**
Homeless	24	73	185	661	943	**31.5%**
Foster Care	7	21	78	146	252	**34.0%**
Female	284	501	948	2,311	4,044	**10.5%**
Male	326	603	1,340	3,357	5,626	**14.0%**

Source: OSPI Graduation and Dropout Statistics Annual Report, 2015 Report
http://www.k12.wa.us/LegisGov/2015documents/GradandDropoutStats2015.pdf

The chart below depicts the on-time 4 year cohort graduation rate for 2013-14 students. Asian students and whites were the only groups above the average graduation rate for all students, and the student populations with the lowest graduation rates were students in foster care, students who are homeless, limited English students, and American Indian students[d].

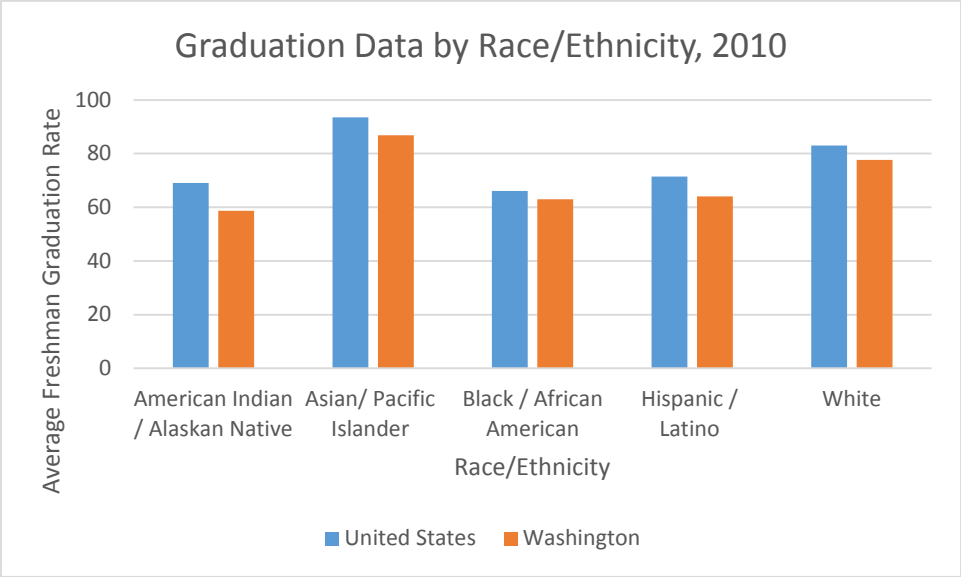
[d] See Appendix C to view data highlights and national comparisons.



Source: OSPI Graduation and Dropout Statistics Annual Report, 2015 Report
http://www.k12.wa.us/LegisGov/2015documents/GradandDropoutStats2015.pdf

Data also shows that Washington State consistently falls below the national average in numbers of students graduating from high school in in both gender and ethnicity. [e] The chart below shows differences in graduation rates statewide and nationally, by race/ethnicity.

[e] Appendix B shows nationwide and state level demographic data.



Sources: OSPI Report Card http://reportcard.ospi.k12.wa.us/; US Dept. of Ed, NCES Dropout, Completers, and Graduation Reports https://nces.ed.gov/ccd/pub_dropouts.asp

EFFECTIVE PRACTICES

Research Based Practices and What's Being Implemented in Washington State

Research shows that an integrative approach that identifies and addresses multiple factors and at various educational levels is necessary to support increased graduation likelihood. An integrated approach that looks at multiple factors will address the complex composite of why students do not succeed in school. While each factor needs attention, many factors are present in each individual.

Bowers and Moore each pose an integrated approach that looks at all factors supporting on-time graduation combined (student, family, school, community) as a means of identifying and addressing graduation rates and success. Moore describes an Integrated Student Support System with the intention of addressing multiple factors[9 28 29]:

Influential factors	Core Components	Supports	Short-term Outcomes	Long-term Outcomes
Student	Needs assessment	Physical and mental health	Academic outcomes	High school graduation
Family	Community partnerships	In-school expanded learning Time	Non-academic outcomes	Post-secondary degree or certification

FACTORS INFLUENCING HIGH SCHOOL GRADUATION				
Influential factors	**Core Components**	**Supports**	**Short-term Outcomes**	**Long-term Outcomes**
School	Coordinated student support	School climate and effectiveness		
Community	Integration within school (commitment)	Parent education and family counseling		
	Data tracking	Social services for families in need		

An integrated approach is supported in a 2015 document prepared by GATE (Graduation: A Team Effort) Foundation. The Foundation proposes an Integrated Student Support Framework. It includes milestone measures in four domains: Kindergarten Ready; K-12 Education Success; Wellness and Civic Engagement; and Post-Graduation Achievement. Milestone measures for these areas include availability of support services, social/emotional skills in students, parent engagement, availability of community-based programs, and college and career preparation[30].

LOCAL EFFORTS IN WASHINGTON

In many school districts throughout Washington, efforts are being made to increase high school graduation and reduce drop-out rates. Below three districts that are doing focused and ambitious work to address these issues are highlighted. Two of these districts are urban (Tacoma and Spokane), and one is a suburban high school and district (Lindbergh High school in Renton). It is telling that little or no research was found on efforts in small, rural districts in Washington (which is not to say efforts do not exist). Resources, personnel, and time to document and publish such efforts is more limited in the smaller communities.

1. Renton School District, Lindbergh High School

Lindbergh High School in Renton School District, a school of 1,294 students, established a 5-year School Improvement Plan to address increased student achievement and graduation rates. They carefully laid out the District Foundation Beliefs, including (but not limited to) the following: a focus on eradicating the achievement gap; a belief in the potential of all students; the expectation that all administrators be instructional leaders; use of data as a tool; an increase in expectations; and ensuring all students are prepared for post-secondary education and training[31].

The demographics of the district and how they have changed over the last ten years are reflective of what the research in this paper shows: a decrease in enrollment of less than 4%; a 20.5% increase in students receiving free and reduced lunch; a 4.1% increase in English Language Learners; a 1% increase in Special Education students; a 15% increase in students of color; a drop of almost 5% in the number of classroom teachers; and in 2014, a count of 81% of students remaining in the same school throughout the entire school year.

The district identified goals and strategies in Pre K-12 and others specific to high school as part of their overall 5-year plan. For high school, one goal was to *assure students were College and Career Ready: Each student will graduate with the necessary skills and an appropriate plan to continue to post-secondary options.* Renton School District set measurable targets in order to reach this goal.

Strategies for achievement included creating and implementing a Pre K-12 Renton Early Warning Indicators System so school districts can use data to keep students on the right track. Another strategy was to create a Pre K-12 system of support to address educational planning, exploration of post-secondary options, access to post-secondary options, and enrollment in post-secondary programs[Error! Bookmark not defined.].

By carefully laying out goals for the high school aligned with district goals, strategies, indicators of progress, timelines, and monitoring techniques, improvement has been indicated by year three (2014) of the five-year plan. All staff is involved and planning teams assigned to the different goals meet regularly to assure progress. Adjustments have been made each year both to the plan and to the activities being implemented.

2. Tacoma Public Schools

Tacoma Public Schools presented highlights of their efforts in *Academic Excellent-Graduation Tacoma Public Schools, Strategic Plan Benchmarks 2013*[32]. This document outlined district goals and steps already taken and the next steps being planned. The district's efforts are especially critical given their population, again reflective of the demographics and factors described in this brief.

In Tacoma, the graduation gap for students of poverty (those receiving Free and Reduced Lunch) is 21% higher than the rest of the student population. 23% more Special Education students drop out of school than the general population; 29% of students transferred after grade 9 drop out of high school. Asians and Whites graduate 15% more than other groups[32].

Additionally, 1,362 senior students were eligible to submit a Collection of Evidence (COE) as a state alternative to passing a High School Proficiency Exam (HSPE) or End-of-Course (EOC) exam in reading, writing, math 1 and/or math 2. Students may choose to retake the tests.

Tacoma Public Schools have already taken steps toward accomplishing raising their graduation rate. These steps include ensuring students have multiple opportunities to demonstrate mastery of standards, collaborating with other departments to ensure more timely follow-up with students, and developing new initiatives. One intervention initiative called "Fresh Focus,"

targets 9th grade students and helps them gain the study and academic skills they need to succeed in high school courses. Eligible students are identified as at-risk in 8th grade.

In addition, Tacoma Public Schools will be providing teachers with more opportunities for professional development, developing a comprehensive summer school plan that allows for students to gain core academic credit over the summer, monitoring underclassman students' course failure, HSPE/EOC status, and discipline and attendance records, and finalizing the Program Placement Process so additional innovative programs can be added that may impact the dropout and graduation rates in the district.

3. Spokane Public Schools

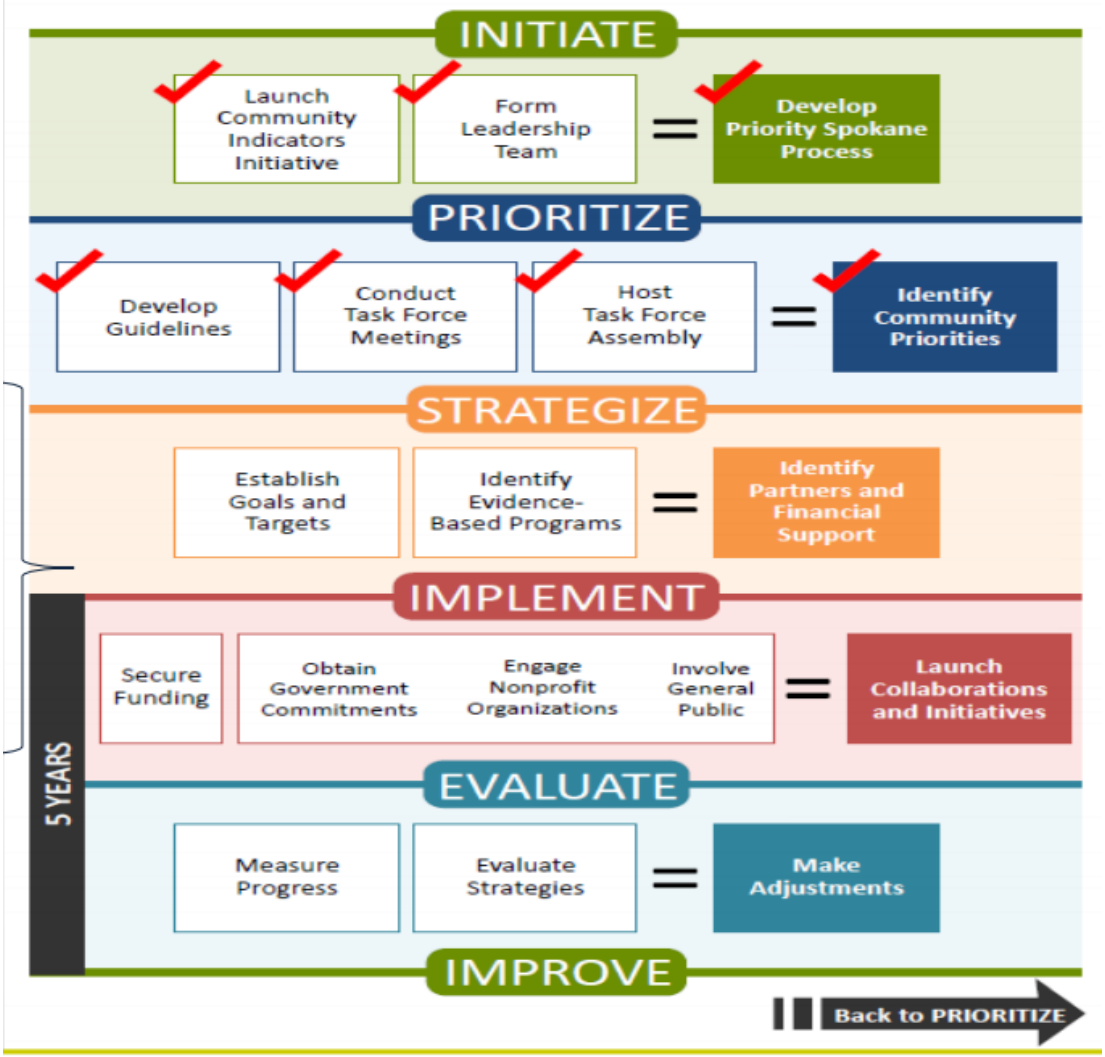
In a document presented to the Gates Foundation, titled Dropout Reduction in Spokane, a community-based public health focus to address high school dropout rates was described[33]. Engaging the community, Spokane believed, would create change. Under-educated students would lead to the continued cycle of poverty described earlier. The district and community leadership collaborated to design a plan for increased graduation and student on-going success.

A 2012 longitudinal study was described in the presentation. It was conducted by Mary Beth Celio on 7,000 Spokane students and found that 809, or 46% of the students who dropped out of high school could be predicted before a student entered high school; 707, or 40% could be predicted while in high school; and only 251, or 14% of student dropouts could not be predicted[33].

The effort was led by Priority Spokane. Three objectives guided the work of the Spokane Schools and community at large. They were: (1) Identify risk factors that lead to students dropping out of school; (2) Describe evidence-based school and community strategies for improving each risk factor; and (3) Understand policy and system changes needed to improve student attendance[f].

Each objective and the student indicator led to strategies that involved the community and the school system. The following chart summarizes this information.

[f] See Appendix D for a visual of youth indicators, or factors that lead to failure to graduate.



Source: Dropout Reduction in Spokane, http://www-test.ospi.k12.wa.us/GATE/AdvisoryMeetings/2014March/GATEadvisory_SpokaneCollectiveDPIR.pdf

CONCLUSION

A person's success at graduating from high school is tightly bound to their success in life. This includes career options, economic stability, mental and physical health, and productive citizenry. Indeed, the success of communities and the nation at large is dependent on all students graduating from high school as a means to this success.

Given this imperative, it is important to acknowledge and act on known factors of whether or not a student will graduate from high school. These factors are based in that child's family characteristics, race/ethnicity, economic status, success in school from early grades going forward, being on track in grade nine, attending school regularly, being connected to school,

and success in academics. A need exists to continue to address demographic differences in schools as in society. As the nation becomes more diverse, so do our school populations. Understanding cultural differences and economic disparities must remain a priority in order to educate all students.

Economics is a two-fold factor. First, students living in poverty are at high risk of dropping out of school. Second, students who drop out of high school continue the cycle of poverty as their future economic and career outlook is much dimmer than those who graduate.

The ninth grade year is critical for students and a predictor of high school graduation. Falling behind during this crucial year means a student not only begins to lag in credit accumulation and academics, but causes personal discouragement that leads to absenteeism, personal feelings of stress, and disconnection from school. These other non-academic factors become forces against graduation. Finally, absenteeism and grades remain crucial to a student staying on track for graduation. A student's connection to school is tied to both of these factors.

An integrated approach that looks at multiple indicators will address the complex composite of why students do not succeed in school. While each indicator and predictor needs attention, many factors are present in each individual.

Overall, additional studies need to be done in the field of predicting and supporting high school graduation. The results need to be acted upon in order to support student success.

APPENDIX A

For the purpose of this brief, ***Graduates*** are defined as those students who are reported as diploma recipients. These are individuals who are awarded a regular high school diploma or a diploma that recognizes some higher level of academic achievement. They can be thought of as students who meet or exceed the coursework and performance standards for high school graduation established by a state or another relevant authority[34].

The definition of a ***dropout,*** taken from the *Common Core of Data (2013),* is a student who was enrolled at any time during the previous school year who is not enrolled at the beginning of the current school year and who has not successfully completed school. Students who have transferred to another school, died, moved to another country, or who are out of school due to illness are not considered dropouts[35].

Factor is the term used in this brief to include both the term *indicator* and the term *predictor*. Their definitions are included here.

Indicators are defined as measures with an established threshold. A numeric threshold can be assigned to the measure[36].

Predictors are measures that are strongly correlated with improved outcomes, but for which a numeric threshold has not been established[36].

Average Freshman Graduation Rate (AFGR) indicates students enrolled in the freshman year who are still there in their senior year[36].

On-track Indicator: A student is considered on track or off track based on a combination of course failures in core academic courses and credits earned. Students who fail one or more core courses OR accumulate fewer credits than the number required for promotion to 10th grade are considered off track for graduation[37].

Additional research is needed in this area, especially updated studies. This brief is not intended to be comprehensive, but rather a guide to help focus for further work.

APPENDIX B

GRADUATION RATES SHOWING GRADE 8-10 BASE ENROLLMENT, NUMBER OF 2010 GRADUATES, AND AVERAGE FRESHMAN GRADUATE RATE (AFGR), Washington and United States: Table 1

Number of Graduates 2009-2010	AFGR (Average Freshman Graduation Rate)	Average Enrollment Base Grades 8,9, and 10	8th Grade Enrollment Base 2005-06	9th Grade Enrollment Base 2006-07	10th Grade Enrollment Base 2007-08
WA: 66,046	WA: 77.2	WA: 85,554	WA: 81,440	WA :90,280	WA: 84,942
US: 3,128,022	US: 78.2	US: 3,998,564	US: 3,827,519	US: 4,284,842	US: 3,881,914

GRADUATION DATA 2010 BY RACE BY RACE, Washington and United States: Table 2

Number of Graduates 2009-2010	American Indian/Alaska Native	Asian /Pacific Islander	Hispanic	Black	White
NUMBER OF GRADUATES	WA: 1,437	WA: 5,893	WA: 6,971	WA: 3,130	WA: 46,124
	US: 34,131	US: 167,840	US: 545,518	US: 472,261	US: 1,871,980
Average Freshman Graduation Rate	WA: 58.7	WA: 86.8	WA: 64.1	WA: 63.0	WA: 77.7
	US: 69.1	US: 93.5	US: 71.4	US: 66.1	US: 83.0

DROP-OUT DATA 2010 FOR GRADES 9-12, Washington and United States: Table 3

Number of Drop Outs	Event Drop-Out Rate	Total Enrollment Grades 9-12
WA: 13,960	WA: 4.2	WA: 329,960
US: 514,238	US: 3.4	US: 14,932,370

DROP-OUT DATA SEGREGATED BY GRADE FOR 2010, GRADES 9, 10, 11, 12, Washington and United States Table 4

Grade	Grade 9	Grade 10	Grade 11	Grade 12
Number of Dropouts	WA: 2,881 US: 105,756	WA: 2,792 US: 113,370	WA: 3,472 US: 117,536	WA: 4,815 US: 175,806
Event Dropout Rate	WA: 3.4 US: 2.6	WA: 3.4 US: 3.0	WA: 4.4 US: 3.3	WA: 5.8 US: 5.1

DROP-OUT RATES BY ETHNICITY SCHOOL YEAR 2010, Washington and United States, Table 5

Ethnicity	American Indian/Alaska Native	Asian/ Pacific Islander	Hispanic	Black	White	2 or More Races
Number of Drop- Outs	WA: 666 US: 12,044	WA: 859 US: 14,595	WA: 2,588 US: 150,137	WA: 1,155 US: 137,287	WA; 8,055 US: 191,943	
Event Drop-Out Rate	WA: 8.2 US: 6.7	WA: 3.0 US: 1.9	WA: 5.8 US: 5.0	WA: 6.1 US: 5.5	WA: 3.6 US: 2.3	--------

LONGITUDINAL DATA SHOWING 2002-2010 EVENT DROP-OUT RATES, Washington and United States, Table 6

2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
WA: 6.2 **US: 3.9**	WA: 6.5 US: 4.1	WA: 4.5 US: 3.9	WA: 5.6 US: 3.9	WA: 5.1 US: 4.4	WA: 5.7 US: 4.1	WA: 4.7 US: 4.1	WA: 4.2 US: 3.4

NUMBER OF GRADUATES AND HIGH SCHOOL DROP-OUTS BY GENDER 2010, Washington and United States, Table 7

Male Graduates	Female Graduates	Male Drop Outs	Male Event Drop-Out Rate	Female Drop Outs	Female Event Drop-Out Rate
WA: 31,353 **US: 1,514,185**	WA: 32,194 US: 1,556,052	WA: 7,415 US: 280,648	WA: 4.5 US: 3.8	WA: 5,836 US: 206,424	WA: 3.7 US: 2.9

(U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File," School Year 2009-2010, Version 1a).

WASHINGTON STATE ON-TIME GRADUATION RATE, OSPI 2013-2014**,** Table 8

	2009	2010	2011	2012	2013	2014
ALL STUDENTS	70.4%	72.5%	72.0%	73.5%	76.5%	75.0%
AMERCAN INDIAN/ALASKA NATIVE (NON-HISPANIC)	48.0%	48.9%	47.9%	52.7%	58.0%	51.0%
ASIAN AND PACIFIC ISLANDER (NON-HISPANIC)	76.5%	79.8%	79.3%	82.2%	82.6%	81.2%
WHITE (NON-HISPANIC)	74.1%	75.6%	75.4%	76.4%	79.4%	77.7%
BLACK/AFRICAN AMERICAN (NON-HISPANIC)	53.6%	60.6%	59.9%	63.2%	66.7%	63.9%
HISPANIC (MAY BE OF ANY RACE)	57.5%	60.4%	60.4%	62.9%	66.9%	66.4%
SPECIAL EDUCATION	54.3%	54.7%	54.8%	55.6%	62.2%	56.4%
LIMITED ENGLISH	55.5%	55.4%	46.6%	50.7%	52.4%	52.2%
LOW INCOME	58.0%	61.9%	59.6%	62.7%	69.4%	66.7%
FEMALE	73.9%	76.0%	75.6%	77.0%	79.3%	78.2%

	2009	2010	2011	2012	2013	2014
MALE	67.1%	69.1%	68.6%	70.2%	73.7%	71.8%

Source: http://reportcard.ospi.K12.wa.us/summary

For all students, from 2009 to 2014, the graduation rate increased by 4.6%. To compare changes by ethnic groups, rates increased as follows: For American Indian/Alaska Native (Non-Hispanic), the increase was 3%. For Asian Pacific Islander (Non-Hispanic), the increase was 4.7% for this six- year period. For White (Non-Hispanic), the rate increased by 3.6%. For Black African/American (Non-Hispanic), the increase was 10.3%, the greatest for all non-White students. For Hispanics of any race, the increase from 2009 to 2014 was 8.9%, the second highest increase for this period.

APPENDIX C

Other highlights from the data include

- The median state AFGR (Average Freshman Graduation Rate) was 78.6 percent.

- Across the United States, the AFGR was highest for Asian/Pacific Islander students (93.5 percent). The rates for other groups were 83.0 percent for White students, 71.4 percent for Hispanic students, 69.1 percent for American Indian/Alaska Native students, 3and 66.1 percent for Black students.

- A comparison of data from 2009–10 to data from the prior school year, 2008–09, shows a percentage point or greater increase in the AFGR for 38 states, including Washington.

- Across the United States, the calculated dropout rate was the lowest for Asian/Pacific Islander students at 1.9 percent and White students at 2.3 percent. The dropout rates for American Indian/Alaska Native, Black, and Hispanic students were 6.7, 5.5, and 5.0 percent respectively.

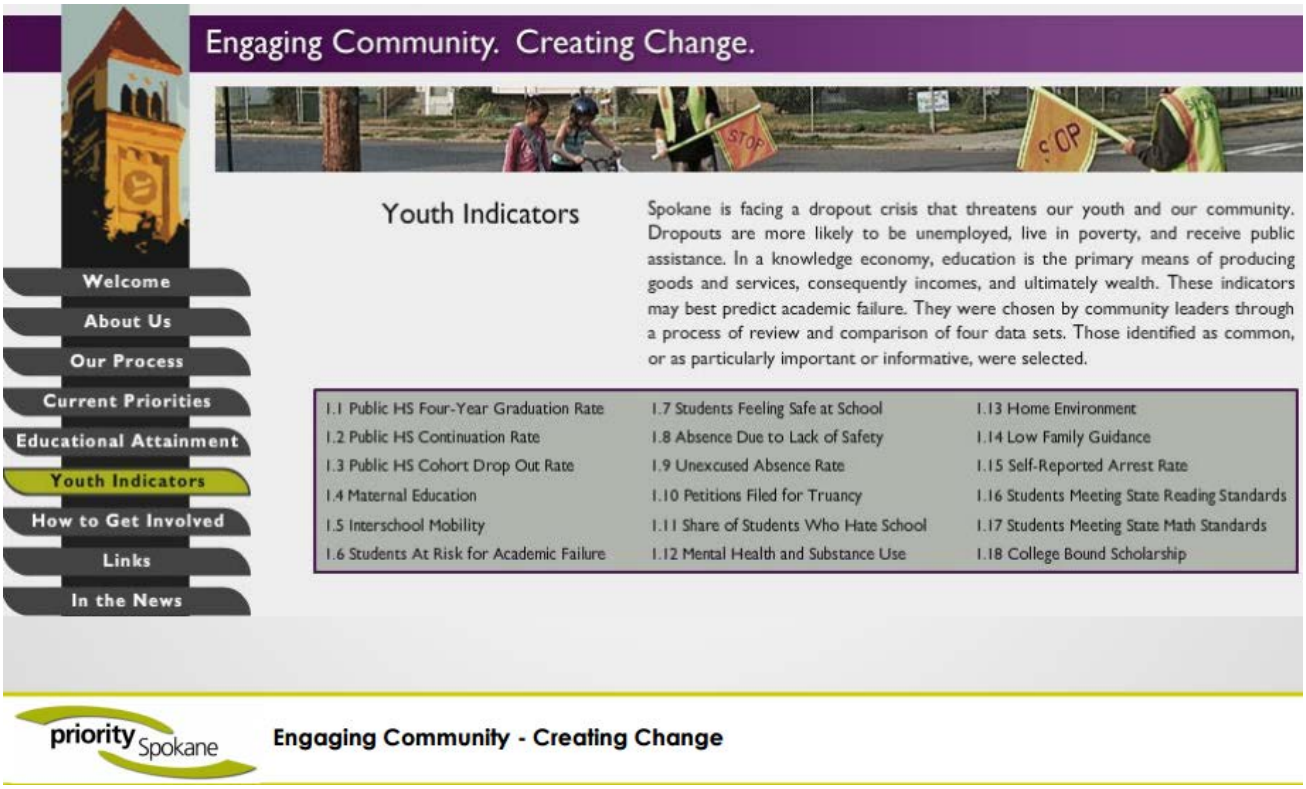
- Across the United States the dropout rate was higher for males than for females at 3.8 percent and 2.9 percent, respectively. The dropout rate was higher among males in every state[34].

- Factors that have been shown to increase a student's risk of dropping out include high rates of absenteeism, low levels of school engagement, low parental education, work or family responsibilities, problematic or deviant behavior, moving to a new school in the ninth grade, and attending a school with lower achievement scores [8] [38] [39] [40].

- Black and Hispanic youth are more likely than whites or Asians to have dropped out of high school. In 2013, 5 percent of whites ages 16 to 24 were not enrolled in school and had not completed high school, compared with 8 percent of blacks, and 12 percent of Hispanics. The high rate for Hispanics is partly the result of the high proportion of immigrants in this age group who never attended school in the U.S. [8] [38]. Asian youth had the lowest rate of all the racial and ethnic groups at three percent[14].

- Some data suggest that the value of school-based formal education is not universally held. For example, in the National Survey of Latinos, youth with a high school education or less and who were not currently enrolled in school said that the lower education attainment of Latinos reflects their obligation to support a family, their limited English skills, a dislike of school, and the lack of necessity for more education for the career that they want, among other reasons[41]. Other studies suggest that these families value education highly and a recent NCES report also notes Latinos enrolled in postsecondary school in record number following the most recent recession [9] [15].

APPENDIX D


Engaging Community. Creating Change.
Welcome
About Us
Our Process
Current Priorities
Educational Attainment
Youth Indicators
How to Get Involved
Links
In the News
Youth Indicators
Spokane is facing a dropout crisis that threatens our youth and our community. Dropouts are more likely to be unemployed, live in poverty, and receive public assistance. In a knowledge economy, education is the primary means of producing goods and services, consequently incomes, and ultimately wealth. These indicators may best predict academic failure. They were chosen by community leaders through a process of review and comparison of four data sets. Those identified as common, or as particularly important or informative, were selected.
I.1 Public HS Four-Year Graduation Rate
I.2 Public HS Continuation Rate
I.3 Public HS Cohort Drop Out Rate
I.4 Maternal Education
I.5 Interschool Mobility
I.6 Students At Risk for Academic Failure
I.7 Students Feeling Safe at School
I.8 Absence Due to Lack of Safety
I.9 Unexcused Absence Rate
I.10 Petitions Filed for Truancy
I.11 Share of Students Who Hate School
I.12 Mental Health and Substance Use
I.13 Home Environment
I.14 Low Family Guidance
I.15 Self-Reported Arrest Rate
I.16 Students Meeting State Reading Standards
I.17 Students Meeting State Math Standards
I.18 College Bound Scholarship
priority Spokane
Engaging Community - Creating Change

SOURCES

[1] U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File," School Year 2009-10, Version 1a; and "NCES Common Core of Data Local Education Agency Universe Survey Dropout and Completion Restricted-Use Data File," School Year 2009-10, Version 1a. Retrieved 3/17/2015 from http://nces.ed.gov/pubs2014/2014391.pdf.

[2] National Center for Education Statistics, Trends in High School Dropout and Completion Rates in the United States, https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012006

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Postsecondary Success

Issue Brief

August, 2015

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Executive Summary

The population of Washington State is becoming increasingly diverse. At the same time, historically underserved populations continue to be underrepresented in postsecondary education. Low-income students and certain populations of color have lower high school graduation rates and are less likely than their peers to enroll in postsecondary education and complete a degree or certificate. In order for Washington to meet its goal of 70 percent postsecondary attainment among adults by 2023, educational systems and staff must be prepared to serve a population with shifting demographics.

To provide the best support for students enrolled in postsecondary education, we must understand the barriers students face as they transition into and complete college. The first thing to understand is the wide variety of circumstances students come from as they transition into college—they could be transitioning from high school, work, military service, or from family obligations. This brief will address barriers—faced by both traditional age and returning adult students—to successful college transition and completion.

Institutions, states, and the federal government have developed policies, programs, and practices to address the barriers students face in completing postsecondary education. Because of the diversity of institutions and institutional missions that evolved in a context of limited state and federal control, most of the effort has been at the institutional level. Although institutions offer a variety of programs and policies designed to help diverse students overcome barriers to postsecondary completion students continue to face barriers of their own, including limitations of resources and the complexity of change.

From a student perspective, the college experience can be overwhelming. Students must learn to successfully interact with college personnel, college structures and systems, and college policies.[1] Students may also face financial challenges, and challenges interacting with peers and the classroom learning environment.

Some students face further challenges or are more likely to face the challenges listed above based on their backgrounds or demographics. First-generation or first-in-family, low-income, and minority students are particularly affected by barriers to successful college completion:

1) **First-generation or first-in-family college students.** These students are, for the purposes of this brief, students whose parents have not attained a postsecondary credential. These students are more likely to enter college without the skills, knowledge, confidence, aspirations, and preparation necessary to succeed in college.[2] This combination of social and academic barriers to successful transitions has a notable effect on persistence rates for these students.

One in three students whose parents' highest level of educational attainment was a high school diploma drop out of college within the first 18 months; that number rises to almost one in two when parents have not completed high school. [3]

2) **Socio-economic status.** The poverty level of the high school attended is the strongest factor in determining whether or not a student will go to college.[4] Low-income students are more likely to come from high schools with limited opportunities for academically rigorous coursework. Low-income students struggle to pay for the academic and non-academic expenses associated with college (e.g. living expenses and other costs); they are more likely to enroll part-time; and they often need to rely on loans to cover education expenses not covered by financial aid.

3) **Ethnicity and Race**. Latino, African American, American Indian/Alaskan Native, and some subgroups of Asian students face significant barriers to completion. These include greater likelihood of being first generation or first-in-family to attend college, underprepared, low-income, or working. These students may also face racial discrimination. Additionally, students may face the personal struggle of reconciling certain cultural norms with college norms (e.g., caring for the family versus leaving home to live at school and pursue a degree full time).

Furthermore, English language learners, students with disabilities, former foster youth, incarcerated youth and adults, and returning adult students—including military veterans and service members—can all face additional unique challenges in completing college. These are explained later in the brief. It is important to remember that many students belong to multiple groups highlighted in this brief.

Below are five stages of the transition and completion journey that are crucial for all students in postsecondary programs, regardless of demographics or background. Programs and policies to support students in these five areas will be especially crucial to enhancing student success in transitioning to and completing college:

1) **College readiness** includes the pre-college preparation that occurs formally (K-12 education) and informally (social capital, community engagement, and so forth). Students who are ready for college have the combination of skills, knowledge, and habits of mind necessary to fully participate in college-level courses to completion.[5] Students who enter college academically underprepared often are required to complete pre-college-level coursework. This lengthens time to graduation, because remedial coursework does not count towards a degree. Nationally, fewer than 1 in 10 students who began with remedial coursework graduate from community colleges within three years, and fewer than 4 in 10 complete a bachelor's degrees in six years.[6]

2) **Postsecondary placement** determines the level of coursework at which a student begins his or her postsecondary pathway. Standardized exam scores, high school GPAs and high school coursework are common determinants of placement. Placement practices can be inconsistent and inaccurate. Research has indicated that a quarter to a third of students assigned to remedial courses could have succeeded (defined as receiving a grade of B or better) in college-level courses without remedial coursework first.[7]

3) First year experiences are critical to students' ability to persist through the first term and continue on the path toward attainment. Acclimation to the college culture and engagement in the college community are key. Students who participate in first-year experience programs demonstrate more positive relationships with faculty, greater knowledge and use of campus resources, more involvement in campus activities, and better time-management skills than their non-participating peers.[8]

4) **Academic momentum** is the ability to continue to move forward through completion of gatekeeper courses or other benchmarks, such as required math, and continue to enroll and attend from term to term. Momentum is also built through stacking of credentials to earn degrees, stacking degrees to further education, and may include transfer to other institutions.

5) **Pathways to completion** can be guided through clear and consistent advising to ensure the most direct route to graduation is taken, avoiding a long and winding route that leads to credits without degrees.

At the institutional level, effective practices to enhance student success and persistence are those that promote high expectations, student support, frequent assessment and feedback, and student engagement and involvement.[9] Many strategies to improve pre-college interventions, postsecondary placement, student support (academic, financial, social), and ease of transfer are currently in place to support the implementation of the Roadmap.

INTRODUCTION

Across the nation, demographic, social, and workplace changes are exerting pressure for increased educational attainment. During the Great Recession of 2007, those who were the least educated took the hardest hits. Recovery from the recession is placing demands on employees for better education credentials and job training across new fields of employment.[10]

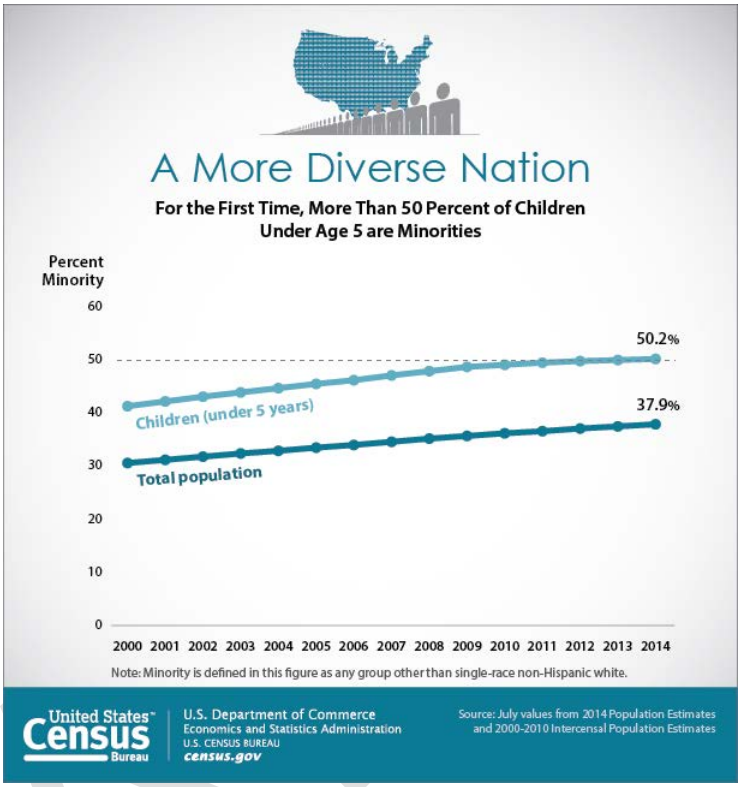
Postsecondary education is facing a new reality, where increasing numbers of students are not recent high school graduates and they are seeking educational programs that are not constrained by time and space.[11] Additionally, we are moving into an era where 70 percent of living-wage jobs require a postsecondary credential or degree. However, the fastest growing segment of the population has been traditionally underserved in postsecondary education: students of color, English language learners, returning adult students, and students with children, jobs, and life experience. According to Complete College America, 75 percent of today's students (mostly adult learners) are juggling some combination of family commitment, job, and education, while commuting to campus.[12]

To help postsecondary education meet these challenges, Washington's policymakers will need to think differently about transitions. Instead of thinking only in terms of how recent high school graduates transition from K-12 to postsecondary education, policymakers need to think in terms of how adults transition from work to postsecondary education.

Limited resources will force policymakers to prioritize efforts in helping postsecondary education institutions meet their challenges. Sound prioritization decisions will be based on knowledge of who the state's potential students are. For example, adults with some college are a very important target group in terms of helping the state meet its attainment goals, and some historically underserved groups, such as Hispanics/Latinos, are growing in size. In fact, the nation is heading rapidly towards a point where people of color will be in the majority. This is already the case for our early learning cohort - birth to 5 years of age.

For the first time in U.S. history, the majority (50.2 percent) of people age 5 and under are people of color. The other 49.8 percent are single-race, non-Hispanic, White.

Populations of color increased in Washington State from 18 percent to 28 percent in the ten-year period from 2000 to 2010. During this period, the Hispanic population increased by 71 percent, Asian population by 49 percent, and those who identify as multiracial increased by 41 percent.[13]



Background

Washington offers a diverse array of public and private postsecondary education institutions. These include five public universities, five public university branch campuses, one state college, and 34 public community and technical colleges. In addition, there are 10 Independent Colleges of Washington, over 50 other private degree-granting institutions physically located in Washington, more than 320 private career schools, and 230 registered apprenticeship programs. Private institutions include both for- and not-for-profit education providers.

All students face barriers to successfully transitioning to postsecondary education and completion of a degree or certificate. However, some groups face additional unique barriers based on their background and/or individual circumstances. These barriers take many forms and often have root causes that predate a student's enrollment in postsecondary education. For example, the opportunity gaps many African American, Latino, Native American, Pacific Islander, and Southeast Asian American students face during their K-12 education may cause them to drop out of high school or require pre-college coursework during postsecondary education. Depending on race or income level, students who graduate high school may be more or less likely to continue on to postsecondary education.

Figure 2 shows postsecondary enrollment patterns for recent high school graduates in Washington. The data demonstrate that Hispanic, low-income, and American Indian or

Alaska Native students are considerably less likely to enroll in college immediately after high school than other students.

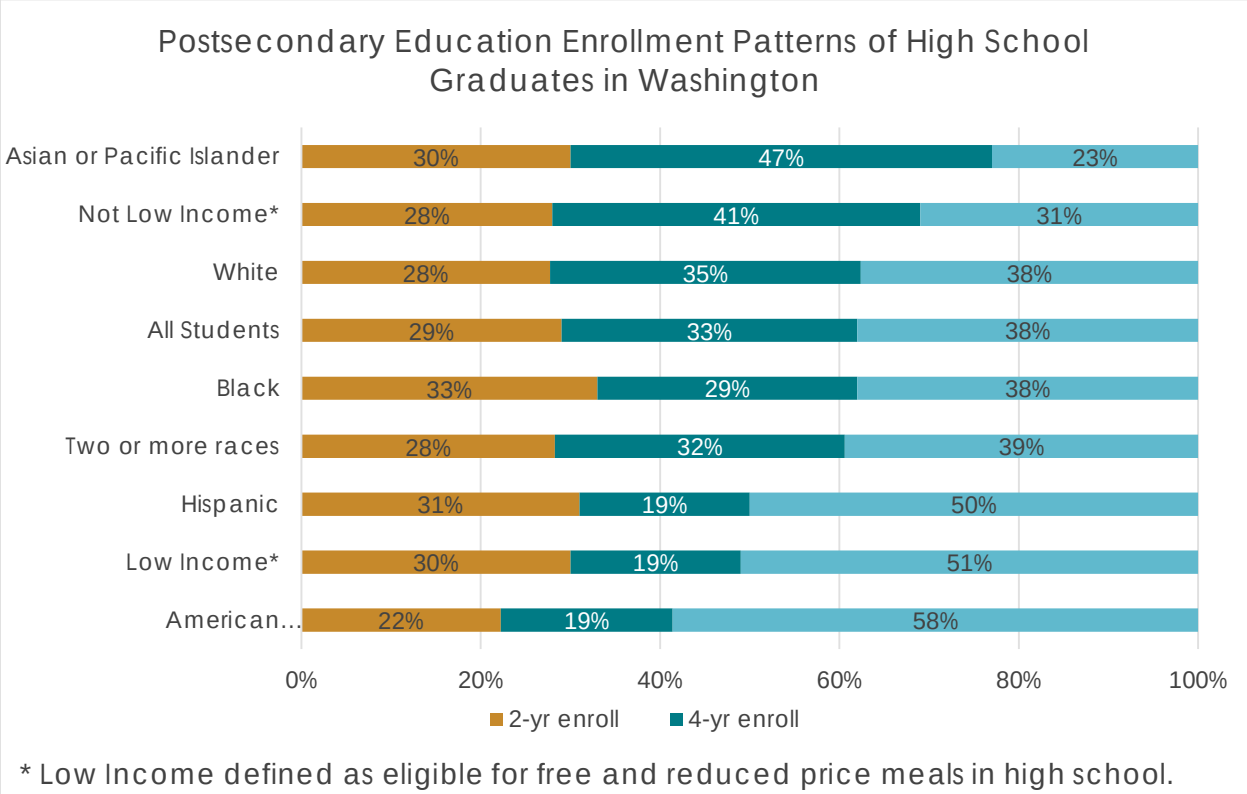


Figure 1: Postsecondary Continuation Source: Education Research and Data Center (http://www.erdcdata.wa.gov/hsfb.aspx). Note: Total includes other race or ethnicity not separately shown.

Though it is helpful in pointing out disparities among groups, Figure 2 does not tell the whole story.[a] For example, although Asian or Pacific Islander students as a group enroll at high rates, the category includes a diverse set of subcategories, such as Southeast Asian students, who face barriers other students do not. To gain a clear picture of the situation, policymakers need data disaggregated into racial and ethnic subcategories, as recommended by the Educational Opportunity Gap Oversight and Accountability Committee.[14]

[a] Another caveat for policy makers to keep in mind when using tables to inform decisions is that the data often are based on "Title IV" institutions, which are only a subset of postsecondary education providers.

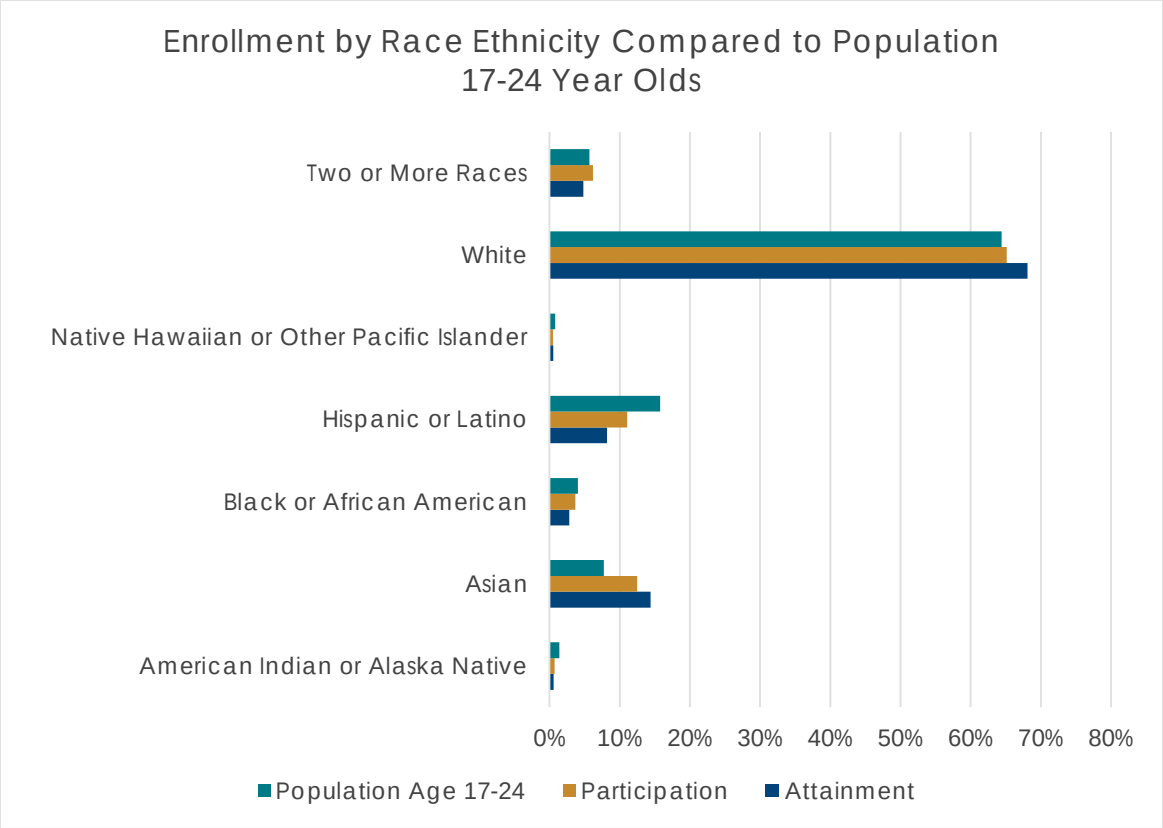


Figure 2: Participation and Attainment

Both younger students (17-24) and older students (25-44) show differences in attainment based on race or ethnicity. As shown in Figure 3, Hispanic or Latino 17-24 year olds make up nearly 16 percent of the population in Washington, yet account for 11 percent of the undergraduate population and just over 8 percent of the population age 17-24 with an associate degree or higher. Asian Washingtonians in that same age group make up less than 8 percent of the population but they account for 12.5 percent of the undergraduate enrollments and more than 14 percent of the population with an associate degree or higher.

In addition to knowing student demographics, it is important to know students' motivations. Figure 4 shows that employment related issues and programs offered are students' main considerations in determining whether and where to go to college respectively. These data reflect the results of an online survey of 1,011 U.S. residents, age 16-40, who were in the first semester of college, or planning to attend college within the coming year.[15]

Figure 3: Reasons to go to college

The study found that once a student decides to go college, many factors are important to select a specific institution. When students were asked to indicate the *single most important* factor, 63 percent said the cost of attending was their biggest concern.[16]

Broad Challenges

Institutions, states, and the federal government have developed policies, programs, and practices to help students address the barriers students face in completing postsecondary education. Because of the diversity of institutions and institutional missions that evolved in a context of limited state and federal control, most of the effort has been at the institutional level. Although institutions offer a variety of programs and policies designed to help diverse students overcome barriers to postsecondary completion, students continue to face barriers of their own.

For example, a 2013 statewide survey of 49 public and private colleges (including community and technical colleges) and universities identified scarce financial resources along with insufficient human resources and staffing as the biggest barriers they face in serving students of color.[17] Other barriers include insufficient faculty and staff diversity.[18] This is important for several reasons, including the importance of mentors and role models for diverse students, the tendency to place diversity initiatives at the periphery of an institution,[19] and the need for professional development on how to support diverse adult students.[20]

Information technology infrastructure can also pose challenges for institutions. For example, disconnects between K-12 and higher education systems mean that high school and beyond plans don't go "beyond" in terms of being easily available for use after high school. Inconsistency in the treatment of high school courses, including dual-credit courses, makes the college planning process more complex. Limitations on coding items for dual purposes may cause confusion and inconsistency. For example, career and technical education courses meet high school graduation requirements, and they may also meet minimum college admission standards. However, these courses are only included on the transcript under one course title, and it may not reflect the dual-purpose nature of the course. Therefore students my need to choose between a course title that would apply more readily to a university vs a course title that would be more clearly articulated with a course of study in a technical college or be recognized by industry. Furthermore, institutions lack the capacity to use Big Data and learning analytics, which hampers efforts to individualize instruction and learning.

From a student perspective, the college experience can be overwhelming. Students must learn to successfully interact with college personnel, college structures and systems, and college policies.[21] Students may also face financial challenges, and challenges interacting with peers and the classroom learning environment. There are a handful of areas in the pre- and post-enrollment postsecondary education experience where students tend to face particular challenges, regardless of demographics:

1) **College readiness** includes pre-college preparation occurs formally (K-12 education) and informally (social capital, community engagement, and so

forth). Students who are ready for college have the combination of skills, knowledge, and habits of mind necessary to fully participate in college-level courses to completion.[22]

2) **Postsecondary placement** determines the level of coursework at which a student begins his or her postsecondary pathway. Standardized exam scores, high school GPAs and high school coursework are common determinants of placement.

3) First year experiences are critical to students' ability to persist through the first semester and continue on the path toward attainment. Acclimation to the college culture and engagement in academics and the college community are key.

4) **Academic momentum** is the ability to continue to move forward through completion of gatekeeper courses or other benchmarks, such as required math, and continue to enroll and attend from term to term. Momentum is also built through stacking of credentials to earn degrees, stacking degrees to further education, and may include transfer to other institutions.

5) **Pathways to completion** can be guided to ensure the most direct route to graduation is taken, avoiding a long and winding route that leads to credits without degrees.

These areas are especially difficult for students who face barriers due to their race/ethnicity, family's familiarity with postsecondary education, income level, age, or other characteristics – particularly for those with little or no understanding of college culture and processes, sometimes referred to as "college knowledge."[23]

College Readiness

Many college students are academically underprepared when they transition to postsecondary education. For example, 54 percent of recent high school graduates enrolling in our community and technical colleges take at least one pre-college course in English or math (See Figure 5).

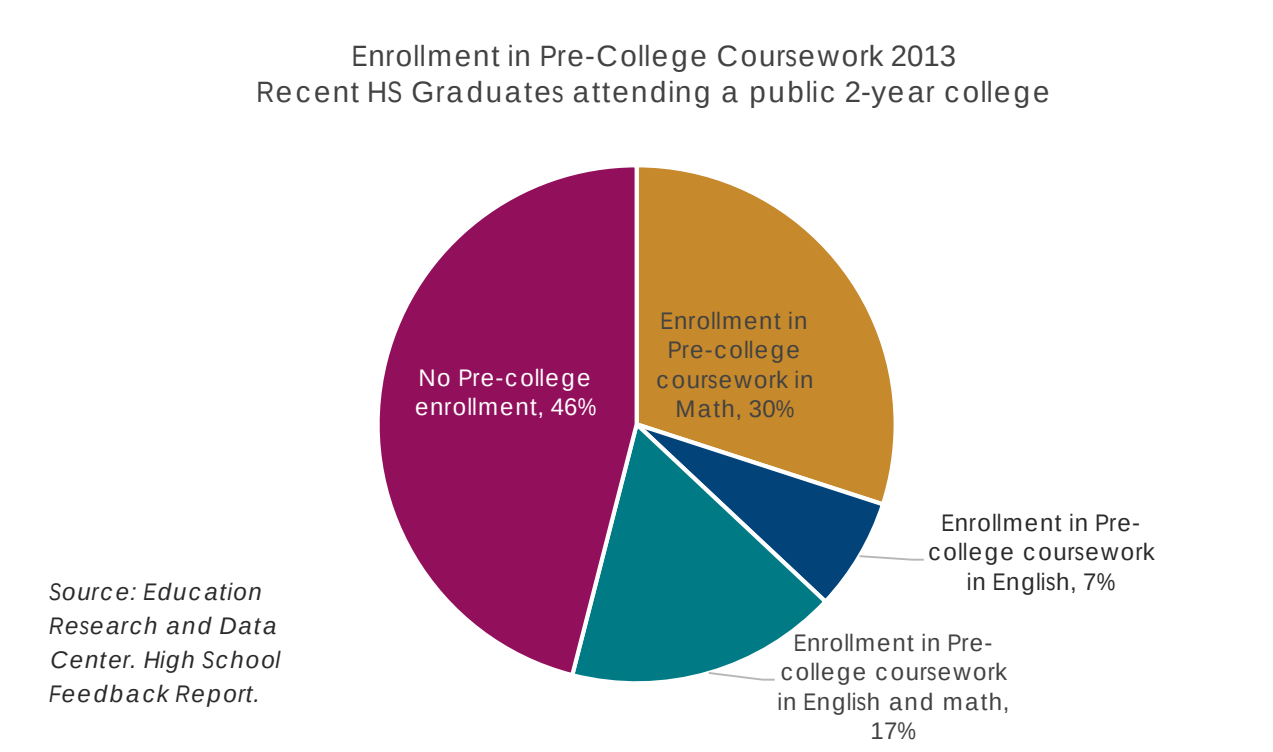


Figure 4: Enrollment in Pre-college Coursework

In addition, many students may be academically prepared, but experience difficulty with other aspects of college life. Success in college requires independence, discipline, and resourcefulness, as well as an awareness of the college-going experience and culture. The transition is often particularly difficult for first-generation college students who may not receive enough guidance to develop the confidence and skills they need to successfully transition to college life.[24]

The sources of many challenges facing students can be found in policies and practices that apply to both traditional and non-traditional students. For example, many students report the FAFSA form is too long, too complex, and requires information that they do not have or information that families are hesitant to reveal. From the White House: "Each year, more than 16 million college students and their families complete the Free Application for Federal Student Aid (FAFSA). They spend hours answering needlessly complicated and intrusive questions that undermine the fundamental goal of student aid: to help more students attend and graduate from college."[25]

Postsecondary Placement

Inaccurate and inconsistent placement practices create a system of chance as to whether or not a student must enroll in, pay for, and complete pre-college coursework. A recent large-scale review of data indicates that a quarter to a third of students assigned to remedial courses based on standardized test scores could have passed college-level courses with a grade of B or better. Previous research indicated that less than 25 percent of students assigned to remediation go on to earn a community college credential or transfer to a four-year college.[26]

First-Year Experiences

Students who participate in first-year experience programs demonstrate more positive relationships with faculty, greater knowledge and use of campus resources, more involvement in campus activities, and better time-management skills than their non-participating peers.[27] Students who feel disconnected from their peers, their faculty, and the college community are less likely to persist. [28] While absenteeism or incomplete coursework may be indicators of lack of engagement, it is also possible for a student to be passively attending and completing work, without being engaged in discussions or building relationships with peers and faculty.[29] Lack of engagement lowers chances of success. Student engagement is the single most significant predictor of persistence.[30]

Academic Momentum

Academic momentum is exemplified though persistence in coursework leading to a credential. A student who successfully passes specific milestones is much more likely to complete a certificate or degree. Examples of these milestones include: earning 12 college credits in high school; entering college right after high school; earning credits in college-level math in the first two years of college; completing the equivalent of full-time enrollment each year; and, being continuously enrolled (excluding summer).[31]

Pathways to Completion

Unclear pathways to completion, including transfer options, increase the time and cost of postsecondary education for both the student and the institution. Providing students with step-by-step academic roadmaps that include transfer options takes the guesswork out of the process, providing students the information needed to make informed choices and avoid courses that won't count toward their chosen degree. Formal transfer pathways, like those established in Washington,[32] encourage students to persist and graduate on time.

Many students do not follow the traditional path of entering and graduating from a single institution. Roughly one-third of students nationwide transfer at least once before earning a degree.[33] In Washington, more than 40 percent of all bachelor's degrees awarded at public colleges and universities are awarded to students who have transferred from a Washington Community or Technical College.[34]

Nationally, about 64 percent of community college students transfer to a baccalaureate institution without first getting an associate's degree. While many transfer students will go on to complete their bachelor's degree, about 26 percent will drop out without a degree.[35] In many cases, these students have either completed more than enough credits to have earned an associate's degree, or are only a few credits short.

Through reverse transfer, these students have the opportunity to gain the associate's degree they have earned. This gives them a valuable credential in the workforce, while also motivating further efforts towards a bachelor's degree.

Specific Challenges

Some challenges are more pronounced for students from particular demographic backgrounds. Demographic groups are not mutually exclusive—many students belong to more than one. For example, a student from a family with low income may also be the first in her family to attend college. Conversely, as discussed above, some barriers, such as financial barriers, impact multiple groups.

1) **First generation or first-in-family.** Students whose parents have not attained a postsecondary credential face particular challenges related to understanding and navigating college processes and college culture.
2) **Socio-economic status.** Poverty is the most significant barrier to college attainment. Conversely, attaining postsecondary credentials leads to higher wages and higher likelihood of breaking generational cycles of poverty.
3) **Ethnicity and race.** Latino, African American, American Indian or Alaskan Native, and some subgroups of Asian students face significant barriers to completion. These include greater likelihood of facing one or more of the following challenges: being first generation or first in family, underprepared, low-income[b], or working too many hours.
4) **English Language Learners (ELL)** are a multi-faceted and complex group of students who have not yet acquired proficiency in English.
5) **Students with disabilities** encounter very different standards of accommodations and modifications in postsecondary institutions than they experienced in the K-12 system.
6) **Former foster youth** usually lose significant support when they age out of care and shoulder adult responsibilities on their own.
7) **Incarcerated students** have restricted access to postsecondary educational resources, including credited courses and online resources.
8) **Returning adults** must prioritize their time and other resources to meet multiple responsibilities including family, dependents, and work.
9) **Service members and veterans** possess skills and knowledge that do not always translate easily to civilian situations and college-level learning.

[b] For purposes of this brief, the term low-income students includes recent high school graduates from low-income families and adult learners with low incomes

First-Generation or First-in-Family

First-generation or first-in-family[c] college students are more likely to lack the skills, knowledge, confidence, aspirations, and preparation that are necessary to succeed in college.[36] They may not know how to apply for college or connect education with a career path.[37] They face challenges related to knowledge of college norms, processes related to financial aid, and support systems to successfully transition to college. They come disproportionately from underserved racial/ethnic groups. They also tend to be older, less likely to receive financial support from parents, more likely to have multiple obligations such as family and work, and more likely to enroll part-time or take multiple breaks in their education to balance these obligations.[38]

Parents may lack financial resources of their own to help these students pay for college; they may also lack information about the process of applying and going to college. This is particularly important for those accessing financial aid, which may cause parents to discourage their children from aspiring to and attending college.[39] One in three students, whose parents' highest level of educational attainment was a high school diploma, drop out of college within the first 18 months; that number rises to almost one in two when the parents have not completed high school.[40]

First-generation students, especially those who are low-income or underrepresented students, face barriers to academic, social, and cultural integration upon transitioning to college. They are more likely to have come from high schools with limited opportunities for advanced placement, international baccalaureate, honors, or other academically rigorous courses.[41] These students report waiting to get involved in extracurricular and campus life during the initial transition to college, until they feel they "have their academic lives under control." While first-generation students derive more benefit from extracurricular activities than their peers, they are less likely to participate.[42] In addition, first generation students are less likely to live on campus and more likely to perceive campus environments and faculty as less supportive than other students.[43] They are also more likely to work more and work off-campus.[44]

Getting information about college is more difficult for first-generation students, which can lead to additional barriers, particularly filling out the FAFSA. First-generation students often have a significant need for financial aid but find the application process confusing and stressful.

Socio-Economic Status

Poverty remains a more important indicator of whether a student will go to college than high school demographics or location.[45] Additionally, researchers have found a clear relationship between family income level and higher education attainment.[46] Of youth

[c] Students whose parents have not attained a postsecondary credential.

from low-income[d] families, only 60 percent graduate high school. One out of three will enroll in college, and only one out of seven will earn a bachelor's degree.[47] In contrast, more than eight out of ten youth from families in the top income quartile will earn a bachelor's degree.[48] To complete postsecondary education, low-income students must overcome multiple financial, academic, and social barriers.

Financial barriers to completion include difficulty paying for academic and non-academic expenses (e.g. living expenses and other costs), being more likely to enroll only part-time in order to save money, and needing to take out loans.[49] For low-income, first-generation students, "unmet financial need— need that remains after applying all financial aid— is a major problem."[50]

Low-income students face similar challenges to first-generation students in terms of academic and social barriers to successful college transition and completion. They have lower levels of academic preparation and are less likely to participate fully in academic experiences that foster postsecondary success. These include studying in groups or interacting with faculty and other students. Additionally, low-income students tend to be older and more likely to have family and work obligations that limit their ability to participate fully in extracurricular activities and support services.[51]

Low-income students may face additional challenges such as homelessness, hunger, and violence, which need to be addressed before their educational goals can be realized.

> *While many students are successfully navigating poverty, fractured family environments, rough neighborhoods, and underperforming public schools, they struggle with a range of academic and personal vulnerabilities — from a lack of proficiency in math and English to family stresses. They often have a strong desire to succeed and extraordinary survival skills. What they are lacking is academic confidence, and understanding of how to bring their interpersonal skills and strengths to bear in academic and professional settings.*[52]

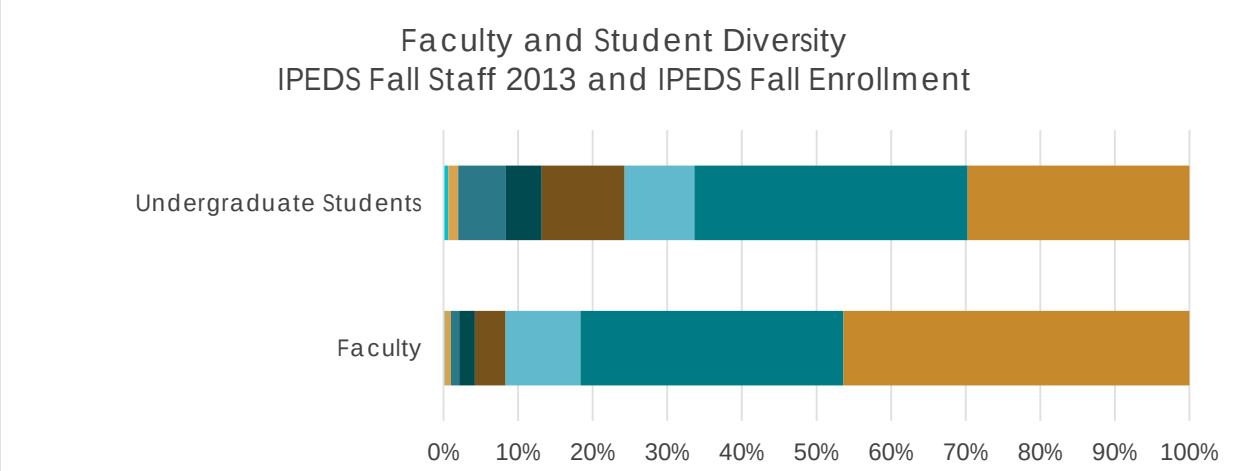
Ethnicity and Race

> *I think people from communities of color really suffer a lot from isolation, from feeling the need to prove themselves. And over time it becomes very difficult to continue to work at a pace like that, and you have to really believe that the benefits outweigh the cost.*[53]

[d] For purposes of this brief, the term low-income students includes recent high school graduates from low-income families and adult learners with low incomes

—Mamie Parker
Former assistant director of fisheries and habitat conservation at the U.S. Fish and Wildlife Service, and first African American to head a regional office for that agency.

Latino, African American, American Indian/Alaskan Native, and some subgroups of Asian students face significant barriers to completion. These students of color are more likely to be first-generation, academically underprepared (needing remediation), low-income, or working.[54] These students are more likely to have difficulty integrating into academic and social communities within a campus climate that may not be welcoming.[55] Research identifies several factors that increase or decrease how welcome students of color feel on college campuses. For example, one factor is racial diversity among teaching faculty. As illustrated in Figure 6, students of color are most often taught by faculty who do not look like them.[56] For example, 11percent of students identify as Hispanic or Latino, while 4percent of the faculty are Hispanic or Latino. On the other hand, 30percent of the undergraduate students are white males, and 46 percent of their instructors are white males.



	Faculty	Undergraduate Students
Native Hawaiian or Other Pacific Islander	0%	1%
American Indian or Alaska Native	1%	1%
Two or More Races	1%	6%
Black or African American	2%	5%
Hispanic or Latino	4%	11%
Asian	10%	9%
White Female	35%	37%
White Male	46%	30%

Figure 5: Student and Faculty Diversity (Source: WSAC Analysis of IPEDS data)

Students of color tend to view campus racial climates differently than white students. For example, researchers have found that students of color were more likely to rate as negative the same campus racial climate white students rated as positive; less likely to feel that the campus racial climate is improving than white students; and less likely to agree with the statement "racial discrimination is no longer a problem" than white students.[57]

Students of color may face underlying discrimination in many forms, ranging from the use of degrading and insensitive stereotypes[58] to racial slurs[59] and hate crimes[60]. At the same time, these students may also be experiencing systemic discrimination including discriminatory treatment, unfair policies and inequitable opportunities.[e] Members of each racial or ethnic group face shared barriers as well as unique barriers.

Hispanics make up the largest and fastest growing[61] of the racial or ethnic groups in Washington, with an increase of 71 percent since 2000. However, they have the lowest rate of educational attainment.[62]. The majority of Latinos are U.S.-born high-school graduates who predominately speak English.[63] A barrier that many Latinos face is reconciling identity conflicts rooted in cultural norms. These conflicts are illustrated by the voice of first-generation Stanford University graduate Nerina Garcia Arcemet. "Culturally you aren't supposed to leave your parents' house until you are married…When someone like me thinks about college, we have to wrestle with our identity…For us, education is not just about what we gain, but also about what we lose."[64]

Asian American students struggle against a fiction that they "are a homogenous racial group with uniformity in educational and financial attainment, culture, religion, and histories."[65] In reality there are many cultural subgroups, most of which are underrepresented in college. In addition, they have to deal with a "model minority" stereotype.[66] This can be particularly harmful when an instructor who holds the stereotype thinks students are just coasting in class. In the words of one student, "One of my professors told me that Asian American students are apathetic and they are here just to study and get their degree and get out."[67] Also, recent Asian American immigrants are accustomed to different educational norms. In the words of another student, "It took me about two years to understand that asking questions to teachers was OK."[68]

[e] Researchers refer to these types of systemic issues as structural and institutional racism. For a detailed definition of these terms, see Lawrence, Keith and Terry Keleher (2004) Structural Racism (Race and Public Policy Conference 2004)
http://www.intergroupresources.com/rc/Definitions%20of%20Racism.pdf

Native Hawaiian or Pacific Islander students[f], like Native American or Alaskan Native Students, are only on college campuses in small numbers. They must work to proactively address barriers in terms of having their voices heard on campus: "Less than one percent of UW students are Pacific Islander, so our goal is to make our voices heard both at the UW [University of Washington] and working with youth outside the UW."[69] In addition, some students walk a tightrope between getting an education and losing their cultural identity. In the words of a Samoan community member in Long Beach "I hear the Samoan elders say that their families are being split apart. Their kids – after they go to college – somehow the Samoan-ness has been educated out of them.

African American students face significant barriers to postsecondary success. Poverty disproportionately affects African Americans.[70] For example, about one quarter of all Pell grant recipients are African Americans. This additional poverty barrier can interfere with a student's social involvement at the institution. For example, a student said "… I feel like that price tag they have on dorms, that deters a lot of students and probably a lot of African American students from living in the dorms. If you don't live in the dorms, you don't feel involved."[71] African American students also experience racism as a significant barrier,[72] reporting "guarded, tense, and threatening" interactions at a higher rate than not only white students but also other students of color.[73]

Native American students make up a relatively small part of the population and an even smaller share of postsecondary enrollments. "The Native American student population is almost invisible in higher education."[74] This can lead students to feel like they do not fit in. Moreover, the federal government's historical legacy of boarding school education to colonize Native Americans may "hold students back due to distrust of the higher educational system."[75] Both of these themes are reflected in the words of a Native American student at Calvin College in New Mexico: "Less than 1 percent of Calvin students are Native American and it is common to feel isolated, like no one understands what I am going through. . . . Another frustration I experience is living in two worlds—though never quite fitting in either. When I go back home, I have to justify going to two schools that are affiliated with an institution that viciously oppressed my elders."[76]

Other Specific Challenges

English language learner (ELL) students represent one in nine of the 49.5 million students enrolled in U.S. public schools – a number that has risen dramatically, from 3.5 million during the 1998-99 school year to 5.3 million a decade later. ELL students who worked while in high school were more likely to go to college after graduation. It may be that jobs offer opportunities to strengthen English language development as well as accrue earnings for family and college expenses.

[f] Outside of Hawaii.

Washington has a high degree of linguistic diversity. In fact, Tukwila School district is the most diverse school district in the nation[77], with more than 80 world languages spoken by students.[78] As of May 2014, Washington's public schools enrolled 102,339 K-12 students in the transitional bilingual instruction program, representing 9.7 percent of overall enrollment.[79]

Students with disabilities face some unique challenges that may prevent them from successfully transitioning to postsecondary education.[80] Some students have disabilities that limit their soft skills such as time management, communication, self-advocacy, and study skills. These students may have additional difficulty navigating the postsecondary system.

Additionally, the federal disability laws that apply to K-12 education and postsecondary education are different. The type and level of accommodations and modifications students received in K-12 may not be available in college. Postsecondary enrollment by students who self-identify as having a disability is low (4.6 percent)[81] when compared with the percentage of K-12 students with disabilities (15.6 percent)[82g], and the percentage of working age adults with disabilities (16.6 percent)[83].

Adult students with disabilities, including military service members and veterans with disabilities, may face additional transition issues specific to their circumstances. This is particularly significant if the disability is recent, and they are managing both the transition to their new physical status as well as the transition to the college environment. In addition to any physical and sensory impairments, it is estimated that as many as 25 percent of the veterans enrolled in postsecondary education have so-called "hidden" disabilities, such as traumatic brain injury (TBI), posttraumatic stress disorder (PTSD), and depression.[84]

Former foster youth transitioning to life on their own frequently face challenges succeeding in postsecondary institutions. There are currently 10,068 children in foster care in Washington State.[85] Currently in Washington, only 18 percent attend college within one year after leaving state care; 42 percent of non-foster students from the same cohort enrolled in college.[86h] And, only 2.7 percent complete a bachelor's degree by the age of 25.[87] Sixty-five percent of foster youth experience seven or more school changes between elementary and high school.[88] This academic instability hinders student academic preparedness for a postsecondary education.

Incarcerated and previously incarcerated juveniles receive basic K-12 education services. The goal is to provide incarcerated youth the opportunity to meet the same challenging academic content and achievement standards that all children in the state are expected to meet. The Office of the Superintendent of Public Instruction (OSPI) offers specific guidance to and oversees the four Educational Service Districts

[g] 13.2 percent special education and 2.4 percent section 504.
[h] Percentage includes graduates and non-graduates in the same cohort.

and 35+ school districts that provide these services. Services are provided inside state-operated juvenile institutions and group homes, county-operated juvenile detention centers and group homes, adult jails and state correctional facilities, and community schools.

In addition, approximately one third of youth in [U.S.] juvenile facilities have identified special education needs – more than double the rate in the general population.[89]

Washington State law also allows some juveniles to be incarcerated in adult facilities. This complicates the delivery of educational services, and reduces the schools ability to prepare students for college-level work.

Incarcerated adults in state prisons are offered postsecondary instruction through a contract between the Department of Corrections and the State Board for Community and Technical Colleges. In 2012-13, eight college districts offered contracted instruction for the Washington Department of Corrections at 12 correctional facilities. Students enroll in courses to increase literacy and gain occupational skills.[90] Although state funds cannot be used for postsecondary education beyond basic education and short-term vocational programs—and incarcerated adults are not eligible for Pell grants—a few opportunities to pursue a degree do exist. These programs receive financial and staff support from philanthropic and volunteer organizations.

According to the State Board for Community and Technical Colleges, "Most of the men and women entering correctional facilities lack the literacy and employment skills needed to succeed in our communities upon release."[91] Attorney General Eric Holder and Secretary of Education Arne Duncan shared research findings showing that inmates who participated in correctional education programs were 43 percent less likely to return to prison than inmates who did not.[92] According to SBCTC's research and analysis, correctional education programs benefit all citizens of Washington State.[93]

Returning Adult Students

Adult learners comprise an increasing proportion of the total enrollment in today's colleges and universities, and yet they continue to be the least understood, the most difficult to recruit, and the least likely to persist. Adding to the challenge of ensuring that adults have up-to-date and accurate information about postsecondary options and support, many adults obtain information about colleges from family, friends, community groups, and colleagues rather than from more official sources.[94]

Returning adult students, with some college but no degree, are a diverse and complex population, and there is a significant lack of data on demographics and educational characteristics for this group.[95] Because they come from a wide range of life circumstances, they face a variety of barriers to postsecondary credential completion.

The primary challenge faced by returning adults in postsecondary education is the wide range of responsibilities these students often juggle: families, dependents, and often part- or full-time work.[96] Research on the topic consistently identifies four major barriers to education for working adults: 1) lack of time; 2) family responsibilities,

including a need for childcare; 3) scheduling and location of courses (often transportation-related); and 4) cost of education.[97]

For adult students, both being employed or being unemployed while in school can pose issues. Unemployment while in school limits resources, but employment limits time. Employment can also put people in the position of earning too much to be eligible for federal aid but not enough to pay for college, given their other financial obligations.

Students of particular interest to policymakers in Washington are the nearly 700,000[98] state residents who have some college credit, but no degree. To meet the state attainment goals, it is imperative that institutions reengage and support these former students.[99]

However, working adults often want to participate differently. For example, they do not spend much time on campus, nor do they have much patience for multiple levels of developmental courses or courses that cover material they already know. They want acceleration because they have less time.

In addition, there are some distinct subgroups, such as veterans, adults with disabilities, or adults with some college credit, whose members face barriers that other adults do not. Research shows that a valuable approach to serving adult students is to identify these subgroups and work to address their specific needs.[100]

Adult students pose unique measurement challenges for policymakers. For example, time to postsecondary credential completion, a popular progress measure, may not adequately capture progress for students who cycle in-out of courses and programs over time or attend part-time.

Active Duty and Veteran Service Members

It is estimated that 5 million U.S. veterans will transition from military life to civilian life by the year 2020. Currently, 603,623 veterans reside in Washington State.[101] Transitioning veterans must balance searching for jobs, researching education and training opportunities, and meeting family responsibilities. Additionally, some veterans may also be managing emotional challenges or physical disabilities.[102]

Veteran students are often older (average age of 33), and more likely to be first-in-family college attendees than their college classmates. For example, 62 percent of veterans are first-in-family college students to 43 percent for non-veteran students. Veteran students arrive on campus with many skills, but are less likely to earn a college degree, and are more likely to be unemployed than their non-veteran peers.[103] Awarding college credits for skills learned in the military may shorten time to college completion. This, in turn, may lead to improved employment prospects.[104] One barrier to awarding credit for prior learning is the 25 percent limit set by the Northwest Commission for Colleges and Universities: no more than 25 percent of the credits for a certificate or degree can be from credit for prior experiential learning.[105]

Some veterans rely on their education benefits as their only source of income while searching for employment. In the short term, their benefits assist with living expenses, but in the long term, this path may not lead to achievement of their academic and career goals.

Current Strategies in Washington

Educators and policy leaders in Washington State are working collaboratively across sectors to implement strategies that we know support students who face barriers to college transition and completion. The goal is to make postsecondary education transitions and completion a logical next step for students—not a giant leap. These strategies are aligned with three primary objectives of the attainment goals, which are to:

- **Ensure access**. Ensuring cost is not a barrier and making college affordable; ensuring high school graduates are career and college ready; streamlining and expanding dual-credit opportunities; and, increasing support for all students.
- **Enhance learning**. Aligning education with employment; providing work-based learning; encouraging adults to earn postsecondary credentials; and, leveraging technology to improve student outcomes.
- **Prepare for future challenges**. Responding to student, employer and community needs; increasing awareness of postsecondary opportunities; and helping students and families save for postsecondary education.

At the institutional level, effective institutional practices create institutional settings that promote high expectations, support, frequent assessment and feedback, and student involvement.[106] Many strategies are in place to support the implementation of the Roadmap, and can be broadly categorized as:

- **Pre-college interventions.** Interventions and/or support programs designed to help students prior to postsecondary enrollment. These may include various outreach efforts, communication, and targeted support as well as academic interventions like transition courses, and other programs to foster college readiness.
- **Postsecondary placement.** Policies and practices that are designed to ensure students are able to reduce or minimize time spent in pre-college coursework.
- **Student support (academic, financial, social).** Support programs designed to help students successfully transition to postsecondary education and complete a degree or certificate. Examples may include first-year transition programs, student aid programs, academic supports, or affinity groups.
- **Transfer improvements.** Programs and policies designed to ensure students are able to receive credit for prior coursework and prior learning. This includes policies like the direct transfer agreement and local articulation agreements.

A sampling of the statewide, system-wide, and institution-level strategies, which specifically support the implementation of the Roadmap and achievement of the two statewide educational attainment goals, is included in Appendix A.

Next Steps

Over the next decade, more Washingtonians will need postsecondary credentials to meet the needs of employers and to meet their own financial needs. The statewide attainment goal of at least 70 percent of adults having a postsecondary credential is based on this fact. In order to reach this goal, all Washingtonians who do not hold a credential must be viewed as potential students. Students need to be well prepared to enter postsecondary apprenticeships, certificate and degree programs; and educational institutions need to be prepared to serve more students with a wider range of diverse skills and needs.

A particular focus must be on students who are first-in-family to attend college, low-income, or people of color. A new push must begin to reach out and engage adult learners, particularly those who have some college credit but no credential, and including the many service members and veterans in Washington.

Rising expectations and standards, along with evolving instructional and assessment strategies in the K-12 system, will help more students to reach the career and college-readiness benchmarks needed to be successful in postsecondary education. Expansion of dual-credit programs in high schools will ensure that more students have college-level experience. Outreach programs will increase the chances that students have the information they need, while continued funding of State Need Grant along with other financial aid programs will give students the resources they need to transition to career training and college.

The Washington State Roadmap for Educational Attainment provides the goals and the strategic vision of the journey ahead. The Strategic Action Plan identifies the key investments needed each biennium to ensure that all Washingtonians have postsecondary educational opportunities necessary to reach the educational attainment goals.

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Appendix A: Asset Map

Statewide or System-Wide Practices

Ensure Access

STATEWIDE OR SYSTEM-WIDE PRACTICES TO ENSURE ACCESS	
Strategy or policy	**Description**
Common Core State Standards and Smarter Balanced Assessments	Fully implementing the new Washington State Learning Standards, including the Common Core State Standards for English language arts and mathematics, is a big step toward increasing college readiness for all students. Assessing student learning at grades 3 through 8, and again in high school ensures that students, families and schools have opportunities for early intervention and individualized educational planning.
High School and Beyond Plans	Requiring each student to create a High School and Beyond Plan provides an opportunity for continual planning and redirection to ensure that students meet the college readiness standard at graduation. Creating 12th grade transitions courses (Bridge to College Mathematics and ELA) gives a boost to students who are not quite on track for college at 11th grade. Additionally, most Washington institutions of higher education have agreed to accept scores of 3 or higher on the SB high school exam as evidence of college readiness, exempting students from remedial coursework.
Support underrepresented students	To improve transitions from high school to postsecondary education for students with disabilities, the Washington Disability Task Force is a legislative task force created in 2013 to provide recommendations on the following goals: 1) improve the transition process from K-12 to higher education for students with disabilities, 2) select a statewide method for sharing best practices between K-12 and higher education, 3) review documentation standards at postsecondary education institutions, and 4) create a plan to improve outreach to students with disabilities.

STATEWIDE OR SYSTEM-WIDE PRACTICES TO ENSURE ACCESS	
Strategy or policy	**Description**
College Bound Scholarship	The College Bound Scholarship is available to 7th and 8th grade students whose family income meets certain guidelines and covers average tuition, some fees, and a small book allowance. In order to receive the scholarship, students must graduate high school with a 2.0 GPA or higher, not have been convicted of a felony, and enroll in an eligible postsecondary school in Washington.
GEAR UP	GEAR UP is a federal (U.S. DOE) grant program that provides six- and seven-year grants to states and partnerships to provide services at high-poverty middle and high schools. This federal program is designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education.
Transitions from military service to college and careers	The Washington State Military Transition Council (WSMTC) was created to support successful transitions into civilian employment, postsecondary education, and career opportunities. The formation of WSMTC formalized the relationship between western Washington's largest military base, Joint Base Lewis McChord (JBLM) and Washington State. WSMTC is the first of its kind in the United States. With the goal of reducing veteran unemployment at its core, four pathways exist that include transition to higher education.
Bridge to College courses	The Bridge to College courses for English Language Arts (ELA) and mathematics are fourth-year (senior) courses designed for students scoring a Level 2 on the 11th grade Smarter Balanced assessment. Students who earn a "B" or better in the Bridge Course are eligible to enter credit-bearing college coursework. The courses are grounded in essential career and college readiness expectations as reflected by the Washington State K–12 Learning Standards for English Language Arts and Mathematics (the Common Core State Standards) to ensure that students passing the course are fully prepared for college-level coursework. The courses were developed by higher education faculty, high school teachers, and curriculum specialists from multiple colleges and school districts.

STATEWIDE OR SYSTEM-WIDE PRACTICES TO ENSURE ACCESS	
Strategy or policy	**Description**
Extended Foster Care	The Extended Foster Care program allows foster youth to voluntarily agree to continue receiving foster care services while completing a secondary or postsecondary academic or vocational program.
Worker Retraining	Worker Retraining is a state-funded program that provides funding for eligible dislocated and unemployed workers to enter approved training programs and receive related support services including financial aid, career advising, educational planning, referral to training resources, job referral, and job development.
Basic Food Employment and Training (BFET)	Basic Food Employment and Training (BFET) is Washington State's SNAP E&T program that gives Basic Food Assistance recipients opportunities to gain skills, training or experience that will improve their employment prospects and reduce their reliance on Basic Food benefits. Eligible students may receive tuition assistance or other support services.
WorkFirst	WorkFirst is Washington's welfare reform program. Some TANF recipients may be referred to Washington's community and technical colleges in order to enter into workforce education or basic skills programs. Supports include tuition assistance/financial aid, work-based learning/WorkFirst work study, basic skills, and job skills training.

Enhance Learning

STATEWIDE OR SYSTEM-WIDE PRACTICES TO ENHANCE LEARNING	
Strategy or policy	Description
Common technology, shared across system.	A shared set of web-based learning technology tools, including a learning management system, a webinar/meeting tool and a video lecture capture tool, offers students consistent, familiar and efficient ways to access learning content, assessments and allied services.
Performance-based funding.	The SBCTC Student Achievement Initiative is a performance-based funding model implemented by the community and technical colleges. Financial rewards are provided to colleges based on achievement measures including first year retention, second year retention, completion of college-level math, and degree completions.
Prior Learning Assessment	Prior learning is the knowledge and skills gained through work and life experience; through military training and experience; and through formal and informal education and training from in-state and out-of-state institutions including foreign institutions. It is estimated that 65 percent of postsecondary learning occurs outside of the traditional academic environment through on-the job training, military training, apprenticeships and a variety of other programs. Providing students with opportunities to earn credit for the skills and knowledge they bring to the classroom not only encourages them to enroll and pursue their degree, but it shortens their time to degree completion. In 2013-14, nearly 20,000 students were awarded credit for prior learning, and 306,308 prior learning credits (equivalent to more than 6,806 annul FTE) were accepted by Washington State colleges and universities.
Competency-based Education	Competency-based education (CBE) programs allow students to bring their knowledge and skills to the programs and advance more quickly through courses in which they have already developed competencies.

STATEWIDE OR SYSTEM-WIDE PRACTICES TO ENHANCE LEARNING	
Strategy or policy	Description
Open Education Resources (OER)	Online, openly-licensed materials and curricula, can dramatically reduce costs to students, which supports their ability to stay in school. OER also support the needs of both students and faculty by allowing for more frequent updating of content and access to a broader and more diverse set of resources. The SBCTC has created an Open Course Library, including openly-licensed, free-for-use-by-anyone curricula and low (less than $30) or no cost textbooks for 81 high enrollment, gatekeeper and pre-college courses. The courses and materials are designed for face-to-face, hybrid and/or online delivery.
Accelerated outcomes-based contextualized applied learning model	The accelerated outcomes-based contextualized applied learning model was adopted by SBCTC in May 2012. The model allows pre-college students (adult basic skills students and developmental education students) to advance through their coursework without content repetition. Credits are awarded based upon achievement of learning outcomes and all content is contextualized and applied to students' career goals. Students receive targeted and ongoing advising.

Prepare for Future Challenges

STATEWIDE OR SYSTEM-WIDE PRACTICES TO PREPARE FOR FUTURE CHALLENGES	
Strategy or Policy	**Description**
12th Grade Campaign	The 12th Year Campaign, a combination of two national programs (College Goal Washington and the College Application Campaign), aims to boost college and financial aid application rates in Washington.

Institutional Practices

Pre-College Intervention

INSTITUTIONAL PRACTICES FOR PRE-COLLEGE INTERVENTION		
Target population	**Program/Policy**	**Institutions**
General	Pre-apprenticeship programs support individuals in gaining the skills needed to become successful competitors for apprenticeship programs, which may include pre-college level course work.	Community and technical colleges, community based organizations, labor organizations
General	Whitman offers an all-expenses paid program that gives 7th and 8th grade students to visit campus and attend college prep workshops and classes taught by Whitman professors. The program includes a workshop for parents that provides information about financial aid, academic choices at the high school level, etc.	Whitman College
General	Program that brings local Tacoma youth to campus	University of Puget Sound
General	Tutoring program with elementary and middle school students	Gonzaga University
Dislocated workers	Rapid Response is an outreach to help dislocated workers return to postsecondary education. Rapid Response activities assist employers and workers following permanent closures, mass layoffs, or disasters resulting in mass job dislocation. It is required by federal law. Community and technical college representatives are key members of local rapid response teams, providing information and guidance to dislocated workers seeking postsecondary education/training.	Community and technical colleges
First-generation	Summer bridge programs before orientation	

INSTITUTIONAL PRACTICES FOR PRE-COLLEGE INTERVENTION		
Target population	**Program/Policy**	**Institutions**
Incarcerated students	There exist numerous partnerships between community colleges and prisons. Prisons offer adult basic education programs, GED preparation programs, and various workforce programs depending on institution.	SBCTC – see full list of partnerships as of March 2015.
Incarcerated youth	Gateways for Incarcerated Youth provides incarcerated youth with postsecondary education/coursework for credit, at no cost to students. Faculty members lead seminars at juvenile correctional facilities. Evergreen students and volunteers serve as peer mentors.	The Evergreen State College; OSPI; Green Hill Academic School.
Low-income	The Seattle University Youth Initiative aims to "break the cycle of poverty" by strengthening academic support for neighborhood youth and their families, while also providing opportunities such as summer learning, preschool education, leadership development, and more.	Seattle University
Returning adults (dislocated or unemployed workers)	Community and technical colleges actively partner with and participate in workshops and information sessions at local One-Stop centers (WorkSource) in order to provide information and guidance to dislocated workers and other unemployed individuals seeking postsecondary education/training.	Community and technical colleges

INSTITUTIONAL PRACTICES FOR PRE-COLLEGE INTERVENTION		
Target population	**Program/Policy**	**Institutions**
Returning adults	StartNextQuarter.org is a web-based recruitment tool used by the community and technical colleges to make it easier for potential students to take the first step in getting started in workforce education programs. Through a short, anonymous survey, potential students can determine if they might be eligible for financial aid through Worker Retraining, BFET, WorkFirst and/or Opportunity Grant programs. The potential student then has the option to sign up for an orientation or in-person meeting on the campus of their choice. Automated emails are sent to the potential student with pertinent information, and their contact info is provided to colleges for follow-up if necessary.	Community and technical colleges
Students with disabilities	DO-IT Scholars gives students with disabilities the opportunity to spend two consecutive summers on the UW campus to experience college life and work on self-advocacy skills. Students and mentors are connected year-round both virtually and in-person.	University of Washington
Students with disabilities	Community IMAGES is a program to assist with the transition from high school to community college and the adult world for students with disabilities.	Spokane Public High Schools and Spokane Community College

Postsecondary Placement

INSTITUTIONAL PRACTICES FOR POSTSECONDARY PLACEMENT		
Target population	**Program/Policy**	**Institutions**
General	The K-12 and higher education sectors collaborated to implement an agreement to use 11th grade Smarter Balanced assessment scores to exempt entering college students from placement into remedial coursework. All public institutions and many of the private colleges agree that a student who scores at least a 3 on the Smarter Balanced assessment will not need to take a placement exam to enroll directly into entry-level college courses.	All community and technical colleges; all public baccalaureate institutions; most private 4-year institutions in WA
General	Placement reciprocity agreements amongst community and technical colleges. A student who qualifies for a specific level of pre-college or college-level math, English, or reading, either through course completion or local skills assessment, will have that course placement level honored at another Washington CTC if the student so requests, even if the courses may not be exact equivalents.	Community and technical college system.
General	Several colleges have policies to place students into college-level math and English courses based on the grades they earned in their high school courses as an alternative to placement exams.	Various community and technical colleges, including Green River, Tacoma, Everett, Olympic, and Highline Community Colleges
General	Dividing precollege curriculum into a series of modules, often combined with an emporium lab model, so students don't have complete sections or portions they already know	8 community and technical colleges

INSTITUTIONAL PRACTICES FOR POSTSECONDARY PLACEMENT		
Target population	**Program/Policy**	**Institutions**
General	Several colleges offer workshops to help students prepare for placement testing.	Edmonds Community College, Olympic College, Lake Washington Institute of Technology

Student Support

INSTITUTIONAL PRACTICES FOR STUDENT SUPPORT		
Target population	**Program/Policy**	**Institutions**
General	Integrated Basic Education and Skills Training Program (I-BEST) allows students to learn basic skills in reading, math, writing, or English and professional/technical academic content simultaneously, thus streamlining the time it takes to earn a credential and enter the workforce.	Community and technical colleges
General	Universal Design for Learning is a framework for guiding educational practice that is designed to be accessible and useful for as many students as possible, including those with disabilities. UDL provides flexibility in the way information is presented and in the way students are allowed to demonstrate learning and access learning environments.	SBCTC and all community and technical colleges, University of Washington

INSTITUTIONAL PRACTICES FOR STUDENT SUPPORT		
Target population	**Program/Policy**	**Institutions**
General	Competency-based education is self-paced, real-world focused, and particularly attractive to adult learners. One example of competency-based education is the FlexIT PACE program at Central Washington University; FlexIT is a bachelor of science degree program that can conform to each student's schedule and needs. Faculty mentors are available to provide one-on-one guidance. Other competency-based programs are offered by Western Governors University and the SBCTC. Led by Columbia Basin College and SBCTC, a consortium of colleges are sharing an online, competency-based business transfer degree program. Additionally, Bellevue College, Edmonds Community College, and the Community Colleges of Spokane are offering CBE certificates in areas of business and technology. Community Colleges of Spokane and Everett Community College are offering highly scalable, self-paced, mentor supported courses in core business disciplines.	CWU, WGU, CC Spokane, Edmonds CC, Everett CC, Tacoma CC, Columbia Basin College, Centralia College, Olympic College, Bellevue College
General	Early warning system	University of Puget Sound and others
General	Students at the Evergreen State College enroll in learning communities, 16-, 12-, or 8-credit programs of study that integrate multiple subjects. Programs often last two or three quarters, so the same cohort of about 25 students stays together, promoting collaborative, integrative learning.	The Evergreen State College
General	Bellevue and Olympic Colleges are working to improve first-year student success through a cohort-based model aligned with the Academy for College Excellence (ACE) model.	Bellevue College; Olympic College

INSTITUTIONAL PRACTICES FOR STUDENT SUPPORT		
Target population	**Program/Policy**	**Institutions**
General (with emphasis on adult and nontradi-tional)	Career schools closely monitor class attendance patterns and follow up promptly if students are missing classes. The follow up comes from multiple directions, for example: instructor, student services, Facebook (to get a high rate of student response), and manager of instruction.	All career schools
General (with emphasis on adult and nontradi-tional)	Career schools provide mental health counselors	Various career schools, such as Perry Technical Institute and Everest College
General (with emphasis on adult and nontrade-tional)	Re-entry programs. If a student withdraws, the institution stays in touch. For example, some institutions allow students to continue free use of on-site counselors.	Various career schools, such as Perry Technical Institute and Everest College
General (with emphasis on adult and nontradi-tional)	Parallel vocational and basic education courses. Students take basic education and vocational courses concurrently and apply what they learn in the basic education course to the vocational course.	Various career schools, such as Perry Technical Institute and Everest College
Foster youth	The Seattle University Fostering Scholars program is a scholarship awarded to select foster youth. The scholarship covers full tuition, books, waived enrollment fees, year-round on-campus housing and meal plan, student insurance; support services include ongoing check-ins with staff, supplemental academic advising, quarterly cohort socials, learning assistance workshops, and more. Since 2006, scholarships have been awarded to 23 graduates as of June 2014.	Seattle University

INSTITUTIONAL PRACTICES FOR STUDENT SUPPORT		
Target population	**Program/Policy**	**Institutions**
Foster youth	Passport to College Promise Scholarship program is designed to help foster youth attend and succeed in college. Students receive a scholarship, specialized support services from college staff, and priority consideration for the state need grant and state work study.	Washington Student Achievement Council; College Success Foundation; participating institutions.
Math	The math emporium model offers instruction in in a lab setting with students working on modules at their own pace (with faculty support). Mandatory attendance (e.g., a minimum of 3 hours weekly in the lab) ensures that students spend sufficient time on task and receive on-demand assistance, mandatory weekly group meetings enable instructors to follow up where testing has identified weaknesses or emphasize particular applications. Group activities help build community among students and with instructors.	14 community and technical colleges (example: Big Bend)
Math	Differentiated pathways, defining the specific math skills necessary for various academic pathways and tailoring course placement and interventions to these requirements	various models at 17 different community and technical colleges
Math	Accelerated models, allowing students to complete multiple precollege levels in a single term, or that allow students to enroll in college-level courses while receiving additional academic support to address skill deficiencies	11 community and technical colleges (example: Cascadia)
Returning adults	Degree completion. Engaging students with some credit but no credential to return to college for completion.	

INSTITUTIONAL PRACTICES FOR STUDENT SUPPORT		
Target population	**Program/Policy**	**Institutions**
Students with disabilities	SAILS is a program at Seattle Central College designed to provide customized support to students with autism and help them succeed. First-year students take a "College 101" course that allows them become more familiarized with campus and surrounding neighborhoods, explore their interests, develop organizational skills, identify personal learning strategies, and learn about technical tools available to assist college students on the autism spectrum. Bellevue College offers a similar program called Navigators, also designed for students with Asperger's or Autism Spectrum Disorders.	Seattle Central College; Bellevue College
Underrep-resented students	The All Nations Louis Stokes Alliance for Minority Participation (ANLSAMP) is designed to increase the number of American Indians and other underrepresented minorities receiving a baccalaureate degree in STEM disciplines. ANLSAMP provides stipends, conference travel assistance, and research opportunities to AMP scholars.	Heritage University, Northwest Indian College, The Evergreen State College, Western Washington University

Transfer Improvements

INSTITUTIONAL PRACTICES FOR TRANSFER IMPROVEMENTS		
Target population	**Program/Policy**	**Institutions**
General	A new Associate in Computer Science DTA/MRP is being developed which will provide a clear pathway for students interested in computer science fields of study. Two and four-year colleges will continue to refine degree requirements, particularly those involving programing courses and admission requirements into computer science programs.	SBCTC, Council of Presidents, WSAC, Independent Colleges of Washington
General	A new Associate in Fine Arts DTA/MRP in Music is being developed which will provide a clear pathway for students who transfer to four-year baccalaureate institutions' music programs with the goal of reducing the overall credits to completion as well as incorporate performance standards into the pathway.	WSAC, SBCTC, Council of Presidents, ICW
General	A new Associate in Arts Nursing DTA/MRP was approved and implemented, which allows for a three year program at a community or technical college that prepares students for licensure with a pathway designed for transfer to a post-licensure, one-year BSN degree program.	Council of Presidents, SBCTC, WSAC, ICW
General	Common course numbering makes course transfer easy between and among Washington's 34 community and technical colleges. Common courses are those courses delivered by a number of community and technical colleges that have official college catalog descriptions similar enough to be accepted as equivalent at a receiving college for transfer purposes.	SBCTC

INSTITUTIONAL PRACTICES FOR TRANSFER IMPROVEMENTS		
Target population	**Program/Policy**	**Institutions**
General	The State Board for Community and Technical Colleges offers baccalaureate degrees through university partnerships at 21 community and technical colleges. This allows students to earn a baccalaureate degree from a private or public four-year institution while remaining at the community or technical college campus.	SBCTC, Washington public baccalaureate colleges and universities independent colleges, private for-profit institutions
General	Registered Apprenticeship College Consortium (RACC) is a national network of colleges and registered apprenticeship programs working together to provide college-to-career opportunities by agreeing to consider the articulation of apprenticeship training to college credits.	Community and technical colleges that have been approved for RACC
General	Heritage is developing a program for students to transition into engineering at a branch campus.	Heritage University

Appendix B: Glossary

Attainment. Achieving established milestones toward an industry-recognized apprenticeship, certificate or degree. Generally applied to a population (e.g. attainment level of 25-44 year olds in Washington).

Big Data. Refers to massive amounts of data that are difficult to analyze and handle using common database management tools.

College readiness. College readiness is a two-sided concept. In order to successfully transition students to college, both of the following must take place: 1) students must be ready for college; and, 2) colleges must be ready for students.

Completion. Earning a postsecondary credential: industry-recognized apprenticeship, certificate or degree. Generally applied to individual or cohort. (e.g. completions in 2013)

First Generation or First-in-Family. Students whose parents have not attained a postsecondary credential.

Learning analytics. The measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs.

Opportunity gap. Disparity in access to the resources needed for all students to be academically successful.[107]

Postsecondary education. The term postsecondary education includes structured education or training after high school, including apprenticeship, college or university, and any career training that leads to an industry-recognized credential.

Postsecondary completion. Earning a postsecondary credential.

Postsecondary credential. A degree, certificate, or evidence of apprenticeship completion.

Postsecondary institution. A provider of postsecondary education.

Successful transition to college. A transition to college involves many stages, including applying for college, paying for college, acclimating to college and completing college-level coursework. A student is considered to have made a successful transition to college when he or she enrolls in college and earns credits in college-level coursework which apply to a certificate or degree.

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