

# Washington State

## STEM Education Innovation Alliance

### 2023 STEM Education Report Card

**S**cience

**T**echnology

**E**ngineering

**M**ath

#### **In This Report:**

2022 Year in Review

Washington's STEM Challenge

2022 Legislative Session Highlights



# 2022 STEM Year in Review – A Snapshot

## Washington remains one of the leading states in the country for STEM employment.

- #1** In the ECONOMIC IMPACT OF TECHNOLOGY AS A PERCENT OF THE STATE ECONOMY.<sup>1</sup> Washington has the highest concentration (9.4%) of technology workers relative to its overall employment base.  
  
In INTENSITY OF THE TECHNOLOGY AND SCIENCE WORKFORCE.<sup>2</sup> Washington has the highest share of workers in computer and information technology, engineering, and life & physical sciences occupations as a percentage of total state employment.
- #4** In TECHNOLOGY CONCENTRATION AND DYNAMISM, a measure of tech industry growth.<sup>3</sup>
- #6** On the Milken Institute’s STATE TECHNOLOGY & SCIENCE INDEX, one spot lower than the previous year.<sup>4</sup>

## Demand for computer & information technology skills remains strong in a wide range of industries despite the recent wave of layoffs in high profile tech companies.<sup>5</sup>

Opportunities for high wage jobs in computer & Information technology remain widespread. Nationally, nine out of ten jobs in computer & information technology are in companies outside the tech sector.<sup>6</sup> And Washington data on IT jobs reflects this same trend. Many IT jobs are in industries such as scientific & technical services, retail trade, manufacturing, finance and insurance, and health care. Operations in many industries are becoming increasingly digital, requiring workers skilled in information technology.

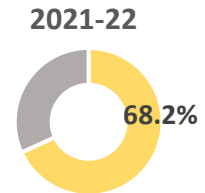
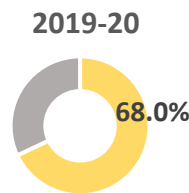
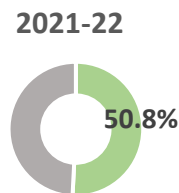
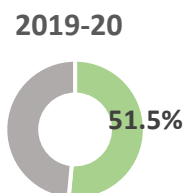
**Unique Job Postings in Computer & Information Technology in 2022  
A Selection of Top Industries**



## This demand presents a challenge and an opportunity for Washington to help residents attain the education they need to prepare for high wage careers in STEM.

The challenge begins with early learning and kindergarten readiness. In 2022, 68.2 percent of students were kindergarten ready in math and only 50.8 percent were kindergarten ready in all developmental and learning areas.<sup>7</sup>

ALL DEVELOPMENTAL & LEARNING AREAS Percent of students who are kindergarten ready	MATH Percent of students who are kindergarten ready
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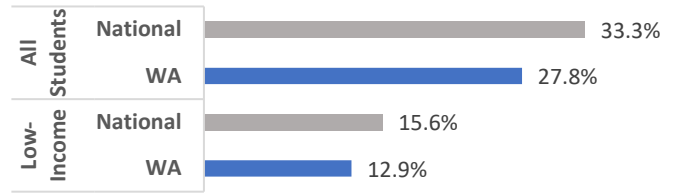


In 2022, the percentage of students meeting the math standard on Washington’s National Assessment of Educational Progress (NAEP) at the 4<sup>th</sup> grade level were near the national average, but 8<sup>th</sup> grade scores fell significantly below.<sup>8</sup>

**NAEP Math Scores - 4th Grade (2022)**  
Percentage at Proficient Level or Higher

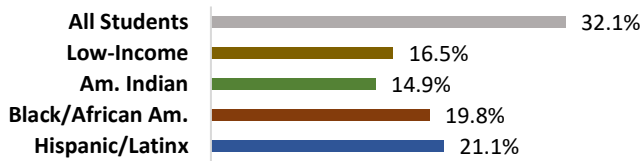


**NAEP Math Scores - 8th Grade (2022)**  
Percentage at Proficient Level or Higher

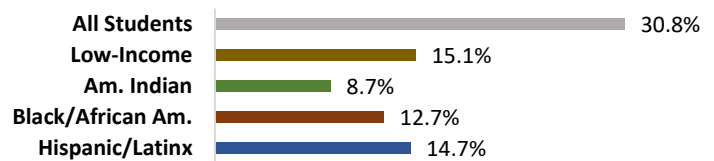


Smarter Balanced Assessment (SBA) math scores show the percentage of low-income students and students from underserved racial and ethnic groups that met standard were below the percent for all students, with scores declining as students proceed through the K-12 grades.<sup>9</sup>

**3rd Grade Math- SBA Scores**  
Percent Meeting Standard in 2022

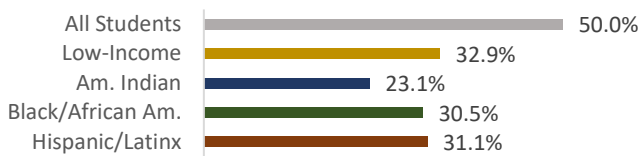


**10th Grade Math- SBA Scores**  
Percent Meeting Standard in 2022

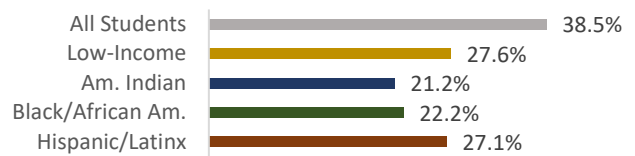


The same pattern is seen in the Washington Comprehensive Assessment of Science (WCAS) scores, with lower percentages of students from underserved racial and ethnic minorities meeting standard and overall scores declining in later grades.<sup>10</sup>

**5th Grade Science 2021-22**  
Percent Meeting Standard

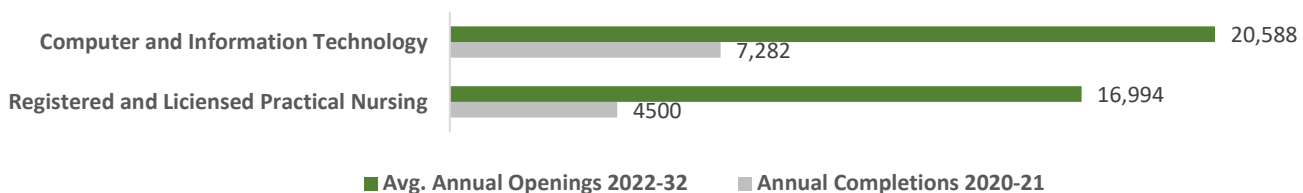


**11th Grade Science 2021-22**  
Percent Meeting Standard



The STEM education and labor market outlook shows significant misalignment in the engineering field and in the field of computer & Information technology, where projected annual job openings far outnumber annual degree completions.<sup>11</sup>

**Key Gaps between STEM Degree & Certificate Completions and Projected Annual Job Openings**



# EARLY LEARNING

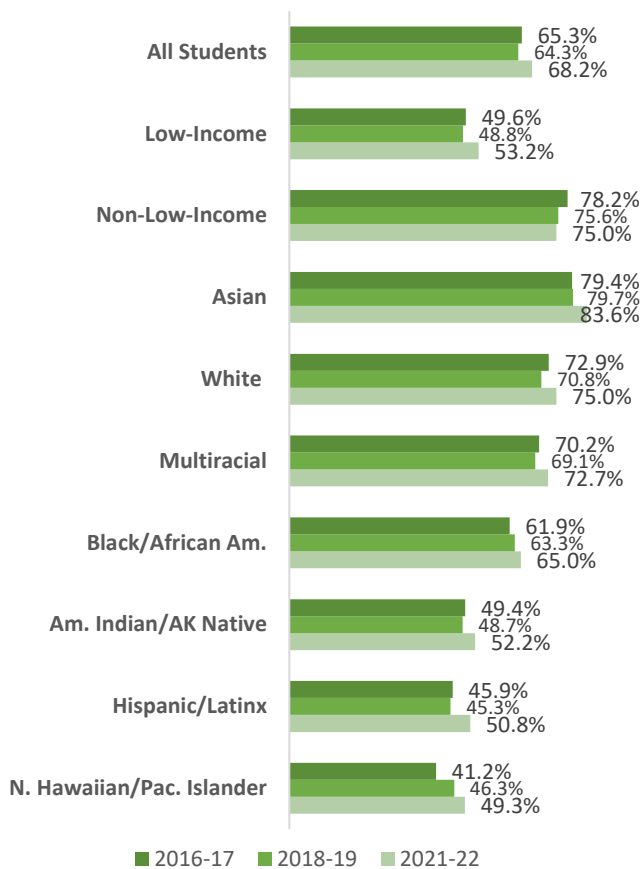


**Kindergarten readiness is a persistent area of concern.** More effort is needed to help students be fully prepared at this critical stage, particularly for those from demographic groups furthest from educational justice. Students who demonstrate kindergarten readiness in math, literacy, and four other developmental areas are more likely to meet standards in math and English language arts assessments in 3rd grade and beyond.<sup>12</sup>

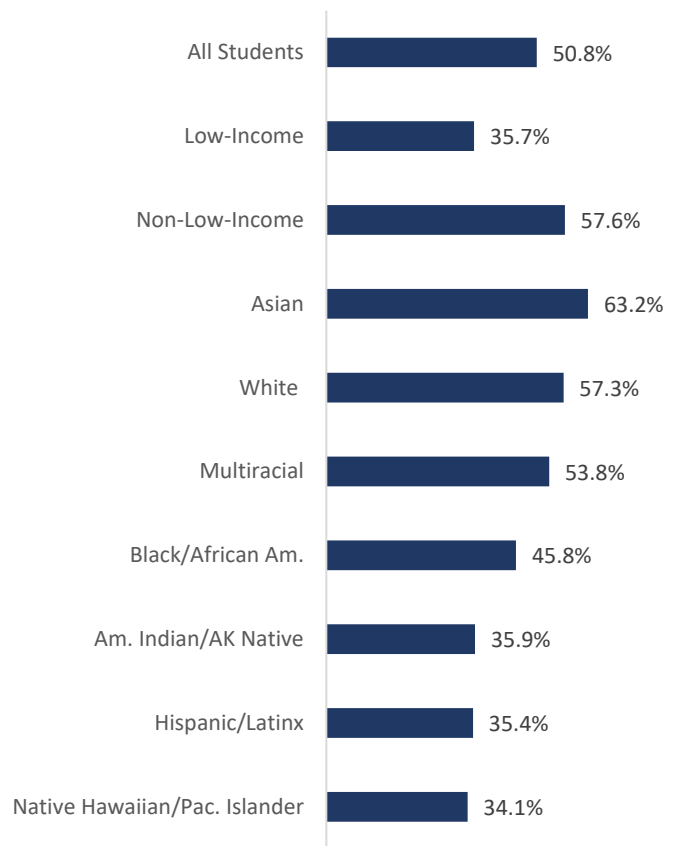
In 2021–22, over 50.8 percent of students were kindergarten ready in all six developmental and learning areas, a slight decline from 51.5 percent two years before. A little over 68 percent of incoming kindergarteners demonstrated “kindergarten readiness” in math among students assessed by WaKIDS in 2021-22, a 4 percent improvement over the previous year.

However, readiness is not evenly spread across racial and ethnic groups. The chart below on math readiness reveals that American Indian/Alaskan Native, African American, Hispanic/Latinx, and low-income students are significantly less likely to be prepared with the skills and abilities necessary to succeed at the next level as they enter kindergarten

**Kindergarten Readiness in Math  
by Race/Ethnicity  
2017-2022**



**Kindergarten Readiness in All Areas  
by Race/Ethnicity & Income  
2021-22**



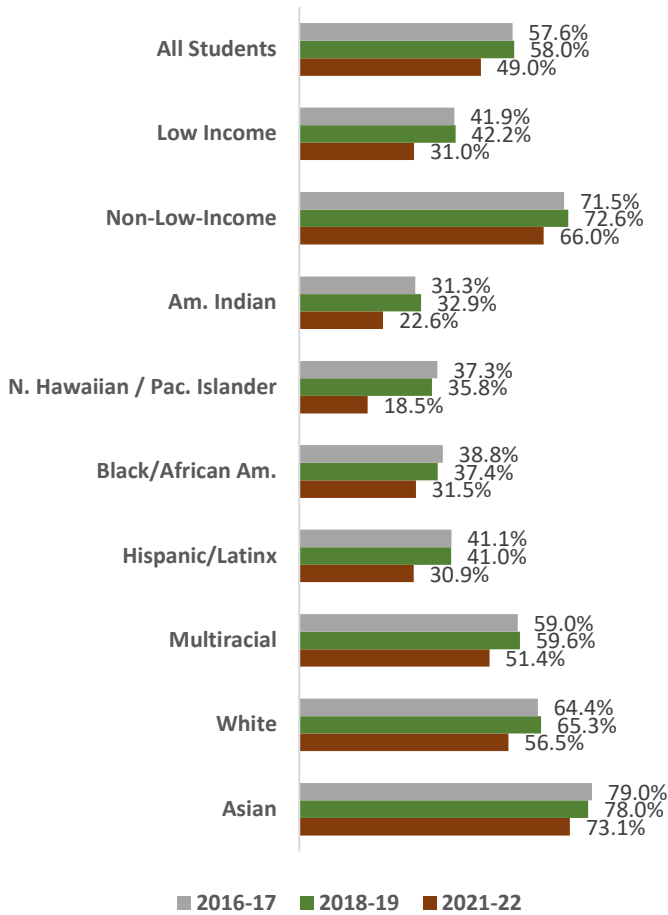
Source: Washington State Office of Superintendent of Public Instruction, Report Card. Washington Kindergarten Inventory of Developing Skills (WaKIDS).

# K-12 Education

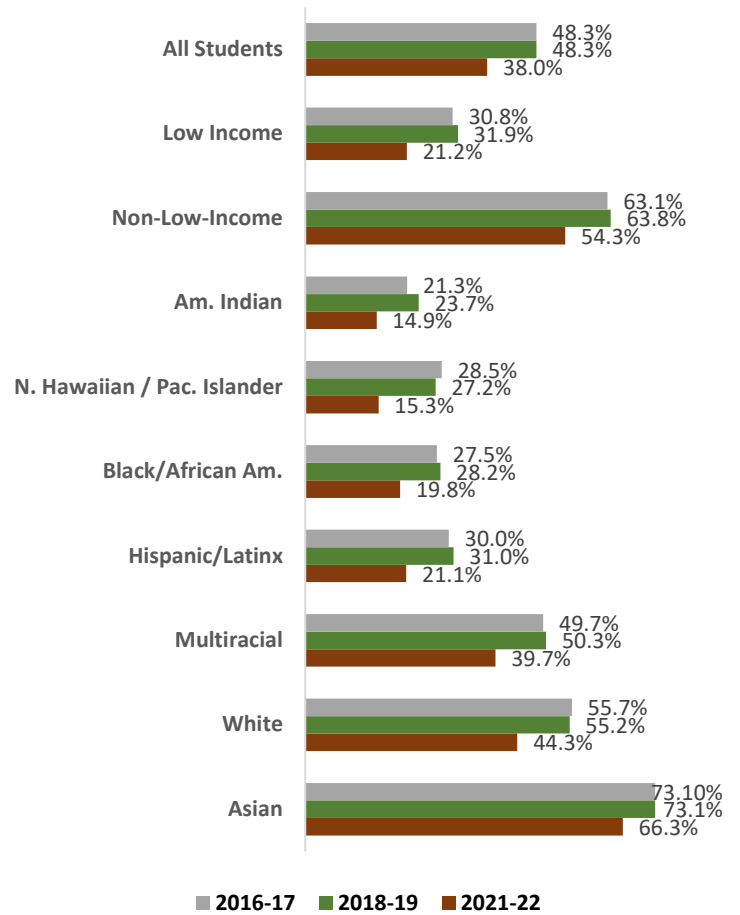
## The Percentage of Students Meeting Standard in Math Declined in 2022

As students proceed through successive grades in the K–12 system, the knowledge and skills they acquire at each level are crucial to their academic success at the next level. The Smarter Balanced Assessment (SBA) measures student progress to determine if they are meeting established learning standards. Smarter Balanced Assessment (SBA) Results show a decline over the last two years, across all demographic groups, in the number of students meeting standard in math, as they progress through successive grades. The percentages decreased at each grade level, through 3<sup>rd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> grades.<sup>13</sup> In addition, low-income, American Indian/Alaskan Native, African American, and Hispanic/ Latinx students meeting Smarter Balanced learning standards in math and science remain relatively low. This is a point of concern and indicates a need for expanded student support services to help them stay on track. Data was not collected in 2020 due to the COVID-19 pandemic.

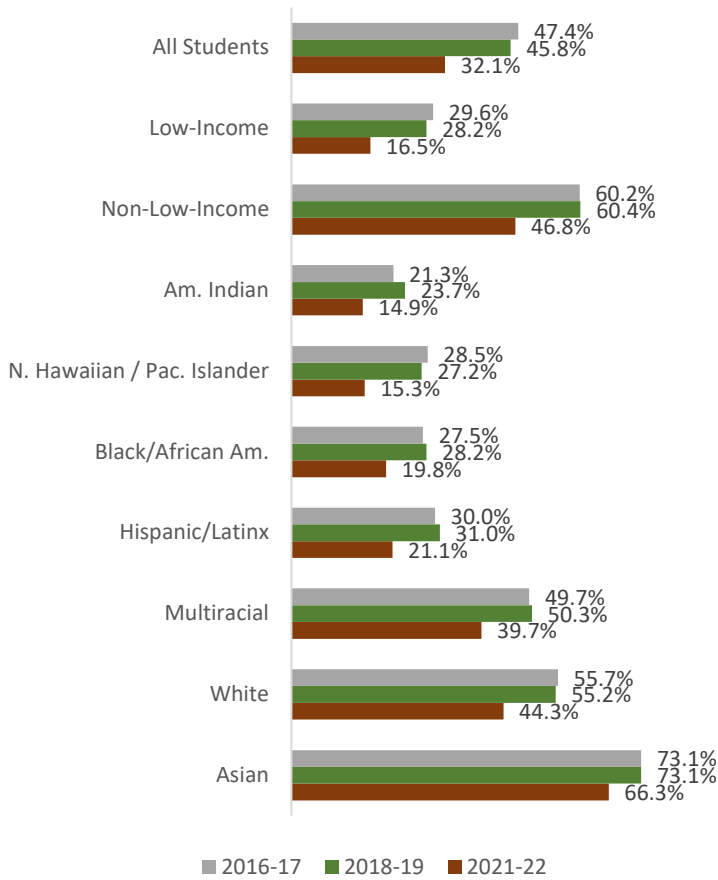
**3rd Grade Math  
Percent Meeting Standard**



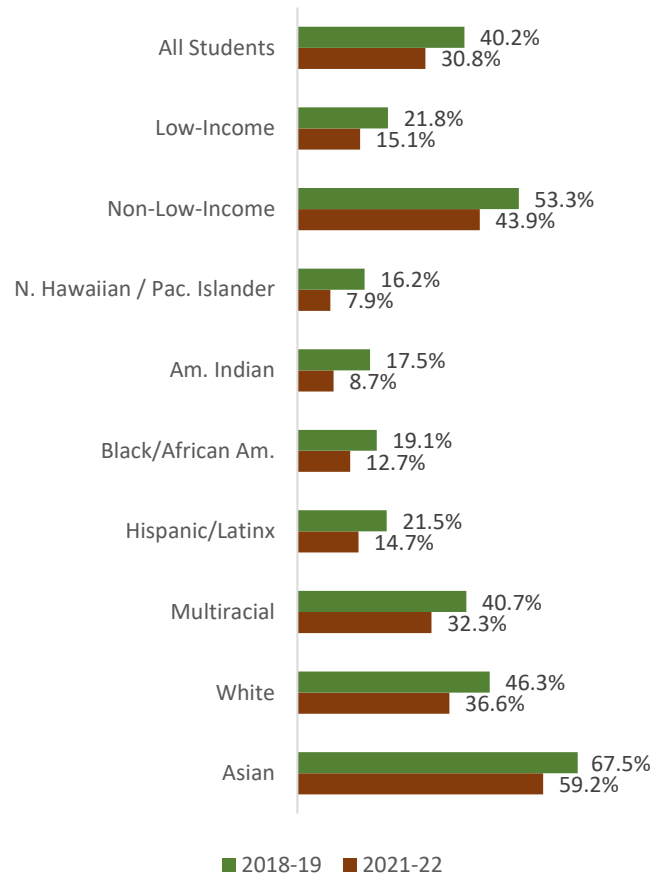
**5th Grade Math  
Percent Meeting Standard**



### 8th Grade Math Percent Meeting Standard



### 10th Grade Math Percent Meeting Standard

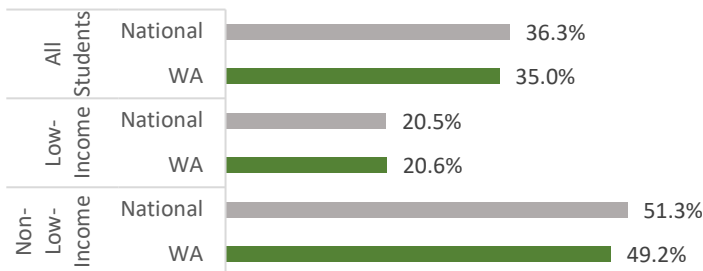


Source: Washington State Office of Superintendent of Public Instruction, Report Card. Smarter Balanced Assessments.<sup>14</sup>

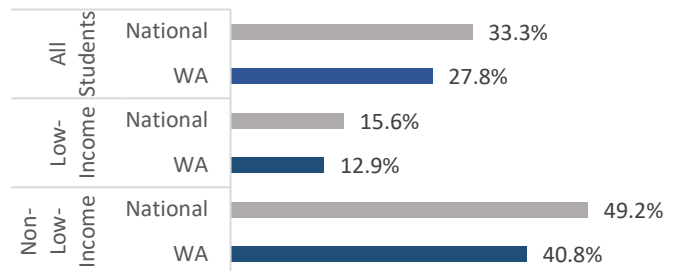
### The Percent of Students Meeting Standard in Math in Grades 4 and 8 is Below the National Average

The National Assessment of Educational Progress (NAEP) mathematics assessment is given every two years to students at grades 4 and 8. The assessment measures both mathematics knowledge and the students' ability to apply their knowledge in problem-solving situations. The results present a broad view of students' mathematics knowledge, skills, and performance over time. In 2022, the assessment showed the largest score declines at grades 4 and 8 since initial assessments in 1990.<sup>15</sup> Washington scores were below the national average for percent meeting standard for all students and for low-income and non-low-income students at the 8<sup>th</sup> grade level and in all but one category at the 4<sup>th</sup> grade level.

#### NAEP Math Scores - 4th Grade (2022) Percentage at Proficient Level or Higher

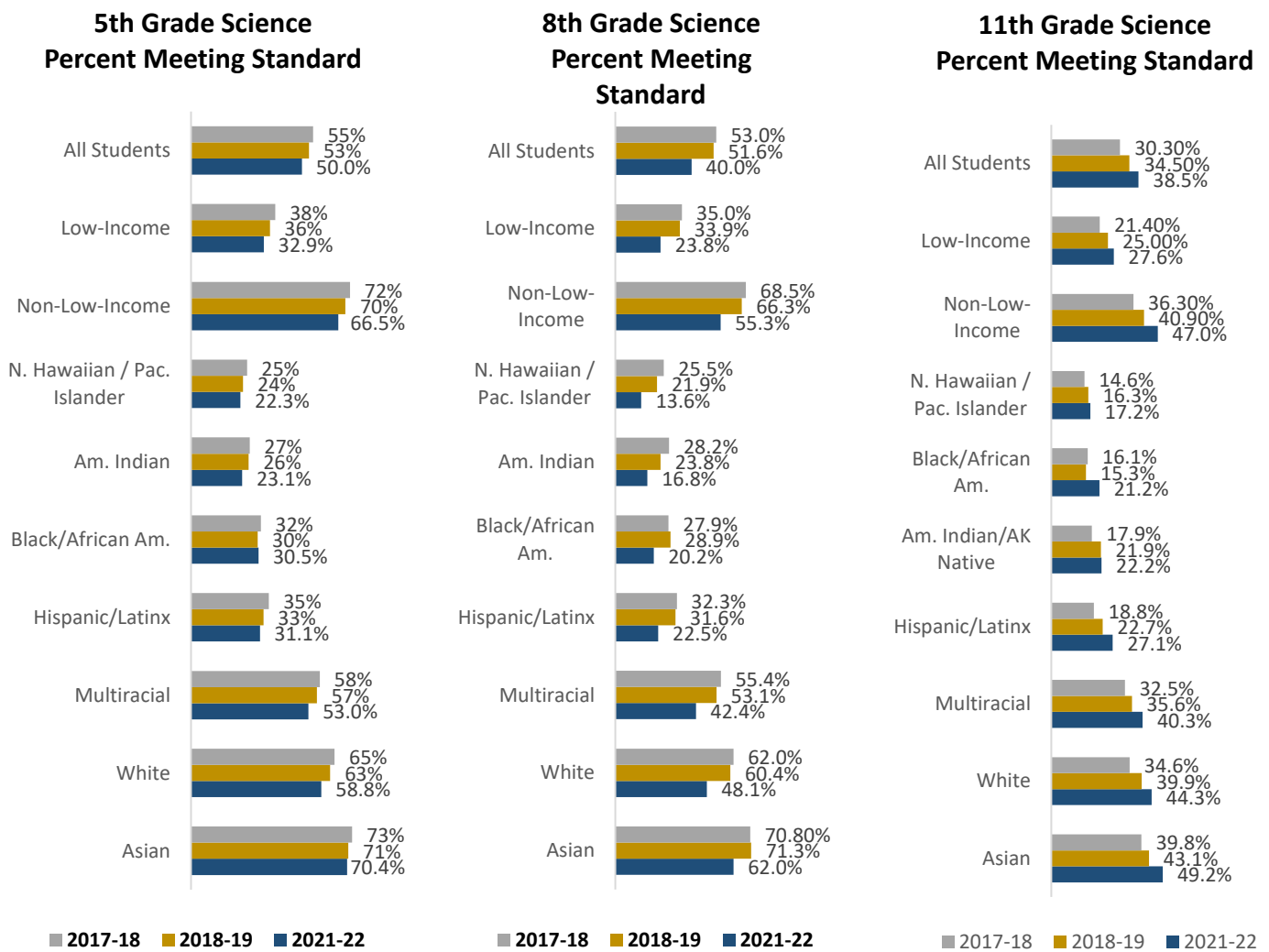


#### NAEP Math Scores - 8th Grade (2022) Percentage at Proficient Level or Higher



## The Percent of Students Meeting Standard in Science Reveal the Challenges That Low-Income, Hispanic/Latinx, Black, American Indian, and Native Hawaiian/Pacific Islander Students Face

The Washington Comprehensive Assessment of Science (WCAS) measures the level of proficiency that Washington students have achieved based on the Washington State 2013 K-12 Science Learning Standards, which are the Next Generation Science Standards (NGSS). All students are assessed on their knowledge of the standards at grades 5, 8, and 11. The assessment shows that the percentage meeting standard for low-income students and students from underserved minorities (Hispanic/Latinx, Black/African/American, American Indian, and Native Hawaiian/Pacific Islander) are significantly lower. Percentages for all student groups declined from 2018 to 2022 at the 5<sup>th</sup> and 8<sup>th</sup> grade levels but improved at the 11<sup>th</sup> grade level. However, the overall trend in percentages meeting standard shows a steady decline as students move from 5th grade to the 11<sup>th</sup>.



Source: Washington State Office of Superintendent of Public Instruction, Report Card. Washington Comprehensive Assessment of Science (WCAS).

## Spotlight on Computer Science

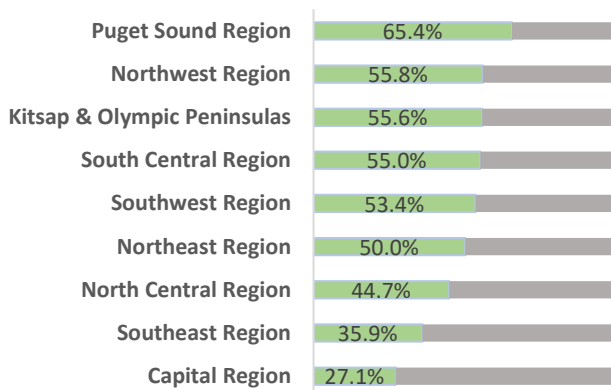
Only 52.3 percent of high schools in Washington statewide offer computer science, compared with 53 percent nationally.

### Percent of High Schools offering Computer Science Courses Statewide

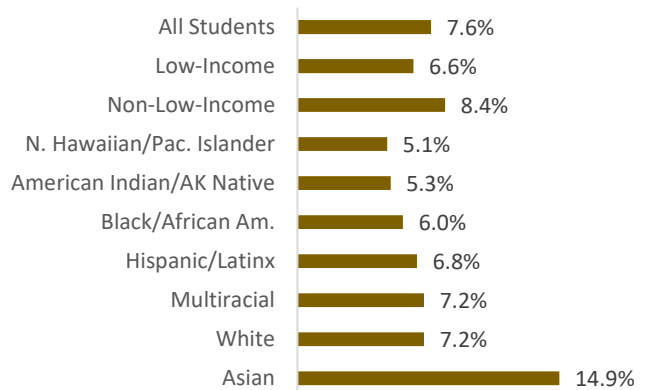


These are already inadequate numbers to meet the need for access to computer science in the state’s high schools. But percentages also vary widely by region, with some areas, particularly in more rural parts of the state, with much lower computer science availability. The enrollment numbers are even more concerning. The percentage of all students in Washington statewide who were enrolled in computer science courses was only 7.6 percent, and the percentage of low-income and underserved racial and ethnic minorities was even lower.

### Percent of High Schools offering Computer Science Courses by Region 2022



### Percentage of Students Enrolled in Computer Science Courses Statewide 2020-21 (Grades 9-12)



Source: Washington State Office of Superintendent of Public Instruction, Report Card.

### Opportunities for high wage jobs in computer & information technology are abundant despite a recent wave of layoffs

Despite a wave of layoffs in high profile tech companies in the latter part of 2022, overall employment opportunities in information technology remain robust. Nationally, nine out of ten jobs in computer & information technology are in companies outside the tech sector.<sup>16</sup> Washington data on jobs reflects this same trend. In fact, most information technology jobs are in industries such as professional and scientific services, finance and insurance, retail, healthcare and manufacturing. Operations in all these industries are becoming increasingly digital, requiring workers skilled in Information technology.

### Computer & Information Technology Projected Annual Job Openings 2022-32 Compared to Annual Degree & Certificate Completions in Computer Science



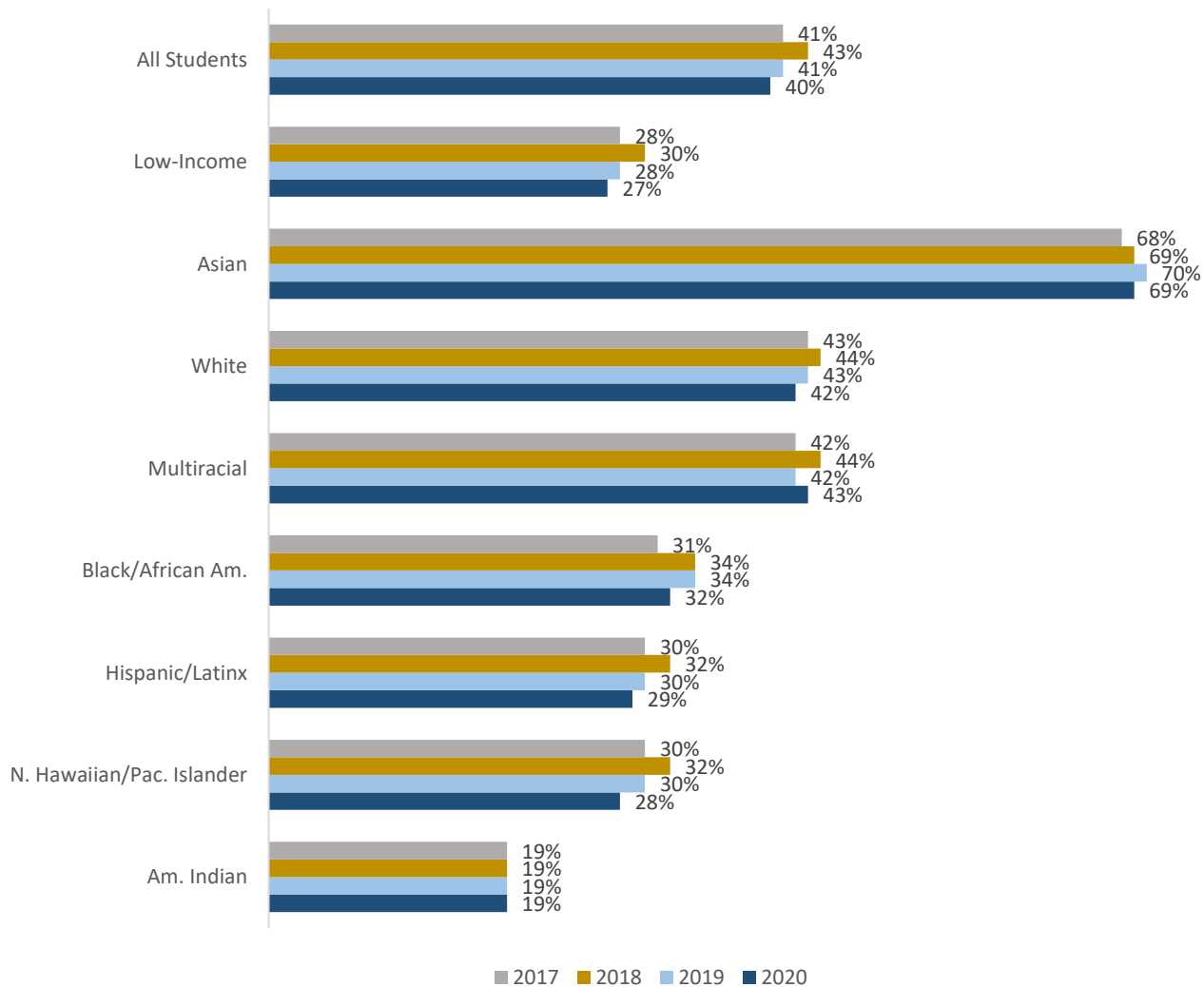
Source: WSAC staff analysis of IPEDS and Lightcast labor market data.



**Low-income students and students from underserved minorities are less likely to taking advanced math classes in high school**

In 2020, 40 percent of all Washington students graduating high school had taken advanced math classes beyond algebra 2. That figure matches the national percentage.<sup>17</sup> There has been slight variation from year to year since 2017, but the percentage has not changed significantly. More concerning is the trend showing that low-income students and students from underserved minorities are less likely to take these courses. Studies have shown that students’ who take advanced math coursework in high school have an easier time transitioning to college STEM courses and are more likely to persist in STEM studies and to enter STEM careers.<sup>18</sup>

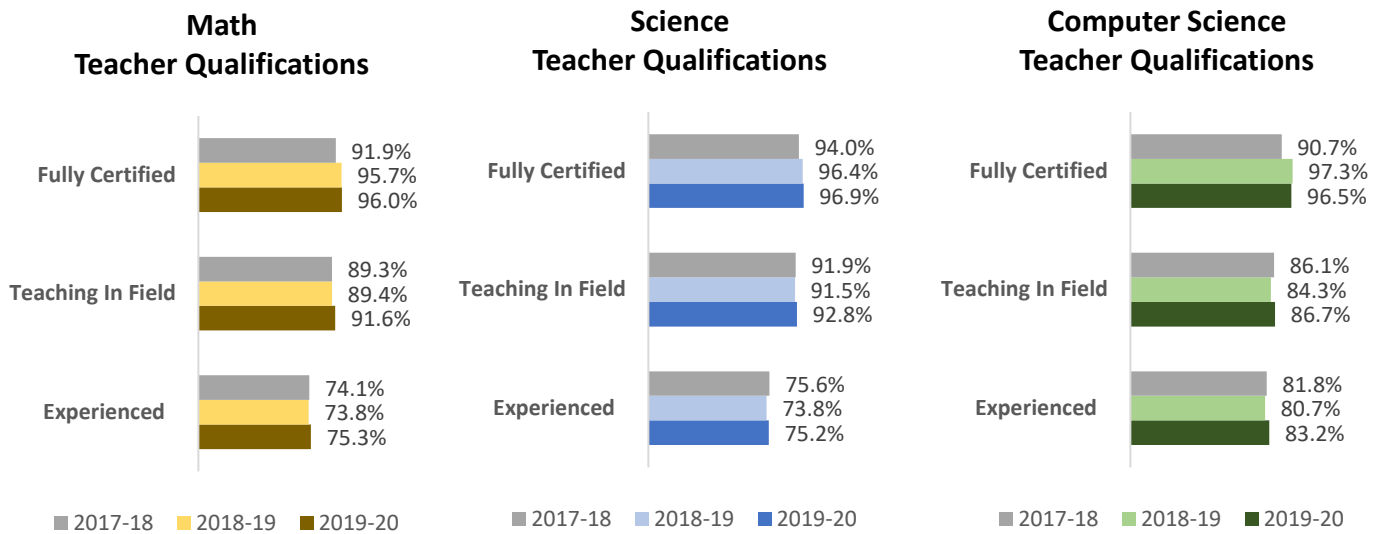
**Statewide Percentage of K-12 Graduating Students Taking Advanced Math Classes**



**STEM Teacher Qualifications**

The percentage of teachers who are fully certified in Math, Science, or Computer Science is above 96 percent, but the percentage with more than 5 years of experience teaching in field is significantly lower. For example, in 2022, only 75 percent of math and science teachers had more than 5 years of experience in the field. And the percent of experienced teachers in computer science was only slightly higher at 83 percent. Adequate experience in teaching is important in the STEM field, since many of the concepts involved are relatively complex and effective teachers must develop an

expansive repertoire of teaching strategies and instructional approaches for a diverse range of students with varying levels of preparation. Developing and retaining qualified teachers is crucial to advancing STEM education.<sup>19</sup>

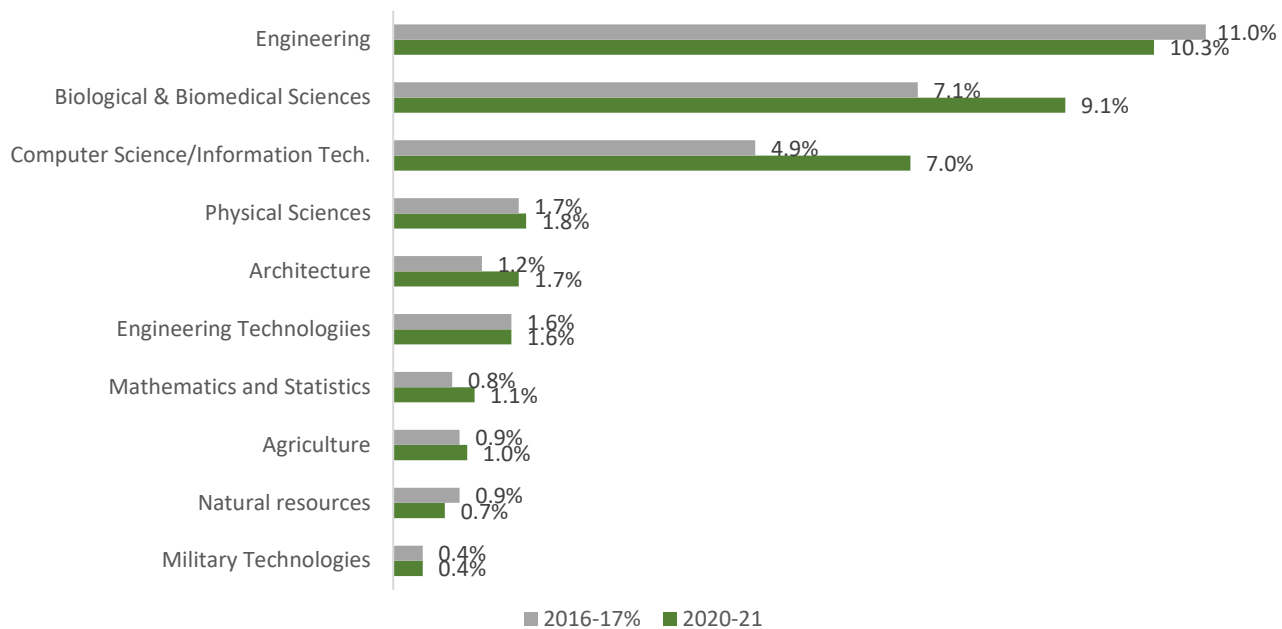


Source: Washington State Office of Superintendent of Public Instruction, Report Card.

### Interest in postsecondary STEM studies is rising<sup>20</sup>

Over the past decade, the percentage of students taking SAT tests who indicated they intend to major in a STEM subject in college has shown a moderate but consistent increase each year in most subject areas. The percentage interested in a STEM major rose from 25 percent in 2016–17 to nearly 35 percent in 2020–21.

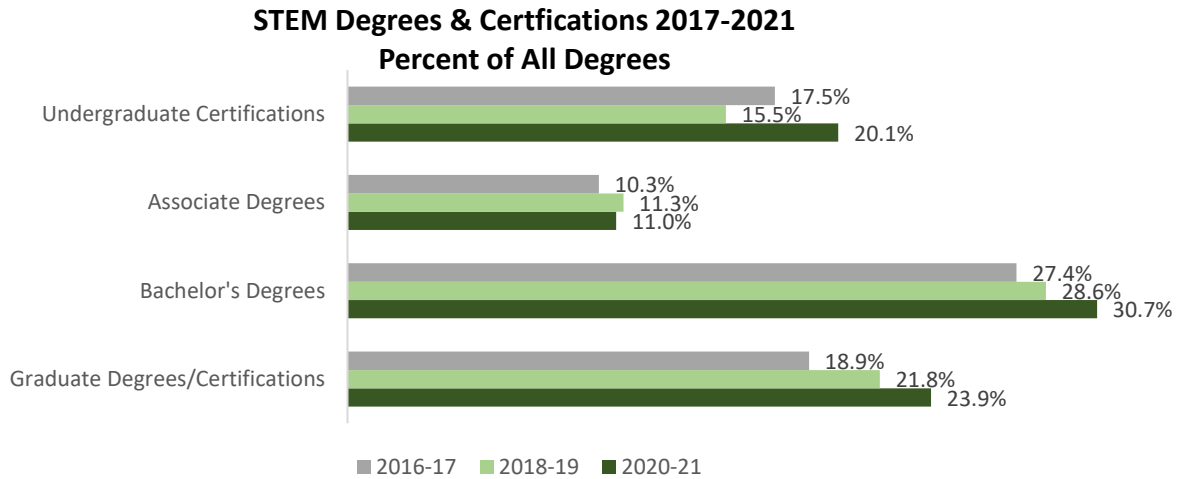
#### Percentage of SAT test takers indicating an interest in STEM 2017-2021



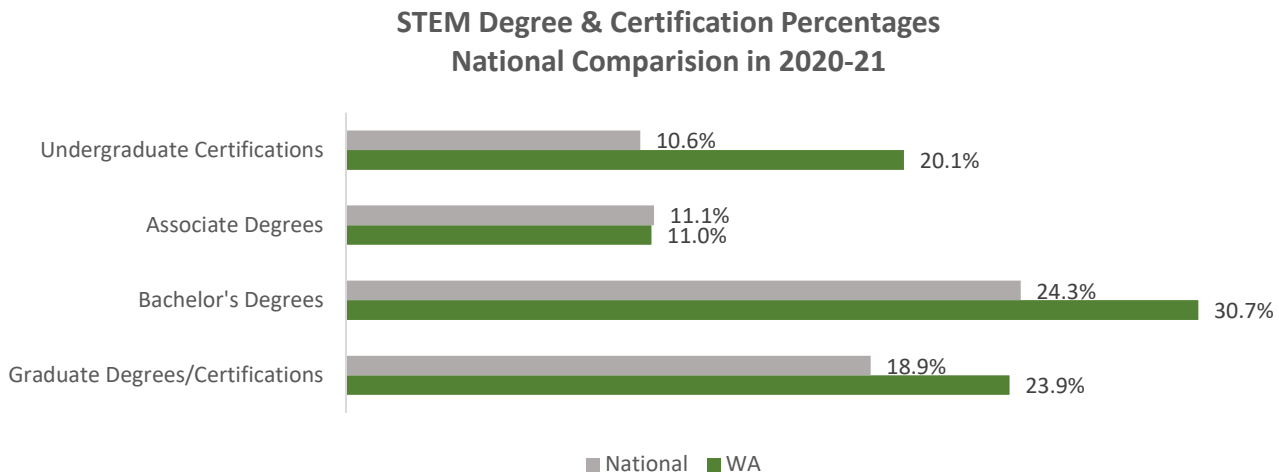
Source: College Board. AP Program Participation and Performance Data

# Postsecondary

STEM Degree Completions as a percentage of all degrees have been increasing at the associate, bachelor's, and graduate levels. Since 2016-17, STEM degree and certificate percentages have grown by 3 percent at the bachelor's level and by 5 percent at the graduate level.



A national comparison for the 2020-21 academic year shows that Washington STEM percentages exceed the national average in most categories. STEM bachelor's degree completions represented 30.7 percent of all bachelor's degrees and exceeded the national average (24.3 percent) by more than 6 percentage points. Graduate Degree completions in STEM fields as a percentage of all graduate degrees (23.9 percent) exceeded the national average (18.9 percent) by 5 percentage points.



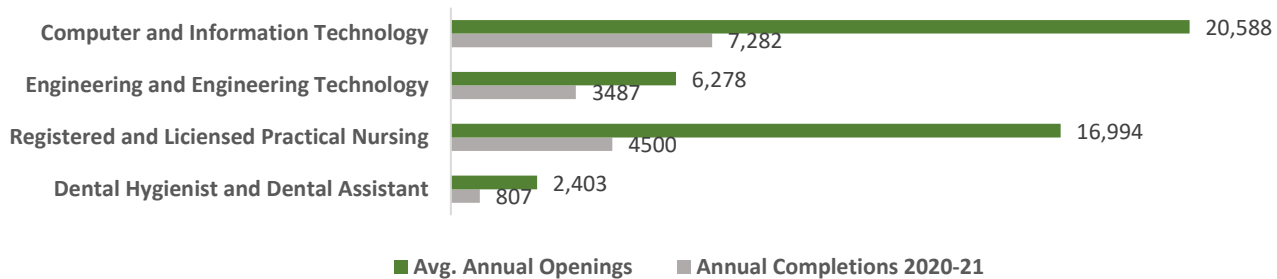
Source: Integrated Postsecondary Education Data System (IPEDS).

# The STEM Labor Market

## Keeping pace with rising employer demand for skilled, STEM-educated workers remains a challenge

Demand for workers with STEM skills remains strong, with projected annual job openings outpacing the number of students completing STEM degree and certificate programs each year. In the engineering and related technology field, annual job openings exceed annual completions by more than 21 percent. The gap is even larger in the computer and information technology field, with 20,588 projected annual job openings compared to only 4,293 annual completions.

### Key Gaps between STEM Degree & Certificate Completions and Projected Annual Job Openings 2022-23

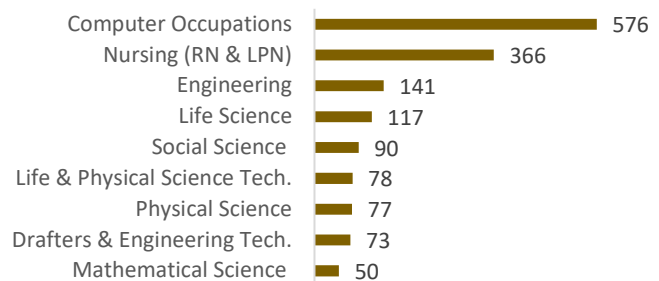


Source: WSAC staff analysis of IPEDS and Lightcast Q4 2022 labor market data

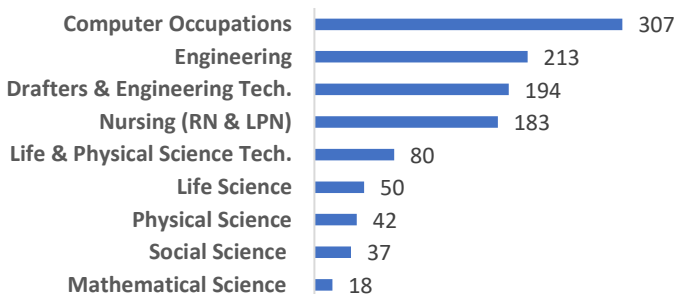
## STEM employment opportunities are prevalent in all regions of the state

Projected STEM job openings vary by region but share some commonalities. Computer and engineering occupations hold the top positions in all regions, with much higher numbers in Puget Sound and the other more densely populated areas of the state. Openings for scientific and engineering technician positions are also prominent in most areas.

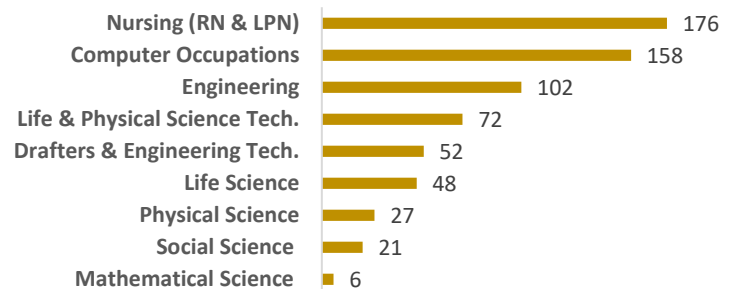
### Capital Region STEM Occupations Projected Annual Openings 2022-2032



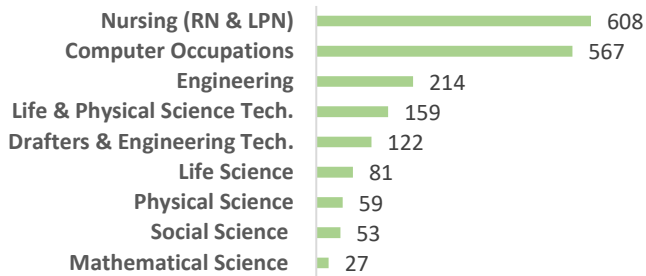
### Kitsap & Olympic Region STEM Occupations Projected Annual Openings 2022-32



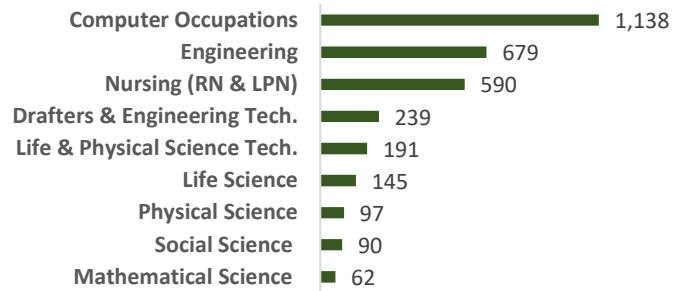
### North Central Region STEM Occupations Projected Annual Openings 2022-32



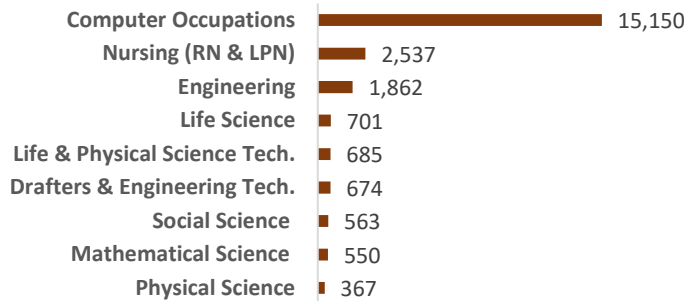
**Northeast Region**  
STEM Occupations  
Projected Annual Openings 2022-2032



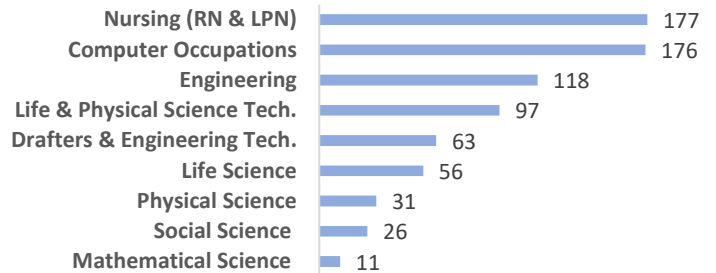
**Northwest Region**  
STEM Occupations  
Projected Annual Openings 2022-32



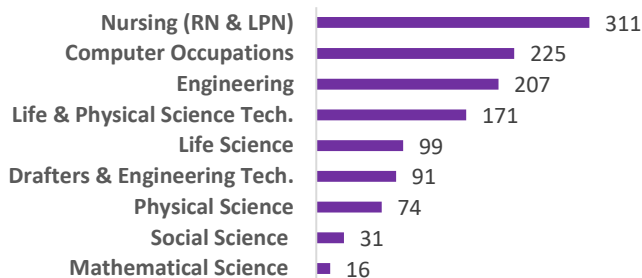
**Puget Sound Region**  
STEM Occupations  
Projected Annual Openings 2022-32



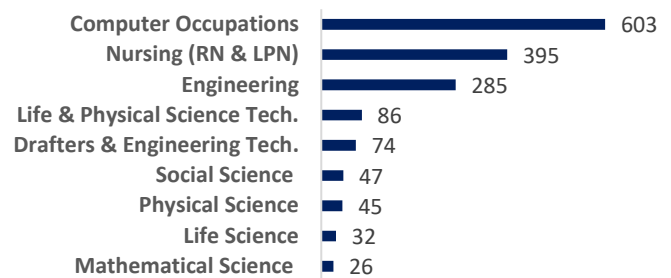
**South Central Region**  
STEM Occupations  
Projected Annual Openings 2022-32



**Southeast Region**  
STEM Occupations  
Projected Annual Openings 2022-32



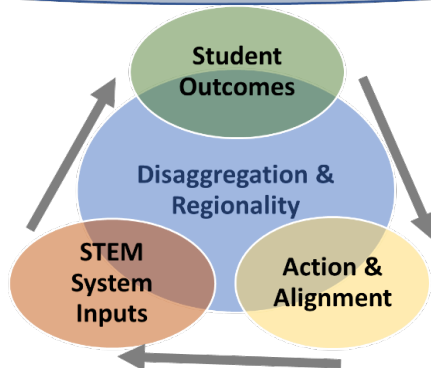
**Southwest Region**  
STEM Occupations  
Projected Annual Openings 2022-2032



Source: WSAC staff analysis of Lightcast Q4 2022 labor market data

## STEM Education Innovation Alliance Framework for Action & Accountability

GOAL: To equitably expand STEM learning opportunities and improve educational outcomes in STEM for Washingtonians



From EARLY LEARNING to EMPLOYMENT & CAREER

## Measuring Progress

In October 2022, the STEM Alliance approved a revised Framework for Action and Accountability, with an expanded set of progress indicators. The overarching goal of the Alliance is to provide the Governor with vision, guidance, assistance, and advice on strategies to increase learning opportunities and improve educational outcomes in STEM across the full spectrum from early learning to employment and careers. The Framework pictured to the left captures the dynamics of how various measures associated with STEM System Inputs, Student Outcomes, and Action & Alignment elements are tracked to monitor progress, with Disaggregation and Regionality acting as guiding principles.

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## 2022 Legislative Session Highlights – Key Impacts on STEM Education<sup>21</sup>

### ESSB 5693

- \$2,056,000 Washington State University to establish a bachelor's degree in cybersecurity operations.
- \$2,262,000 to Eastern Washington University establish a Bachelor of Science in Cybersecurity degree option in the EWU computer science program.
- \$613,000 to Central Washington University to expand cybersecurity capacity by adding additional faculty resources in the department of computer science.
- \$500,000 for the Washington state Leadership and Assistance for Science Education Reform (LASER).
- \$1,000,000 to Community and Technical Colleges for a computer science and education grant program.
- \$8,000,000 to Community and Technical Colleges for grants for nursing programs to purchase or upgrade simulation laboratory equipment.
- \$7,018,000 to Community and Technical Colleges to expand cybersecurity academic enrollments by 500 FTE students.
- \$205,000 to Community and Technical Colleges for a center for excellence in cybersecurity.
- \$7,000,000 to Community and Technical Colleges to expand the opportunity grant program to provide health care workforce grants for students.
- \$3,760,000 for nursing education, to increase the number of nursing slots for academic year 2022-23 by at least 50 and build capacity for at least 200 new slots in the 2023-2025 biennium, and to purchase two simulation vans.
- \$1,500,000 for the development of a climate solutions and climate justice curriculum.

HB1723 \$1,865,000 to close the digital equity divide by increasing accessibility and affordability of telecommunication services, devices, and training.

HB2007 3,000,000 to establish a nurse educator loan repayment program under the Washington Health Corp.

SB5657: \$200,000 for school districts operating institutional education programs for youth in state long-term juvenile institutions to provide opportunities to access an elective computer science course.

## Concluding Comments

STEM education is vital to Washington’s innovation-driven economy and aligning the state’s STEM education system with labor market demand is imperative. The focus must be on improving the full spectrum from early learning and K-12 to career-connected learning and postsecondary programs. All stages are crucial to helping students develop the key STEM skills and credentials they will need to prepare for good career opportunities in Washington’s dynamic and evolving economy. Expanding institutional enrollment capacity in key fields may remove barriers that are driving some of the skilled worker supply and demand gaps, particularly in fields such as computer science and information technology. Another key to advancing STEM education and labor market alignment is to address equity issues, to ensure that groups that have been historically underrepresented and underserved, including low-income students and students from racial and ethnic minorities, are given the supports and resources they need to succeed in their education and career goals.

## References

- <sup>1</sup> Computing Technology Industry Association (CompTIA). (2022). STATE OF THE TECH WORKFORCE, CYBERSTATES 2022. [https://www.cyberstates.org/pdf/CompTIA\\_Cyberstates\\_2022.pdf](https://www.cyberstates.org/pdf/CompTIA_Cyberstates_2022.pdf).
- <sup>2</sup> Milken Institute Center for Regional Economics. (2022) State Technology and Science Index 2022. [https://milkeninstitute.org/sites/default/files/2022-11/State\\_Technology\\_and\\_Science\\_Index\\_2022\\_Milken\\_Institute\\_0.pdf](https://milkeninstitute.org/sites/default/files/2022-11/State_Technology_and_Science_Index_2022_Milken_Institute_0.pdf).
- <sup>3</sup> Milken Institute Center for Regional Economics (2022).
- <sup>4</sup> Milken Institute Center for Regional Economics (2022).
- <sup>5</sup> WSAC staff analysis of Lightcast Q4 2022 labor market data.
- <sup>6</sup> Burning Glass Technologies. (2019). Beyond Tech: Rising Demand for IT Skills in Non-Tech Industries. [https://www.burning-glass.com/wp-content/uploads/BGT\\_Oracle\\_BeyondTech\\_v7.pdf](https://www.burning-glass.com/wp-content/uploads/BGT_Oracle_BeyondTech_v7.pdf).
- <sup>7</sup> Washington State Office of Superintendent of Public Instruction, Report Card. Washington Kindergarten Inventory of Developing Skills (WaKIDS)
- <sup>8</sup> National Center for Education Statistics (NCES), National Assessment of Education Progress (NAEP), 2022.
- <sup>9</sup> Washington State Office of Superintendent of Public Instruction, Report Card. Smarter Balanced Assessments.
- <sup>10</sup> Washington State Office of Superintendent of Public Instruction, Report Card, Washington Comprehensive Assessment of Science (WCAS).
- <sup>11</sup> WSAC staff analysis of IPEDS and Lightcast Q4 2022 labor market data. This report uses a broad definition of STEM that includes healthcare as an important STEM-related field.
- <sup>12</sup> Washington State Institute for Public Policy, “Outcome Evaluation of Washington State’s Early Childhood Education and Assistance Program,” December 2014, [https://www.wsipp.wa.gov/ReportFile/1576/Wsipp\\_Outcome-Evaluation-of-Washington-StatesEarly-Childhood-Educationand-Assistance-Program\\_Report.pdf](https://www.wsipp.wa.gov/ReportFile/1576/Wsipp_Outcome-Evaluation-of-Washington-StatesEarly-Childhood-Educationand-Assistance-Program_Report.pdf)
- <sup>13</sup> Note: Data was not collected in 2020 due to the COVID-19 pandemic.
- <sup>14</sup> Due to school facility closures and the suspension of end-of-year testing due to the COVID-19 crisis, assessment data for 2019-20 is not available.
- <sup>15</sup> NAEP Report Card: 2022 NAEP Mathematics Assessment. <https://www.nationsreportcard.gov/highlights/mathematics/2022/>.
- <sup>16</sup> Burning Glass Technologies. (2019). Beyond Tech: Rising Demand for IT Skills in Non-Tech Industries. [https://www.burning-glass.com/wp-content/uploads/BGT\\_Oracle\\_BeyondTech\\_v7.pdf](https://www.burning-glass.com/wp-content/uploads/BGT_Oracle_BeyondTech_v7.pdf).
- <sup>17</sup> Source: National Center for Education Statistics (NCES), Fast Facts, Advanced Mathematics and Science Courses. <https://nces.ed.gov/fastfacts/display.asp?id=97>.
- <sup>18</sup> Sadler, P., Sonnert, G., Hazari, Z., and Robert, T. (2014) The Role of Advanced High School Coursework in Increasing STEM Career Interest. *Science Educator*, Summer 2014 Vol. 23, No. 1.
- Federman, M. (2007). State graduation requirements, high school course taking, and choosing a technical college major. *B.E. Journal of Economic Analysis & Policy: Advances in Economic Analysis & Policy*, 7(1), 1-32.
- <sup>19</sup> Council of Scientific Society Presidents. (2018). The Need for Well-Qualified Science and Mathematics Teachers. <https://www.sciencepresidents.org/assets/docs/2018-CSSP-Statement-Need-for-STEM-teachers.pdf>.
- <sup>20</sup> Note: The use of stated postsecondary interests of SAT test takers has inherent limitations with respect to drawing more general conclusions. SAT test takers are not broadly representative of the diverse range of students in the state, and a measure based on their interests may not capture those of students from historically underserved racial and ethnic groups.
- <sup>21</sup> The STEM investments highlighted in this section use a broad definition of STEM that includes healthcare as an important STEM-related field.





# Washington State STEM Education Innovation Alliance

The STEM Education Innovation Alliance, legislatively created in 2013, brings together leaders from a broad range of business, labor, education, government, and nonprofit organizations, with the role of advising Washington's governor and legislature on policy and strategic planning in support of STEM education initiatives.

## ALLIANCE MEMBERSHIP

### **Amazon**

*Lindsay Hopkins*

Program Manager, AWS Educate Cloud Degree

### **Association of Washington Principals**

*Scott Friedman*, Associate Director

### **Ballmer Group**

*Andi Smith*, Executive Director, Washington

### **Bill & Melinda Gates Foundation**

*Lindsay Lovlien*, Senior Program Officer

### **Career Connect Washington**

*Maud Daudon*, Executive Leader

### **Citizen Member**

*Jeff Estes*

### **Code.org**

*Hadi Partovi*, Founder

### **College Success Foundation**

*James Dorsey*, President & CEO

### **Community Colleges of Spokane**

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### **Council of Presidents,**

*Ruben Flores*, Interim Executive Director

### **FIRST (For Inspiration and Recognition of Science and Technology)**

*Washington, Erica Beckstrom*, President

### **Greater Spokane Inc.**

*Alisha Benson*, CEO

### **Independent Colleges of Washington**

*Terri Standish-Kuon*, President and CEO

### **Mentors in Tech**

*Kevin Wang*

Founder

### **Microsoft Philanthropies**

*Jane Broom Davidson*, Senior Director

### **Microsoft Philanthropies Technology Education and Literacy in Schools Program,**

*Patrick O'Steen*, West Region Lead

### **North Central Educational Service District | Apple STEM Network**

*Sue Kane*, Director of STEM Initiatives and Strategic Partnerships

### **Pacific Education Institute**

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### **Pacific Northwest National Laboratory**

*Evangalina Galvan Shreeve*, Director, Office of STEM Education

### **Pacific Science Center**

*Will Daugherty*, President and CEO

### **Raikes Foundation**

*Dina Blum Burlingame*, Program Officer, Education

### **Starbucks Corporation**

*Evan Smith*, Vice President, Technology Strategy and Business Transformation

### **STEMCore Consulting**

*Deidre Holmberg*, Founder and Lead Consultant

### **The Museum of Flight**

*Dana Riley Black*, Vice President of Education

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*Ed Lazowska*, Bill & Melinda Gates Chair

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### **Washington State Board for Community and Technical Colleges**

*Paul Francis*, Executive Director

### **Washington State Board of Education**

*Randy Spaulding*, Executive Director

### **Washington State Department of Children, Youth and Families**

*Ross Hunter*, Secretary

### **Washington State Department of Commerce**

*Lisa Brown*, Director

### **Washington State Department of Labor & Industries**

*Joel Sacks*, Director

### **Washington State Employment Security Department**

*Cami Feek*, Commissioner, Executive Programs

### **Washington State Labor Council**

*Larry Brown*, President

### **Washington State Office of Superintendent of Public Instruction**

*Shandy Abrahamson*, Career Connected Learning Tribal Engagement Specialist, Office of Native Education

### **Washington State Office of Superintendent of Public Instruction**

*Chris Reykdal*, Superintendent

### **Washington State Office of the Governor**

*John Aultman*, Executive Policy Advisor | Higher Education and Workforce Development

### **Washington State Opportunity Scholarship**

*Kimber Connors*, Executive Director

### **Washington State Workforce Training and Education Coordinating Board, Eleni Papadakis**, Executive Director

*Eleni Papadakis*, Executive Director

### **Washington STEM**

*Jenee Myers Twitchell*, Chief Impact Officer

### **Washington Student Achievement Council**

*Mike Meotti*, Executive Director

### **Wenatchee Valley College**

*Karina Vega-Villa*, MESA Program Director