The North Central Region, spanning from Moses Lake to Okanogan, is home to growing information technology, healthcare, K-12 education, agriculture and construction industries. Twenty-seven school districts in the North Central Region are partners in the Apple STEM Network. The Network’s business, education, and community partners are working to close credential attainment gaps, especially for rural communities, students of color, and students from low-income families. They aim to increase the number of local students who become technology, education, healthcare, and trades professionals, which combined have 1,155 annual projected openings over the next five years.

**STEM BY THE NUMBERS: NORTH CENTRAL REGION**

**97 MORE CREDENTIALS = REGION ON TRACK**

<table>
<thead>
<tr>
<th>Class</th>
<th>Baseline</th>
<th>Class of 2018</th>
<th>Class of 2020</th>
<th>Class of 2022</th>
<th>Class of 2025</th>
<th>Class of 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credentials</td>
<td>31%</td>
<td>31%</td>
<td>34%</td>
<td>36%</td>
<td>30%</td>
<td>45%</td>
</tr>
<tr>
<td>Attained with</td>
<td>1,087</td>
<td>1,087</td>
<td>1,183</td>
<td>1,239</td>
<td>1,354</td>
<td>1,545</td>
</tr>
<tr>
<td>Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credentials</td>
<td>43%</td>
<td>43%</td>
<td>47%</td>
<td>51%</td>
<td>56%</td>
<td>56%</td>
</tr>
<tr>
<td>Attained without Intervention</td>
<td>1,473</td>
<td>1,473</td>
<td>1,783</td>
<td>1,874</td>
<td>2,246</td>
<td>2,246</td>
</tr>
</tbody>
</table>

**Washington State**
- Credentials Attained with Intervention
- Credentials Attained without Intervention

**North Central Region**
- Credentials Attained with Intervention
- Credentials Attained without Intervention

Measured six to eight years after high school graduation
THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

North Central Washington has a growing number of tech jobs in fields like agriculture, energy, and healthcare. To increase the number of students with computer science and tech credentials, the Apple STEM Network has forged strategic partnerships with philanthropic partners like Microsoft and Code.org, who are providing support for rural schools to implement computer science courses for high school students. Regional postsecondary institutions have come together to build onto this foundational knowledge and are aligning their programs to provide students a regional path toward computer science credentials.

NORTH CENTRAL REGION
SUPPLY-DEMAND PROJECTIONS

By supporting more students to be on track to earn a high-demand credential, the Apple STEM Network and its partners in the North Central Region will ensure that up to 2,219 family-sustaining*** jobs (those that pay a regionalized wage of $44,842 or more a year) are available to local young adults looking to start their career in the North Central Region.

*Jobs requiring related work experience, and/or on-the-job training, would generally not be immediately available to high school graduates and be more competitive with a greater number of eligible applicants.

** The King County surplus represents a proportion of the surplus jobs that could be supplied by students from the North Central Region. The surplus is the result of fewer King County originating students than annual projected job openings in King County.

*** Family-sustaining regionalized wage is defined as the full-time wage needed to support a household of 2 adults (1 working) and 1 child, using the MIT Living Wage Calculator.

ALIGNED PATHS TO FUTURE CAREERS

North Central Washington has a growing number of tech jobs in fields like agriculture, energy, and healthcare. To increase the number of students with computer science and tech credentials, the Apple STEM Network has forged strategic partnerships with philanthropic partners like Microsoft and Code.org, who are providing support for rural schools to implement computer science courses for high school students. Regional postsecondary institutions have come together to build onto this foundational knowledge and are aligning their programs to provide students a regional path toward computer science credentials.
**KINDERGARTEN MATH READY (2018)**

52% of 3,158 North Central Region children entering kindergarten are math ready compared to 66% of 79,072 children statewide.

**3RD GRADE MATH (2017)**

49% of 3,496 of North Central Region third graders meet grade level math standards compared to 58% of 86,451 third graders statewide.
DUAL CREDIT (2017 9-12TH GRADERS)
53% of 14,809 North Central Region high schoolers complete at least one dual credit course compared to 56% of 330,854 youth statewide.

CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2016)
51% of 3,118 of the originating ninth graders in the North Central Region enroll in a postsecondary program and 43% of those originating ninth graders earn a credential by age 26.

Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

For more information on the Apple STEM Network and its work in the North Central Region, contact Network Director Sue Kane at suek@ncesd.org.
### North Central Region STEM Indicators

**Ready for Kindergarten**
While 48 percent of all North Central Region kids are math ready by kindergarten, high-quality early learning opportunities need to be more accessible to families of color and those that are lower-income to close math-readiness gaps.

<table>
<thead>
<tr>
<th>TBD</th>
<th>Of North Central Region children entering kindergarten are math ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>48%</td>
<td></td>
</tr>
</tbody>
</table>

**K-12 STEM Learning**
Between kindergarten and third grade, math-readiness and skills gaps widen for many students, which is correlated with success in related areas of study. School districts need resources and assistance to remove barriers and create opportunities in STEM for all students.

<table>
<thead>
<tr>
<th>TBD</th>
<th>Of North Central Region third graders meet grade level math standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>49%</td>
<td></td>
</tr>
</tbody>
</table>

**Secondary Pathways**
While students in the North Central Region are overall less likely to complete dual credit** courses than their peers across the state, students of color and low-income students experience reduced access to and completion of these courses compared to their peers.

<table>
<thead>
<tr>
<th>TBD</th>
<th>Of North Central Region high schoolers complete at least one dual credit course</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td></td>
</tr>
</tbody>
</table>

**Credential Enrollment/Attainment**
Of the originating ninth graders across the state, 51 percent enroll and 40 percent complete a credential. While North Central Region students enroll and complete at comparable rates, the region is working to expand credential pathways capacity to close opportunity gaps for key student groups.

<table>
<thead>
<tr>
<th>TBD</th>
<th>Of the originating ninth graders in the North Central Region enroll in a postsecondary program and 43 percent of those originating ninth graders earn a credential by age 26.</th>
</tr>
</thead>
<tbody>
<tr>
<td>51%</td>
<td></td>
</tr>
</tbody>
</table>

*Dual credit programs give students the opportunity to earn high school and college credit simultaneously. Completion of dual credit coursework is highly correlated with higher education enrollment and completion.*

STEM by the Numbers is a series of regional reports which examines data that tells us about Washington students’ access to credentials and family-sustaining jobs. Together with our partners, we are advocating for and developing regionalized, cross-sector, and longitudinal data. We highlight student outcomes above, and in future publications we will report on systems indicators, like high school course offerings and availability of STEM professional learning and supports.

Data citations and region-by-region analyses will be posted at [www.washingtonstem.org/STEMbythenumbers](http://www.washingtonstem.org/STEMbythenumbers).

For more information on the Apple STEM Network and its work in the North Central Region, contact Network Director Sue Kane at [suek@ncesd.org](mailto:suek@ncesd.org).
REGIONAL TOP INDUSTRIES AND STEM JOBS

NURSES
Annual # of Openings: 174
Credential: Bachelor’s
Average Regional Wage: $78,861 → $116,736

CONSTRUCTION & TRADES PROFESSIONALS
Annual # of Openings: 530
Credential: Apprenticeship
Average Regional Wage: $46,415 → $92,147

K-12 TEACHERS
Annual # of Openings: 307
Credential: Bachelor’s
Average Regional Wage: $60,680

COMPUTER & IT PROFESSIONALS
Annual # of Openings: 94
Credential: Associate’s → Bachelor’s
Average Regional Wage: $48,475 → $103,933

CAREER CONNECTED LEARNING IN NORTH CENTRAL WASHINGTON

The Apple STEM Network is working to ensure that all students have pathways to living wage careers in STEM fields like agriculture, technology, manufacturing, energies, and healthcare. To successfully navigate these paths, students need opportunities to make connections to STEM professionals and build social capital through career connected learning opportunities like career fairs, internships, youth apprenticeships and other worksite learning experiences. The Apple STEM Network works through strategic partnerships with regional educators, NCESD, GWATA, the North Central WDC, WorkSource, Wenatchee Valley College, Big Bend Community College, AJAC, the Grant County Economic Development Council, the North Central Economic Development District, the Ports of Chelan, Douglas and Moses Lake, and many others in our four county region (Chelan, Douglas, Grant, and Okanogan) to expand these opportunities for students.

By 2030, Washington STEM and our statewide partners aim to triple the number of students of color, students from low-income and rural families, and young women who are on track to earn high-demand credentials and enter family-sustaining careers in the state.