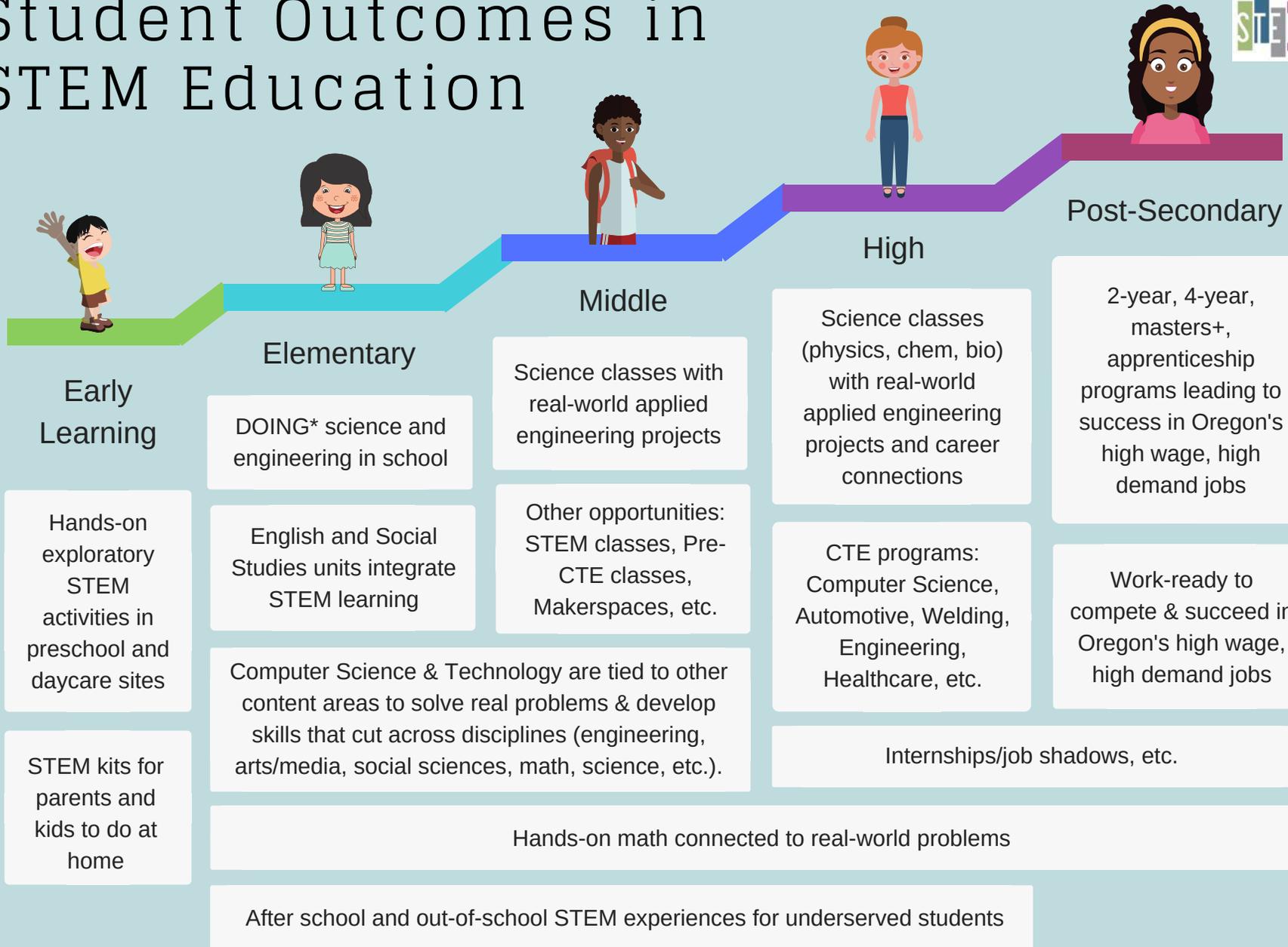


# Student Outcomes in STEM Education



## Early Learning

Hands-on exploratory STEM activities in preschool and daycare sites

STEM kits for parents and kids to do at home

## Elementary

DOING\* science and engineering in school

English and Social Studies units integrate STEM learning

Computer Science & Technology are tied to other content areas to solve real problems & develop skills that cut across disciplines (engineering, arts/media, social sciences, math, science, etc.).

## Middle

Science classes with real-world applied engineering projects

Other opportunities: STEM classes, Pre-CTE classes, Makerspaces, etc.

Hands-on math connected to real-world problems

After school and out-of-school STEM experiences for underserved students

## High

Science classes (physics, chem, bio) with real-world applied engineering projects and career connections

CTE programs: Computer Science, Automotive, Welding, Engineering, Healthcare, etc.

Internships/job shadows, etc.

## Post-Secondary

2-year, 4-year, masters+, apprenticeship programs leading to success in Oregon's high wage, high demand jobs

Work-ready to compete & succeed in Oregon's high wage, high demand jobs

STEM builds student competencies in: critical thinking & problem solving, reasoning & argumentation, creativity & innovation, personal & social responsibility, continuous learning & self-direction, perseverance & adaptability, collaboration & teamwork, and other workplace skills.

Students are ready to engage in a technology-driven, globally-connected society where citizens are called to think critically and work collaboratively to solve complex challenges.

**DOING\*** = Investigating, Building Models, Engineering Design, etc.

**STEM** = Science, Technology, Engineering & Math

**CTE** = Career & Technical Education