

Teaching and Learning with Technology

“We need technology in every classroom and in every student and teacher’s hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world.”
– David Warlick, Education, Technology Educator*

K-12: Putting Students on the Path to College and Career Success



Standards¹

“Today, our schools must prepare all students for college and careers — and do far more to personalize

instruction and employ the smart use of technology.”
— Arne Duncan, US Secretary of Education



Teachers²

21%

Believe they have the right level of technology

75%

Wish they had greater access to technology

Students³

Technology-based instruction can reduce the time students take to reach a learning objective by 30-80%.

WITHOUT TECH

WITH TECH

60 mins

30 mins

In College: Technology is a 21st Century "Must Have"



Device Ownership⁴

89% of students own a laptop, notebook, or chromebook

83% own a smartphone

11% own a hybrid or 2 in 1

45% own a tablet

Typical Types of Use⁵

70% of students use their laptop for coursework and research.

47% use laptops regularly to take notes in class.

85% of students reported that technology saves them time when studying.

77% of students report being required to use, at least one social media site for a class. The most popular accounts are YouTube (57%) Facebook (42%) and Twitter (25%).

+50% of college students said they preferred reading digital textbooks over print textbooks.

Learning Online⁶

77% of students have taken at least one online course

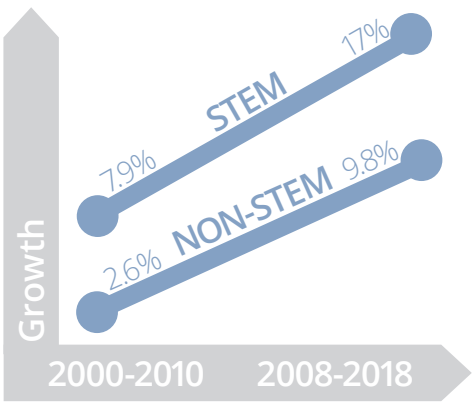
42% of students reported better grades in online courses vs. in-person courses

In Life: Technology Prepares Students for Their Next Job



Jobs of the Future⁷

Recent & Projected Job Growth



The Innovation Economy⁸

In 2013 an estimated **165,100** Americans worked in computer network support specialists **141,270** as computer network architects, and **78,020** as information security analysts
none of those occupations existed in 1999

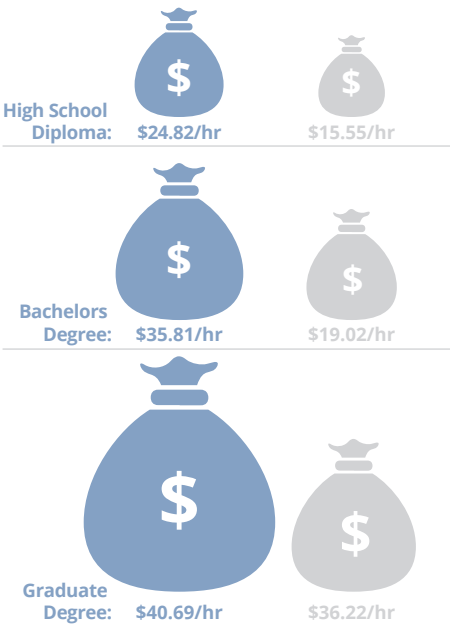


Salary⁹

Average Salaries (25 to 32 year olds)

- High school graduate: \$28,000
- Two-year degree: \$30,000
- Bachelors Degree: \$45,500
- Electrical Engineer: \$61,900
- Network Security Analyst: \$64,900
- Chemical Engineer: \$65,900
- Technology Analyst: \$67,500

Tech Job Non-Tech Job



STEM occupations are growing by 17% by 2020, compared to 9.8% growth in non-STEM occupations.

30% of students are looking for a technology related career.

*wcents.onlearning.us 1. ed.gov 2. pbs.org 3. fcc.gov 4. pearsoned.com 5. campustechnology.com, thedailybeast.com coursesmart.com 6. coursesmart.com 7. esa.gov 8. pewresearch.org 9. forbes.com, huffingtonpost.com, esa.gov