Research & 21st Digital Learning Center Stats and Facts

Research:
1. In the years between 1985 and 1997, Apple conducted a comprehensive research project to measure the impact of technology on teaching and learning. This study was called ACOT (Apple Classrooms of Tomorrow), and to this day, it still stands as one of the most important pieces of research about the impacts of technology on teaching and learning. The research was followed by Apple Classrooms of Tomorrow—Today (ACOT2) in 2008. The goal of ACOT2 is more targeted: to help high schools get closer to creating the kind of learning environment this generation of students needs, wants, and expects so they will stay in school.

Summarized below are a few of the major findings:
   • For high school students participating in the program, drop-out rates fell from almost 30 percent to nearly zero, while absenteeism dropped from 8 percent to 4 percent.
   • Teachers can and will use technology effectively when they are given effective professional development and the proper support.
   • Students became more excited about learning, which resulted in significantly improved grades.
   • Finally, students who participated in ACOT employed inquiry, collaboration, and problem-solving skills—without prompting.  
   (Source: Apple Classrooms of Tomorrow—Today, 2008)

2. A new study from Pew Research (Teens, Social Media & Technology Overview 2015, Lenhart, 2015) showed the following as it relates to technology and teens:
   • 94% of teens report going online daily (Lenhart, 2015)
   • African-American and Hispanic youth report more frequent internet use than white teens (Lenhart, 2015)
   • 79% of teens instant messag, prefer it over email (Lenhart, 2015)
   • Nearly 75% of teens own a cell phone (Lenhart, 2015)
   • Fully 87% of American teens ages 13 to 17 have or have access to a desktop or laptop computer, and 58% of teens have or have access to a tablet computer. (Lenhart, 2015)
   (Source: Teens, Social Media & Technology Overview 2015, Lenhart, 2015)

3. In 2010, Project RED conducted the first large-scale national study to identify and prioritize the factors that make some U.S. K-12 technology implementations perform dramatically better than others. Project RED found that:
   • Properly implemented educational technology can substantially improve student achievement.
   • Properly implemented educational technology can be revenue-positive at all levels—federal, state, and local.
   • Continuous access to a computing device for every student leads to increased academic achievement and financial benefits, especially when technology is properly implemented.
   (Source: Project RED Website)
Worldwide Resources:
Significant energy and resources has been placed into building an entire ecosystem around the creation and distribution of free education content. The goal is for meaningful learning to occur anytime, anywhere. iBooks Author and iTunes U—free apps—let educators and students create and publish engaging content, transforming both teaching and learning while reaching hundreds of millions of people globally. There are in excess of 750,000 discrete education content assets in iTunes U. Adding those not included in the iTunes U platform, the resources for quality education content could reach into the millions.
(Source: A.V.E. for Success)

Targeting High School:
The United States is currently the only industrialized country where students are less likely to graduate from high school than their parents. (A Quality High School Education for All; Addressing the Dropout Challenge in Our Community, 2010). Research shows that a lack of student engagement is predictive of dropping out even after controlling for academic achievement and student background. (Confronting the Graduation Rate Crisis, 2004). Moreover, a high school dropout will earn $200,000 less than a high school graduate over his lifetime and almost a million dollars less than a college graduate. (11 Facts of About High School Dropout Rate). Our focus is to keep high school students engaged by providing just-in-time, relevant digital resources to teachers to inspire their students and keep them engaged with relevant materials.

21st Digital Learning Center Resources:
According to the PARCC iTrax Survey conducted in Fall 2014, 80% of devices in the state can access iTunes U content online.

In total 1,135 digital resources have been consolidated into this collection and is expected to grow.

**English Language Arts:** 228 digital resources
- ELA 9-10 Course: 124 resources
- ELA 11-12 Course: 104 resources

**Math:** 510 digital resources
- Algebra 1: 162 resources
- Algebra II: 168 resources
- Geometry Course: 180 resources

**Science:** 277 digital resources
- Biology: 79 resources
- Chemistry: 89 resources
- Physics: 109 resources

**Social Studies** – 67 digital resources
- Economics: 67 resources