



Making Learning Mobile





Qualcomm® Wireless Reach™ and Kajeet® collaborated on the Making Learning Mobile (MLM) project to examine the effect of student access to always on, always-connected mobile devices and the resulting learning experiences both in and outside of school. Additionally, the project aimed to provide new research on how teachers integrate mobile learning within classroom instruction, specifically within underserved schools.

Challenge

- While the 2010 National Education Technology Plan provided a roadmap for schools and districts to leverage technology more effectively to transform education, many students have not been able to reap the academic benefits of digital learning because they lack access to mobile devices or the Internet outside of school.
- This challenge of inequity in educational opportunities is particularly acute in low-income communities. The lack of home access to digital tools and resources limits students' abilities to complete homework tasks and pursue self-directed learning exercises available through the Internet.
- Correspondingly, teachers say that students' lack of out of school access to these tools prevents them from fully integrating digital tools and resources into their classroom practices as well.
- Over 90 percent of the students who participated in MLM are from low-income households. Additionally, the Falconer school community is representative of many low-income communities affected by the homework gap due to their below average rates of home Internet access and students' lack of computing devices outside of school.

UNITED STATES

2014 Statistics*

Population (est.)	 318.9 million
Life Expectancy	 79.6 years
GDP Per Capita	 US\$52,800
Mobile Penetration	 104.8%

Solution

- The three-year project was implemented within Chicago Public Schools at Falconer Elementary School from fall 2012 through spring 2015 with impact reports published annually.
- 348 5th grade students and their classroom teachers were provided with ubiquitously connected 3G/4G Android tablets to use both at school and at home to support learning.
- The connection on the devices was managed using Kajeet's Sentinel® platform, which provides educators with the ability to designate which sites students had access to whether they were in or out of school.
- To support the transformation of the learning experience for these 5th graders, teachers were provided with additional professional development and coaching on effective ways to leverage the tablets in class and utilize their students' new out of school Internet access to extend the learning process.
- A key component of MLM was to help students develop familiarity with using digital tools for learning and digital citizenship skills.
- Both students and teachers had access to a wide range of mobile-enabled digital content as well as educationally appropriate social media tools, messaging and email services to facilitate enhanced learning, collaborations and communications between students and their teachers.

*Sources: CIA World Factbook (<https://www.cia.gov/library/publications/the-world-factbook>); Mobile penetration data provided by Ovum World Cellular Information Service and based on market intelligence.

Impact

Project Tomorrow®, a national education nonprofit, conducted the external evaluation on the MLM Project for all three years. Summative key findings from the project evaluations include:



Increased student engagement

76% of students reported greater interest in what they were learning and 62% participated more in classroom discussions. Students report using their connected tablets to complete homework assignments (68%), check on grades (98%), look up online information at home (84%), contribute to class blogs (74%), and email questions to teachers (84%) and classmates (79%) about schoolwork.



Developed college and career ready skills

The digital learning experiences helped the students develop important skills such as problem solving, communications, collaboration and digital citizenship. The students reported improved research skills (83%), improved technology skills (80%), more time spent on mastering a skill or learning something (75%), working with classmates more (73%), and the development of critical thinking skills (60%).



Teacher capacity building

The type of professional development provided to the teachers resulted in a more comprehensive integration of the tablets into daily classroom usage and a transformed learning environment for the students. Students reported using Google for Education applications (88%), playing educational games in class (86%), and creating multi-media presentations (86%).



Increased reading comprehension and writing fluency

The combination of the connected tablet, appropriate mobile-enabled content, and increased teacher skill with classroom usage resulted in students in one class reporting higher levels of reading (62%) and writing (60%), as well as, increased reading comprehension (70%) and writing fluency (70%).



Improved math test scores

The purposeful integration of the tablets within math instruction resulted in higher student achievement on the district's standardized assessment tests. When compared with five other district schools, serving a similar student population, Falconer showed the highest percentage of 5th graders scoring at or above the national average in math. 60% of students believe the tablets enabled better test scores and grades.

Program Stakeholders



Jan 9, 2017

Qualcomm® Wireless Reach™

Qualcomm believes access to advanced wireless technologies can improve people's lives. Qualcomm Wireless Reach is a strategic initiative that brings wireless technology to underserved communities globally. For the last ten years, Wireless Reach has invested in programs that foster entrepreneurship, aid in public safety, enhance the delivery of health care, enrich teaching and learning and improve environmental sustainability, impacting nearly 10 million beneficiaries.

Learn more at qualcomm.com/wirelessreach

@QCWirelessReach