

MOTO

There are now five billion wireless subscribers in the world, and of those, 1 billion are 3G subscribers, according to Wireless Intelligence.

By 2014, there will be 2.8 billion 3G subscribers. (3G refers to a third-generation cellular network, which is capable of streaming video and other bandwidth-intensive applications wirelessly. Already, some providers are rolling out 4G services that promise even faster download speeds and more capabilities.)

As mobile learning has come to mean something very different than it once did, the very definition of a mobile device may be changing. Mark Anderson of Strategic News Service, a predictive newsletter covering the computing and telecommunications industries, says there are three categories of today's popular computing devices: the laptop, the carry-along (which includes netbooks, iPads, and other slates), and the mobile.

As one educator said at a recent conference: Devices like laptops or iPads might never leave the classroom. How is that mobile? The promise of mobile learning, some believe, comes from the true capacity for anytime, anywhere learning—or, as Soloway puts it, “everywhere, all-the-time learning.”

TRUE ANYTIME, ANYWHERE LEARNING

“Smart phones rival laptops and the computers of just a few years ago, and they're much more affordable,” says Michael Flood, education solutions practice manager at AT&T. “The ultimate question, and goal, is how we can get devices—with computing power and access to the information that will help them learn more effectively—into the hands of students.”

Laptops and netbooks, useful as they have been, are not with students all the time. “But as we move toward getting students engaged with other students and teachers outside the classroom, they need their devices with them anytime, anywhere,” Flood says. “They won't have a netbook in the lunch line, but they will have a phone, and they will pop it open to seek an answer to a question.”

Students with smart phones, 3G (or 4G) access, and a data plan can use the device on the school bus to look up information for a report on their way home in the afternoon. They can do their research or "Homework" ANYWHERE. That's the real power of mobile learning

Having a one-to-one ratio of mobile devices to students is a key to moving education forward, Soloway believes.

"Up to now, schools have spent billions of dollars on technology, and the result is zero," he says bluntly. The question is why. "First, we've used computers as supplements to existing curriculum. We've taken the existing pedagogy, the existing curriculum, and added some computers when we could. Teachers couldn't count on the devices because they didn't have enough of them, so the best they could do was supplemental. And supplemental use is just that. It's not enough to move the needle.

Personalize learning for all students by frequent, appropriate use of technology in all classrooms and other learning places. Technology is no longer a supplement. It's an integral part of students' lives outside of the classroom and is most effective when it becomes an integral part of the core curriculum.

Make professional learning and technology training a priority for administrators and teachers. Well-trained teachers supported by a principal committed to change are key to using technology to its fullest potential. To truly transform learning educators must be able to confidently integrate technologies into their teaching and assessments.

Use technologies such as social media, games and simulations to engage students and encourage collaboration. Today's students have been communicating and learning on technology platforms as long as they can remember. Leverage the extraordinary power of technology to connect with students, excite them about learning, and empower them to succeed.

Use online assessments weekly to gauge student learning and then tailor instruction for personalized learning experiences. Technology can assess each student's learning progress faster to help teachers guide students more effectively. Use this data to determine instruction, remediation, and accelerated learning strategies for each student.

Use technology applications daily in intervention programs such as Title I, special education (IDEA), Reading Intervention, and English Language Learner programs Research shows that the most challenged students are the ones who respond most and achieve the most gains when technology is used daily to personalize instruction and improve skills.

"It is no longer good enough for schools to send out students who know how to do what they were taught. ie; modern world needs citizens who can do what they were not taught. We call this 'learning learning.'"

SOME INTERESTING STATS

A student who graduates from high school and then graduates from college generates \$448,000 to \$874,000 in increased tax revenues compared with a dropout over a career of 40 years.

Mobile learning decreases dropout ratio significantly...because it allows one to learn at one's own pace/...

The financial impact for students who would normally drop out but because of independent learning practices introduced through mobile learning complete college will then earn income over 40 years add almost 4 trillion dollars in tax revenue.

Students who have participated in 1:1 computing report higher achievement and increased engagement, according to findings of studies published in a special issue of the Journal of Technology, Learning and Assessment, published by Boston College's Lynch School of Education.

The journal's January 2010 edition represents the first-ever collection of peer-reviewed research articles examining the impacts of providing every teacher and student their own laptop computer in school — typically known as "1:1 computing."

"This new collection of articles brings together some of the best evidence to date on the implementation and impacts of 1:1 computing," said Boston College Assistant Professor of Education Laura M. O'Dwyer, a co-editor of the journal, which is housed jointly in the Technology and Assessment Study Collaborative (inTASC) and the Center for the Study of Testing, Evaluation and Educational Policy (CSTEPP) at Boston College.

The journal includes co-editor and Lynch School researcher Damian Bebell's evaluation of a pilot program in Massachusetts' Berkshire County. Bebell found the Berkshire Wireless Learning Initiative produced improved performance in English and writing, though results for math achievement were flat. Overwhelmingly, the laptops got students excited about school. Bebell said that across all of the studies contained in the journal, one common link is clear: the value of teachers committed to making 1:1 computing work.

"One of the most salient findings was the critical role that teachers played in the success of each 1:1 program," Bebell said. Additional factors critical to student success across 1:1 technology settings included:

- Having a strong commitment from school leadership
- Developing consistent and supportive administrative policies
- Creating professional development opportunities for teachers, particularly the sharing of best practices

All of the studies that examined the impact of 1:1 computing on student achievement found that students in the 1:1 settings outperformed their traditional classroom peers on

English/Language Arts standardized tests by a statistically significant margin. Study authors also reported on evidence of increased student motivation and engagement, as well as changes in teachers' instructional practices.

REAL TIME MOTO SOCIETY

Not everyone has a computer....but almost everyone has a mobile device They are inexpensive devices...smart phones can be acquired for 39.00. Perhaps an addition to financial aid required funding. Perhaps each college can have a contract with one of the many large carriers that covers all student mobile outreach needs from teacher to class participants

A smartphone is a mobile phone that offers more advanced computing ability and connectivity than a contemporary feature phone. Smartphones and feature phones may be thought of as handheld computers integrated with a mobile telephone, but while most feature phones are able to run applications based on platforms such as Java ME, a smartphone allows the user to run and multitask applications that are native to the underlying hardware.

According to an Olswang report in early 2011, smartphones are experiencing accelerating rates of adoption: 22% of UK consumers already have a smartphone, with this percentage rising to 31% amongst 24-35 year olds

Growth in demand for advanced mobile devices boasting powerful processors, abundant memory, larger screens, and open operating systems has outpaced the rest of the mobile phone market for several years. According to a study by ComScore, over 45.5 million people in the United States owned smartphones in 2010 out of 234 million total subscribers.

Where should American education fall with a policy on Mobile Learning Devices. Should it follow the model of outstanding educators who are proven learners? That would involve the ubiquitous use of learning technologies. The other option: Should it follow the model of Middle Eastern countries attempting to keep their populations in the centuries of the past? Blocking the internet and controlling the use of Mobile Learning Devices. Should American Educators resist the advent of learning technologies, or should they embrace it. Embracing it will require Professional Development. Rejecting it requires absolutely nothing.

http://www.miubit.com/eng/03_pro/pro_01.php

The promise of ubiquitous technology is full personalization of the educational experience, which cannot be provided by the traditional combination of textbooks, and teachers who lecture to the whole class. The only way to leave no children behind is to engage them exactly where they are, enabling them to work at their individual paces -- including accelerated paces -- by providing the required tools, knowledge, and resources in the language, complexity, and capacity that are most beneficial.

Other resources:

www.vcpiratesoup.com

LMS: Learning Management System

<http://www.niemanlab.org/2009/03/microsofts-vision-ubiquitous-display-technology/>

<http://www.istartedsomething.com/20090228/microsoft-office-labs-vision-2019-video/>

http://www.platformrondmediawijsheid.be/new/index_flash.jsp?v=487#/487

http://www.platformrondmediawijsheid.be/new/index_flash.jsp?v=487#/317

www.khanacademy.org

www.ted.com

<http://www.istartedsomething.com/20090228/microsoft-office-labs-vision-2019-video/>

<http://thejournal.com/articles/2011/05/17/6-technologies-that-will-change-education.aspx>

<http://www.nmc.org/>