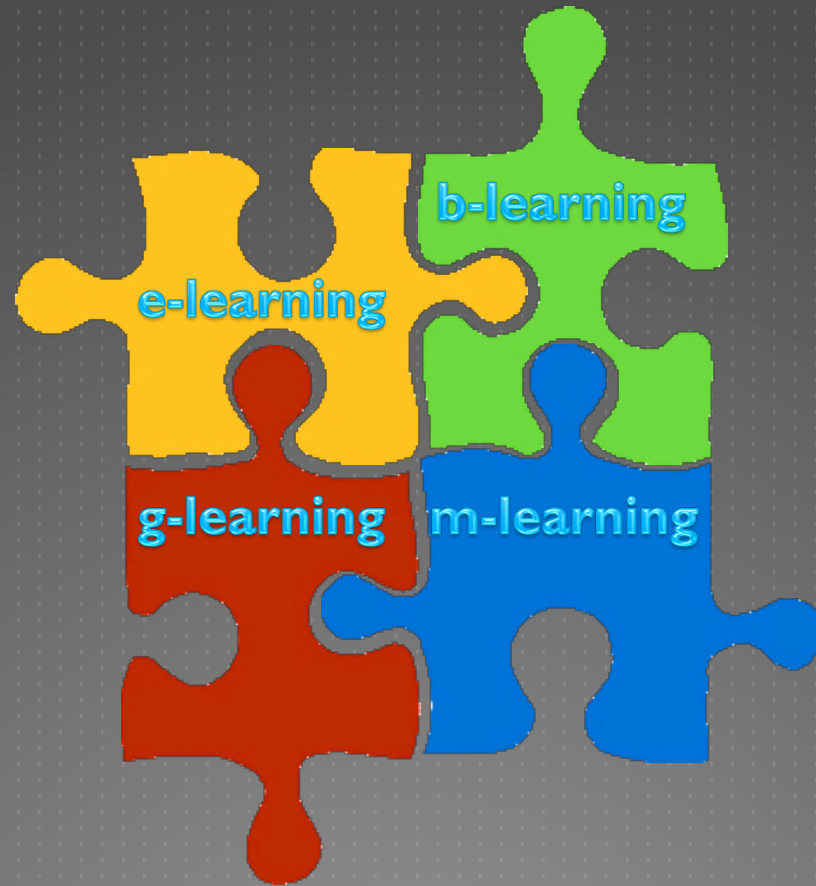


DIGITAL EDUCATION

Are we really taking
advantage of its benefits?



THE DIGITAL EDUCATION PUZZLE



THE DIGITAL EDUCATION PUZZLE

**what are we speaking
about when we say
digital education?**

REVOLUTIONIZE EDUCATION

- ▶ “Every education system in the world is being reformed at the moment and it's not enough. Reform is no use anymore, because that's simply improving a broken model. What we need is not evolution, but a revolution in education. This has to be transformed into something else.”
- ▶ “Digital technologies combined with the extraordinary talents of teachers, provide an opportunity to revolutionize education.”



REVOLUTIONIZE EDUCATION



**GREAT
FOR
SOCKS**



**BAD
FOR
EDUCATION**

WHAT DO WE MEAN WITH BLENDED LEARNING?

- ▶ Are we meaning a certain percentage of face to face education and another percentage of distance education?
- ▶ Or are we meaning to personalize the teaching and learning process by using the appropriate technologies for each particular situation?



LET'S GO BACK TO DIGITAL EDUCATION

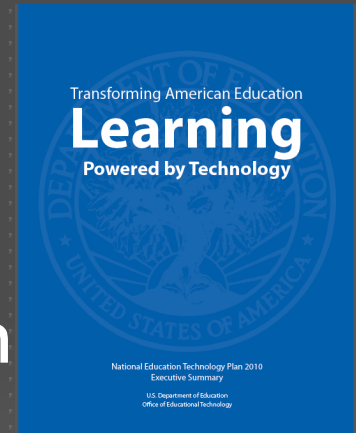


Digital education is not just using appropriate technologies, **but using them in an appropriate way**

DIGITAL EDUCATION

- ▶ How can we take advantage of its benefits?
 - ▶ Learning: Engage and Empower
 - ▶ Assessment: Measure What Matters
 - ▶ Teaching: Prepare and Connect
 - ▶ Infrastructure: Access and Enable
 - ▶ Productivity: Redesign and Transform

* Source: Learning Powered by Technology – NET Plan 2010



DIGITAL EDUCATION



Horizon Project

Technology Outlook

STEM+ Education 2013-2018

An NMC Horizon Project Sector Analysis

An NMC Horizon Project Sector Analysis

STEM+ Education 2013-2018

TOP TEN MOST SIGNIFICANT CHALLENGES

- ▶ **The demand for personalized learning is not adequately supported by current technology or practices**
- ▶ **Appropriate metrics of evaluation lag the emergence of new scholarly forms of authoring, publishing, and researching**
- ▶ **Most academics are not using new and compelling technologies for learning and teaching, nor for organizing their own research**
- ▶ **Faculty training still does not acknowledge the fact that digital media literacy continues its rise in importance as a key skill in every STEM discipline and profession**
- ▶ **Cross-institution authentication and detailed access policies are needed to allow sharing of online experiments among institutions**

TOP TEN MOST SIGNIFICANT CHALLENGES

- ▶ **New models of education are bringing unprecedented competition to the traditional models of higher education**
- ▶ **MOOCs need to be rethought as open ongoing connectivist communities for open teaching and open research**
- ▶ **There is still much to be done before we are teaching STEM not as a set of facts, but instead as a way of knowing**
- ▶ **Our organizations are not set up to promote innovation in teaching**
- ▶ **Math needs to be redesigned, and teaching coding should be a major part of that new learning course**

FINAL THOUGHTS

- ▶ Technology is technology only for people who are born before it was invented (Alan Kay)
- ▶ That's why we don't argue about whether the piano is corrupting music with technology (Seymour Papert)
- ▶ We should change the education system to make it relevant to our students. (Don Tapscott)

