Outline

• Part I: Current state of mobile learning
• Part II: The Future: the next 15 years
  – Education for All (EFA)
• Part III: Grand Challenges
  – What do you think is a grand challenge? #mlw2013
• Q&A (with twitter backchannel)
Part I
CoMo: Supporting collaborative group work using mobile phones

Social media:

Supporting supervision at a distance

(Winters et al., 2008-2010)
One Laptop Per Child (OLPC)
The present

• Formal Education
  – 1:1
  – Bring your own device (BYOD)

• Informal Education
  – Skills-based
  – Nokia Life Tools

• Seamless Learning
  – Across formal/informal

• Technology
  – Digital textbooks, e-readers, mobile applications
Rationale

• **Rationale**: Despite 15+ years of research the impact of mobile learning has not been significant

• **Aim**: Better engage with policymakers: A resource to promote the use of mobile technologies for learning in the long-term and at scale

• **Key underpinning**: How mobile learning interventions intersect with social, cultural and commercial factors (Winters, 2013)
Part II
The future

• MOOCs & Experiential learning
  – Integration of *in-situ* learning
  – Capture practice data and share/discuss
• Authentic and personalized learning
  – Real-time analysis of new kinds of data sets
• New forms of (formative) assessment
  – How learning practices are recorded
• Mobile programming
  – AppsForGood, CoderDojo, Raspberry Pi, AkiraChix
• Global social interaction
  – Build on connected classrooms
ML & Education for All (EFA)

• Remit: provide quality basic education for all children, youth and adults (UNESCO, 2000)

• Themes which ML can help address
  – Access
  – Life Skills
  – Gender equality
  – Learning outcomes

• Where are we now & where next?
Access

• Where are we now?
  – Access defined as access to content

• What do we need to do in the next 15 years?
  – Access as sustained and developmental learning over time
  – Mobile learning programmes co-designed with communities to address their needs
  – Balance between low-end and high-end mobiles
Life Skills

• Where are we now?
  – Strong, scalable projects (e.g. BBC Janala)

• What do we need to do in the next 15 years?
  – Strong pedagogical design that leverages the functionality of powerful mobile technologies
  – UX skills
miLexicon Design (Underwood et al, 2012)

Capture of language interactions & Context
Notes, images, sounds, where & when

Collected language items
My Resources (PLE)

Structured language item record

Interaction history

Send item to people (PLN)
Gender equality

• Where are we now?
  – Strong focus on marginalised, e.g. Women receiving Medicaid (Text4Baby, 2011)
  – Multi-sector partnerships

• What do we need to do in the next 15 years?
  – Better understanding of how poverty intersects with gendered inequalities in the lives of the most marginalised
  – Sustainable models should not depend on these communities’ spending
Learning outcomes

• Where are we now?
  – Complexities of gathering data related to determining learning outcomes (Vavoula & Sharples, 2009)

• What do we need to do in the next 15 years?
  – More research needed on associating mobile learning practices with learning outcomes
  – Collecting data that supports formative assessment
  – Will require a cultural shift (away from rote learning)
Grand Challenges

• Build strong multi-sector partnerships
• Link mobile learning analytics to learning theory
• Train teachers in mobile learning design
• Promote mobile learning for all
Multi-sector partnerships

• Criticism: too many pilots!
• Successes: Nokia MoMath, Text4Baby & Google SMS-Tips
• Profitability should not be a determinant of investment, quality of educational opportunity should
Mobile learning analytics

• Driver for developing better understanding of how people learn
  – Ethical issues re: collection & analysis of large datasets
  – Methods of analysis linked to learning practices
Teacher training in ML design

- Lack of training currently
- Training should focus on deepening teachers’ understanding of the complex relationships between mobile technology, pedagogy, design and implementation
Mobile learning for all

- Address the needs of all learning abilities
- Need interventions that address the EFA goals directly
- Equity of opportunity should not be eclipsed by a market-driven agenda
- How to cater to the learning needs of those who don’t fit into a market-driven niche?
- Bring developed and developing countries’ expertise & skills together for mutual benefit
Conclusion

• Enable mobile learning for all through the equity of provision and opportunity

• Approach
  – Mobile learning as a diverse ecosystem that relies on the cooperation of various entities both public and private
  – Significantly increasing practitioner training on the design of mobile learning interventions
  – Build upon and drive future technical innovation
Thank you!

• n.winters@ioe.ac.uk
• http://www.lkl.ac.uk/niall
• @nwin

• http://mlearningafrica.blogspot.com