The 8 Essentials for Success in Mobile Learning

Chris Dede
Harvard University

Julie Evans
Project Tomorrow

With special commentary from Nancy Hayashi
San Marcos Unified School District
Use your devices to tweet your ideas or comments during today’s session:

#8essentialsML  #ISTE15
@Chrs_Dede
@JulieEvans_PT
@hayashisays
Paper includes:
• Lessons learned from 7 mobile learning projects from around the globe
Introducing the 8 Essentials for Mobile Learning

1. Purposeful planning for mobile device usage
2. Leveraging mobile-enabled content & curriculum
3. Understanding the power of Internet access
4. Preparing educators effectively
5. Securing leadership buy-in
6. Building personal learner efficacy and capacity for self-directed learning
7. Measuring project results with meaningful metrics
8. Creating a sustainable and scalable ecosystem
Today’s discussion:

- Why is mobile learning planning more important than ever?
- Introduction to a new resource/report

Part 1: Quick overview of 4 essentials
  - With examples from US projects
  - Selected Speak Up data bits to support value

Part 2: Essentials in Action
  - Examination of EcoMOBILE Project
  - Insights from Alvin Dunn Mobile Project

Part 3: Creating scalable & sustainable ecosystem

- Your comments/thoughts/questions

Be part of the discussion
Why is mobile learning planning more important than ever?
3 Contexts for Learning

- Classrooms
  - Presentation and discussion

- Richly Contextualized Real World Learning
  - Internships, apprenticeships

- Learning Communities
  - Interpretation and transfer

face to face, virtual, blended
Community: Social Media

- **Sharing**
  - Social Bookmarking
  - Photo/Video Sharing
  - Social Networking
  - Writers’ Workshops and Fanfiction

- **Thinking**
  - Blogs
  - Podcasts
  - Online Discussion Forums
  - Twitter

- **Co–Creating**
  - Wikis/Collaborative File Creation
  - Mashups/Collective Media Creation
  - Collaborative Social Change Communities
THE CONVERSATION PRISM
Brought to you by
Brian Solis & JESS3

For more information
check out conversationprism.com
1. Purposeful planning for mobile device usage
2. Preparing educators effectively
3. Securing leadership buy-in
4. Measuring project results with meaningful metrics

With examples from US projects
The 8 Essentials for Mobile Learning:

1. Purposeful planning for device usage
The 8 Essentials for Mobile Learning:

1. Purposeful planning for device usage

It is all about asking the right questions:

• What are the learning goals – how do they relate to the learner and the teacher?
• What instructional strategies will support goals?
• Are the right conditions in place for success?
• How will we measure impact?
• How will this effort be sustained?
• Do all key stakeholders have a voice?
The 8 Essentials for Mobile Learning:

1. Purposeful planning for device usage

Example: Onslow County Schools’ Mobile Learning Initiative

Planning started with key goals:

- Improving math literacy for all
- Change students’ perceptions around math abilities
- Increasing out of school access to learning resources
- Stimulating changes in teacher practice
The 8 Essentials for Mobile Learning:

Purposeful planning for device usage

Speak Up data byte to support this essential:

District administrators (53%) and technology leaders (59%) say that strategic planning for a digital learning initiative like mobile learning is key component for success
The 8 Essentials for Mobile Learning:

2. Teacher preparation for mlearning
The 8 Essentials for Mobile Learning:

2 Teacher preparation for mlearning

Increasing recognition of value of connected learning but change process is challenging

Real mobile learning integration process is 3 years:

Year 1: Awareness
Year 2: Adoption
Year 3: Adaptation

But how to move from one level to another?
The 8 Essentials for Mobile Learning:

2. Teacher preparation for mlearning

Example: Making Learning Mobile in Chicago

Year 2 and 3 strategies:

- JIT mentoring and coaching
- In class activities and support
- Targeted applications
- Traditional conferences and skill development

Indicator of maturation at work: migration from passive approach to PD to active, self-directed learning
The 8 Essentials for Mobile Learning:

2 Teacher preparation for mlearning

Source: US National Education Technology Plan, 2010
“Deeper Learning”

- Case–based learning
- Collaborative learning
- Apprenticeships
- Self–directed, life–wide learning
- Learning for transfer
- Interdisciplinary studies
- Diagnostic assessments
Deeper learning is an instructional strategy that can help students master skills for success in the 21st century. Technology is a powerful way of implementing effective deeper learning.

http://www.studentsatthecenter.org/topics/role-digital-technologies-deeper-learning
Core Principles of Professional Development

- Teachers teach as they were taught.

- The important issue is not technology usage, but changes in content, pedagogy, assessment, and learning outside of school.

- Continuous peer learning is the best strategy for long-term improvement.
Professional Development: Communities of “Unlearning”

- Developing fluency in using emerging interactive media

- Complementing presentational instruction with collaborative inquiry-based learning

- **Unlearning** almost unconscious assumptions and beliefs and values about the nature of teaching, learning, and schooling
The 8 Essentials for Mobile Learning:

Teacher preparation for mlearning

Speak Up data to support this essential:

How are teachers **self-directing their own PD**?

- Watching videos, listening to podcasts
- Sourcing ideas via Pinterest
- Using mobile apps
- Participating in webinars
- Taking online classes
- Using social networks and Twitter to get JIT info and support
The 8 Essentials for Mobile Learning:

3. Leadership buy-in
The 8 Essentials for Mobile Learning:

3. Leadership buy-in

Leaders enable the conditions for success by:

- Envisioning applications for mobile
- Displacing cherished misconceptions
- Inspiring others to act on faith
- Support new ideas and solutions

Key point: #1 cause of failure in mobile learning?

Lack of leadership buy-in
The 8 Essentials for Mobile Learning:

Leadership buy-in

Example: EDC Mobile Online PD for Educators

Boston Public Schools – summer course for principals

• Using mobiles to embed digital tools within school communities of practice
• Ah-hah moments for the principals
  o “School leaders are the catalyst for change”
  o “Set expectations and lead by example”
  o “Be personally familiar with tools and adoption process”
The 8 Essentials for Mobile Learning:

3 Leadership buy-in

Speak Up data to support this essential:

District administrators (40%) say enhancing administrators’ leadership skills is a key component in driving greater student achievement

- But administrators need specific leadership development to support mlearning including how to effectively evaluate teachers in that process
The 8 Essentials for Mobile Learning:

3 Leadership buy-in

Speak Up data to support this essential:

How important is it for every student to be able to use a mobile device to support schoolwork?

Yes – 84% of District Administrators

Yes – 86% of School Site Principals
The 8 Essentials for Mobile Learning:

4 Metrics for evaluation
Today's children can meet future challenges if their schooling and informal learning activities prepare them for adult roles as citizens, employees, managers, parents, volunteers, and entrepreneurs.
### Dimensions of Advanced Knowledge and Skills

<table>
<thead>
<tr>
<th>Cognitive Outcomes</th>
<th>Intrapersonal Outcomes</th>
<th>Interpersonal Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive processes and strategies</td>
<td>Intellectual Openness</td>
<td>Teamwork and Collaboration</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Work Ethic and Conscientiousness</td>
<td>Leadership</td>
</tr>
<tr>
<td>Creativity</td>
<td>Positive Core Self-Evaluation</td>
<td>Communication</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>Metacognition</td>
<td>Responsibility</td>
</tr>
<tr>
<td>Information Literacy</td>
<td>Flexibility</td>
<td>Conflict Resolution</td>
</tr>
<tr>
<td>Reasoning</td>
<td>Initiative</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>Appreciation of Diversity</td>
<td></td>
</tr>
</tbody>
</table>
The 8 Essentials for Mobile Learning:

4

Metrics for evaluation

Speak Up data to support this essential:

- Student engagement (71%)
- Classroom observations (58%)
- Teacher buy-in (58%)
- Student feedback (54%)
- Teacher feedback (53%)
- Student achievement results (52%)
- Student skill development (45%)
- Teacher interest in more PD (44%)

What administrators say is best way to evaluate digital learning impact
Essentials for Mobile Learning in Action

5. Leveraging mobile-enabled content & curriculum
6. Understanding the power of Internet access
7. Building personal learner efficacy and capacity for self-directed learning

1. EcoMOBILE Augmented Reality Project
2. Alvin Dunn Elementary School Project
The 8 Essentials for Mobile Learning:

5 Mobile empowered content and curriculum

Importance of mobile empowered content

Adaptive qualities inherent in mobile learning

Ability to address multiple learning goals
The 8 Essentials for Mobile Learning:

6. **Power of Internet access**

The new mantra in education:

**Internet access = educational opportunity equity**

Value of anytime, anywhere access to support unintentional, informal learning

Home access challenges – especially with access contention

Power of “personal” Internet access
The 8 Essentials for Mobile Learning:

Creating self-directed learners

Goal should be to leverage mobiles to create more **personalized learning in the classroom** and support the development of a **life-long learning ethos beyond the classroom walls**

*Think:*
- Engagement
- Grit / Tenacity
- Self-efficacy for learning
Augmenting Real World Ecosystems
http://ecomobile.gse.harvard.edu
GoPro Cameras Capture EcoMOBILE Experience
In the future, your mobile phone will act as your digital "6th sense". It will help you find local content and services, learn what you like, filter out the irrelevant, know you and what is around you, discover things relevant to you, interact with networks, and sense local content and services.
The 8 Essentials for Mobile Learning:

5. Mobile empowered content and curriculum

6. Power of Internet access

7. Creating self-directed learners
Mobile Learning at Alvin Dunn Elementary School

Special Qualcomm Education project to address the “homework gap”

- 6th graders provided with LTE tablets to use at school and at home
- Teachers incorporated tablets into instruction and research projects
- Evaluation study completed by Project Tomorrow

- Increased student self-efficacy and engagement
- Teachers more likely to assign digital homework
- Parents link tablet usage with global skills
8. How do we create a sustainable and scalable ecosystem?

Share your thoughts
Use your devices to tweet your ideas or comments:

#8essentialsML
#ISTE15
@Chrs_Dede
@JulieEvans_PT
The 8 Essentials for Mobile Learning:

8 Sustaining and scaling innovation

Scaling: value of pilots vs. “instant” school/district wide implementations

• Is sustainability built into your project plan?

• But how do we build in sustainability with limited product life spans?

• Do we have a shared vision for success?
The 8 Essentials for Mobile Learning *in review*

1. Purposeful **planning** for mobile device usage
2. Leveraging **mobile-enabled content** & curriculum
3. Understanding the power of **Internet access**
4. **Preparing educators** effectively
5. Securing **leadership buy-in**
6. Building personal learner efficacy and capacity for **self-directed learning**
7. Measuring project results with **meaningful metrics**
8. Creating a **sustainable and scalable ecosystem**
www.qualcomm.com/company/wireless-reach/resources

- Downloadable report
- Other resources
Your comments/thoughts/questions
Thank you for your participation today in this discussion.

Chris Dede  
Harvard University  
chris_dede@gse.harvard.edu  
@chrs_dede

Julie Evans  
Project Tomorrow  
jevans@tomorrow.org  
@JulieEvans_PT
Tell us what you think!

There are two ways to provide feedback on this session:

- ISTE 2015 mobile app
- isteconference.org/feedback