Mobiles in secondary schools

Elizabeth Hartnell-Young
Learning Sciences Research Institute
University of Nottingham

• Funded by Becta & supported by Nokia and Vodafone
• Working with teacher-researchers in three sites
• Introducing the legitimate use of mobile phones in classes
• Conducting observations, surveys, interviews, and collecting school-and student-generated products and documents
Handhelds in Initial Teacher Training

Jocelyn Wishart
Graduate School of Education
University of Bristol

• Teachers prefer the personal
• Technology at their side and not in their face
• Key applications:
  • Diary scheduling, class admin and personal note-taking
  • Anytime, anywhere internet access

https://www.bris.ac.uk/education/research/sites/pda
mLearning @ the Corvinus University of Budapest

Gábor Kismihók

Corvinus University of Budapest
Corvinno Technology Transfer

http://informatika.uni-corvinus.hu
www.corvinno.com

- mobile learning services for up to 3000 students
- mobilised LMS – mobilised content
- ontology based adaptive tests
- collaborative functions
- participation in several European research projects with Ericsson
  *(mlearning3, socrates, impact, NEW: Contsens)*
Moblog: Learn culture through mobile group blogging

Yinjuan Shao (PhD student)
Learning Sciences Research Institute
University of Nottingham

• Online community for enculturation formed by international students as culture learners
• Learning in daily life: evidences collection and experiences sharing, ‘capture the moment’ ‘on the spot’, anytime, anywhere
• Personal learner contributes to the reflective learning resources: Self-reflection and group reflection
Location-based games for field activities

Peter Lonsdale, PhD student
Learning Sciences Research Institute
University of Nottingham

- PDAs with GPS+WiFi allow interactive games to be played in outdoor spaces
- Software toolkit for building and deploying location-based games
- Investigation of game mechanics to scaffold learning activities:
  - Competition/opposition as motivators
  - Game goals as task structure
PI: Personal Inquiry

Mike Sharples
Learning Sciences Research Institute
University of Nottingham

• Partnership between Nottingham and Open University, UK
• Support for inquiry science learning between formal and informal settings
• In classroom: children explore issues and planning inquiries
• Outside class: carry out science inquiries guided by personal technology
• Back in classroom: children visualise and share results
SEMA ('speak out' in Kiswahili)
has trained:
16,500 teachers
from 3500 schools
in 13 districts across Kenya

John Traxler, University of Wolverhampton

- The image shows Tutors and Quality Assurance Officers undergoing SMS initial training. They are responsible for conducting cascade training to Head Teachers and others in their zones.
Mobile multimedia learning objects

The design, development and evaluation of multimedia learning objects for mobiles

Contact: john.cook@londonmet.ac.uk
Information Presentation for Racing Sailors

Russell Beale
Advanced Interaction Group
University of Birmingham, UK

- investigation into how racing sailors improve performance
- supporting them with mobile and embedded technologies
- mobile systems less good; embedded systems preferred
- basic data presentation preferred over processed representations, as raw information necessary for learning
- http://www.cs.bham.ac.uk/research/hci/
Context-aware architectures for mobile systems

Russell Beale
Advanced Interaction Group
University of Birmingham, UK

• Location (ultrasound) + previous expertise (user profile) + exposure (time looking at painting) combined to provide contextual input to handheld mobile guide in museum
• Better than kiosk or paper-based presentation
• Can manipulate people’s path through museum
• Linkage between virtual world and physical world intuitive but strong
• http://www.cs.bham.ac.uk/research/hci/
Learning through mobile blogging supported portfolios

Russell Beale, Nick Shrine
Advanced Interaction Group
University of Birmingham, UK

Antti Syvänan,
Dept of Education
University of Tampere, Finland

- Student teachers given Nokia communicators with customised mobile blogging software for easy, anytime creation of multimedia portfolios
- Supports their in-place learning and encourages reflection
- Finnish study, to be replicated in UK as well
- http://www.cs.bham.ac.uk/research/hci/
Social lubrication: bluedating

Russell Beale
Advanced Interaction Group
University of Birmingham, UK

• Mobile device used to communicate social interests, requests for a date, etc. to other devices
• Users with similar interests pulled together by unobtrusive technology
• Subverted by user groups and altered to share jokes and comments
  • Still performs primary function of aiding group cohesion
• http://www.cs.bham.ac.uk/research/hci/
Flex-Learn project

Dr. Lisa Gjedde
Danish School of Education
Aarhus University
lg@dpu.dk

• Exploring the potentials of Mobile video-based learning for truckdrivers
• Convergence of tools and learning resources on a dual pc/mobile platform
• Multimodal learning resources addressing learners with special needs
• Contextualized on-demand learning in a life-long perspective
Mobile Learning Environments

Dr. Lisa Gjedde
Danish School of Education
Aarhus University
lg@dpu.dk

• The Mobile Learning Environments project will explore the possible uses of mobile or pervasive learning games in schools and educational environments of today and tomorrow. By obtaining knowledge from situated tests, we aim at delivering recommendations about platforms, applications and business development.

• http://www.nordicinnovation.net/prosjekt.cfm?id=1-4415-240
ENLACE Project

M. F. Verdejo
C. Celorrio
E. J. Lorenzo
LTCS Group
UNED, Spain

• Explore the design of an innovative educational environment
  • Inquiry and collaborative long-term activities
  • Integration across the curriculum
• Physical exploration of special interest sites, analytical reflection at school
  • Sustain data and tool interoperability
  • Continuum between formal and informal settings
    (classroom, computer lab, field trip, home, exploratorium)

http://enlace.uned.es
M-learning in schools: mobile technologies and cultural ecology

Norbert Pachler
WLE Centre for Excellence
Institute of Education, London

Ben Bachmair, Universität Kassel
John Cook, London Met
Gunther Kress, Institute of Education

- theory building based on an inter-disciplinary approach (cultural studies, sociology, semiotics, pedagogy and educational technology)
- topography of an ecological approach to m-learning around cultural transformation, multimodal, connected and situated meaning-making with ubiquitous technologies
- considers implications for school culture, organisation as well as teacher education and development
- supported by key examples of practice

http://www.wlecentre.ac.uk
Ericsson Education

Bernadette Simpson

The role of mobile learning in European Education

- development of a policy document on the role of mobile learning.
- an overview of the role of mobile learning in the 25 states.
- pedagogical aspects of mobile learning.
- adapting ILT and e-learning materials to mobile learning.
- development, adaptation, teaching and evaluation of mobile learning courseware for real students.
Mobile DNA (Digital Narrative Approach)

Inmaculada Arnedillo-Sánchez
Centre for Research in IT in Education
Trinity College Dublin

- Supporting collaboration & creativity in the creation of mobile DNs
- ‘Parallelise’ Filming & Editing using mobile phones & MMS
- From story generation to final production in 3 hours
- Three-phase process:
  - Story generation (indoors)
  - Filming & Editing (out & indoors)
  - Final production & Screening (out & indoors)
DNT - An MCSCL Toolkit for Digital Narrative Production

Peter Byrne
CRITE
Schools of Education and Computer Science & Statistics
Trinity College Dublin

Shared Workspaces
- Concept-map
- Storyboard
- Timeline

Mobile Client
- Media Capture
- View / Edit Shared Workspaces

Communication
- Chat Client
- MMS / SMS / Bluetooth

Scaffolding
- Wizard
- Customisable Templates

Technical
- Transparent Networking Middleware
- File Management
- Service Oriented Architecture
SMART - Stop-Motion Animation and Review Tool

Peter Byrne
CRITE
Schools of Education and Computer Science & Statistics
Trinity College Dublin

- Create animations
  - Capture Images
  - Edit Filmstrip/Timeline
  - Play/view animation
  - All on the mobile phone

- Enables a C4 approach to Mobile learning
  - Constructivism
  - Constructionism
  - Contextualisation
  - Collaborative
Maintaining, Changing and Crossing Contexts: an Activity Theoretic Reinterpretation of Mobile Learning

Esra Wali
London Knowledge Lab
Institution of Education, University of London

- Investigate the concept of ‘mobile learning’ focusing on the continuity of learners’ activities that take place in multiple contexts.
- Explore students’ utilisation of portable devices (old and new) to accomplish routine learning practices in different contexts.
- Investigate the relationship between context and learning practices.

More information: http://doctoralschool.ioe.ac.uk/
Communications in the 21th Century

Zs. Kondor / K. Nyíri
Hungarian Academy of Sciences

• The interdisciplinary project http://www.socialscience.t-mobile.hu focusses on the fact that the mobile telephone by now has become a multi-purpose data transmitter - a mobile companion.
• From an educational point of view, mobile telephony is destined to be the dominant medium of non-formal learning and life-long learning.
Mobile My Sports Pulse Challenge

David Metcalf
Institute for Simulation and Training
University of Central Florida, USA
In partnership with Växjö University

• Mobile Simulations for Science, Technology, Engineering and Math (STEM) Education
• Voice, SMS, and e-mail message from Sport Celebrities
  • Example: Andre Agassi: “My serve is 132 mph, what is that in feet/second” For help go to mysportspulse.com
• Answer is sent back and scored by the automated system- Game elements to build virtual athlete and win prizes
  http://www.mysportspulse.com
AMULETS (Advanced Mobile and Ubiquitous Learning Environment for Teachers and Students)
CeLeKT, Växjö University, Sweden

- We are exploring how teachers can develop and implement novel educational scenarios combining outdoors and indoors activities using ubiquitous computing technologies together with stationary computers.
- 55 children and 16 teacher students were equipped with Smartphones, PDAs and GPS devices. They performed different kind of collaborative activities in the domains of natural sciences, history and geography.
- Back in the classroom they visualized, discussed and compared their results using interactive digital maps.
- More information about AMULETS can be found at: http://www.celekt.info/
Skattjakt (Treasure Hunt)

CeLeKT Team, Växjö University, Sweden

Skattjakt is a mobile game that has been conceived and implemented to promote physical activity and collaborative problem solving by the unique combination of orienteering, gaming and mobile technology.

- 79 young people equipped with Smartphones and GPS devices participated and played the game. 22 of them involved in game design workshops and classes.

- Novel way to connect informal and formal learning activities.

- More information can be found at: http://www.celekt.info/max
mobile Games-Based Learning project

Alice Mitchell
INSPIRE
Anglia Ruskin University

- Growing sophistication and affordability of mobile technologies
- Motivating potential & learning gains of mobile games
- Increasing need for decision-making skills in crisis situations
- mobile Games-Based Learning (mGBL) - a practical response
- 3-year project 2005-2008, supported by European Commission
- More details at: http://www.mg-bl.com
context creation:
mobile search in museum settings
damien darcy, niall winters

como: facilitating mobile
work-based practices using web 2.0 apps
niall winters, yishay mor, kim whittlestone (rvc)
http://www.lkl.ac.uk/como (funded by the centre of
distance education)

mopix: collaborative
maths mediated by mobile devices
niall winters, ken kahn, dusanka nikolic, candia morgan,
jehad alshwaikh
http://www.lkl.ac.uk/mopix (funded by the EC FP6
ReMath project)

contact: n.winters@ioe.ac.uk
UBICO - Scaffolding and Regulating Collaborative Learning with Ubiquitous and Pervasive Technologies

Sanna Järvelä, Jari Laru, Piia Näykki
Educational Technology Research Unit
University of Oulu, Finland

• Exploring possibilities to scaffold collaborative learning with wireless networks and mobile tools. The pedagogical ideas are grounded on collaborative learning, including a socially shared origin of cognition and SRL theory.

• These research activities are carried out through iterative design experiments in situated contexts of collaborative learning.

http://edtech.oulu.fi/en/research
MoULE: Mobile and Ubiquitous Learning


Institute for Education Technology of Italian National Research Council

- MoULE supports mobile learning based on collaborative knowledge building processes. It uses GPS to associate the students’ activities with their geographical location.

- Users can edit and share documents using both desktop computers, through an extension of Moodle, and smartphones.

- Main functions are: localized annotation, synchronous and asynchronous communication tools, localized search, creation of shared content (wiki).

- Project home page: http://moule.pa.itd.cnr.it
GI DDER: Groups in Digital Dialogue

High school students learn about contemporary art across sites

- Pre-visit: work collectively on task in classroom wiki and select works to explore more deeply
- Visit: use mobile phones in museum to blog their experience of authentic works to the wiki
- Post-visit: use labels and other shared resources to interpret artworks, present to class

Palmyre Pierroux
InterMedia, University of Oslo
http://www.intermedia.uio.no
MOTEL
Mobile Technology Enhanced Learning

Rune Baggetun
InterMedia, University of Bergen

• Location Based Services for field trips
• Using students own mobiles for exploration
• Virtual annotations of a geographic area
• Maps as shared media spaces
The Accessible Cultural Heritage City

Rune Baggetun
InterMedia
University of Bergen

- Enabling learning about cultural heritage
- Supporting formal and informal learning
- Access for all through universal design
- Facilitating cross media use
Youth and mobile phones

Steinar Westrheim
InterMedia, University of Bergen
&
Stord Haugesund University College

• What do mobile phones mean for youth?
• From part of the body to just a tool

• What possibilities do teenagers see for mobiles in schools?
SILO: Mobile, location-based game for history

Jo Dugstad Wake
Department of information science and media studies
&
InterMedia, University of Bergen

- Teaching and learning of history
- Geotagging, Open maps
- Design Based Research / pedagogical interventions