

# Towards a methodology of researching mobile learning

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# Structure

- 1. Mobile learning as socio-cultural ecology**
- 2. Selection and description of case studies and framework for comparative analysis**
- 3. Categories for description and analysis of the mobile learning cases**
- 4. Discussion and conclusion**

# 1. Mobile learning as socio-cultural ecology

Theoretical and conceptual framework of mobile learning:

- educational uses of mobile devices,
- viewed in ecological terms,
- as part of cultural and pedagogical contexts in transformation.

The socio-cultural ecology considers different components:

- the learners' agency, appropriation and cultural practices,
- their everyday lives and school contexts,
- structures and cultural resources as potential links
- between different system components.

All for the benefit of learners.



## 2. Selection and description of case studies and framework for comparative analysis

- Qualitative media research
- Methods are seen as appropriate to consider
  - the activities of learners in the context of school/university and their life worlds,
  - the resources, which learners are using (in terms of agentive and meaningful activities), and
  - to ask for the potential inherent in these resources and activities

# Triangulation of methods, investigators and (interdisciplinary) theories

- grounded theory
- individual case studies
- discourse analysis
- action theories
- interpretative ethnography
- case comparison

# 3. Categories for description and analysis of the mobile learning cases

# How, and on the basis of what data the cases were compiled

## Step 1:

- “in school” and “outside school”
- Projects in schools:  
mobile phone as topic, mobile phone in use, mobile phone as topic as well as in use, mobile phone for administration
- Projects outside school:  
location awareness, software applications with interactive features, sound applications without interactive features (audio files), infrastructure.

# How, and on the basis of what data the cases were compiled

## Step 2:

- focus on teacher, learner and content,
- school subjects in which they were conducted ,
- a functional framework and
- pedagogical underpinnings.



# How, and on the basis of what data the cases were compiled

## Step 3:

- Examined the most salient aspect of each project which form the focus of our analysis with other aspects being backgrounded.
- Characterization of the projects, provides a basic overview of the learning and teaching related coverage by giving the central key words of each project, sorted by their relevance for the respective project
- Formal description of the projects: (1) the name of the project, (2) the country in which the project was conducted, (3) the subject and level of education as well as (4) the location (classroom, fieldtrip, leisure).

projects	key words/coverage
<p>(1) Handy  (2) Switzerland  (3) German, French, Maths;  Secondary  (4) Classroom</p>	<p>multimodal content creation  (transformative; knowledge building); microlearning; m-maturity/technical literacy; archive; sustainability; peer-teaching; languages; Mathematics; everyday life; expert scheme; genres</p>
<p>(1) Learning Lab  (2) India  (3) Natural sciences; Secondary  (4) Field trip; classroom</p>	<p>informal context (out of school); location awareness/GPS; data collection; life world (reflection); visualisation and knowledge building; natural sciences; pictures; media convergence; media literacy; combine analogue and digital media</p>

# Categories for the formal description of projects

- context/rationale: background information (i.e. how many people, type of school, duration, devices used, technical support, ...); learning and teaching aims and envisioned role of mobile devices
- approaches to teaching and learning: how are the devices used; key activities, key tasks, key pedagogical/‘didactic’ issues
- technologies and requirements: interoperability, storage, usability etc
- project outcomes
- lessons learnt/issues emerging: incl. replicability and transferability
- recommendations and future possibilities
- general project data: project name, url, country, year, contact, types of mobile devices, further media, number of persons, duration, location, educational establishment, phase of education, subject domain, teaching/learning focus, keywords

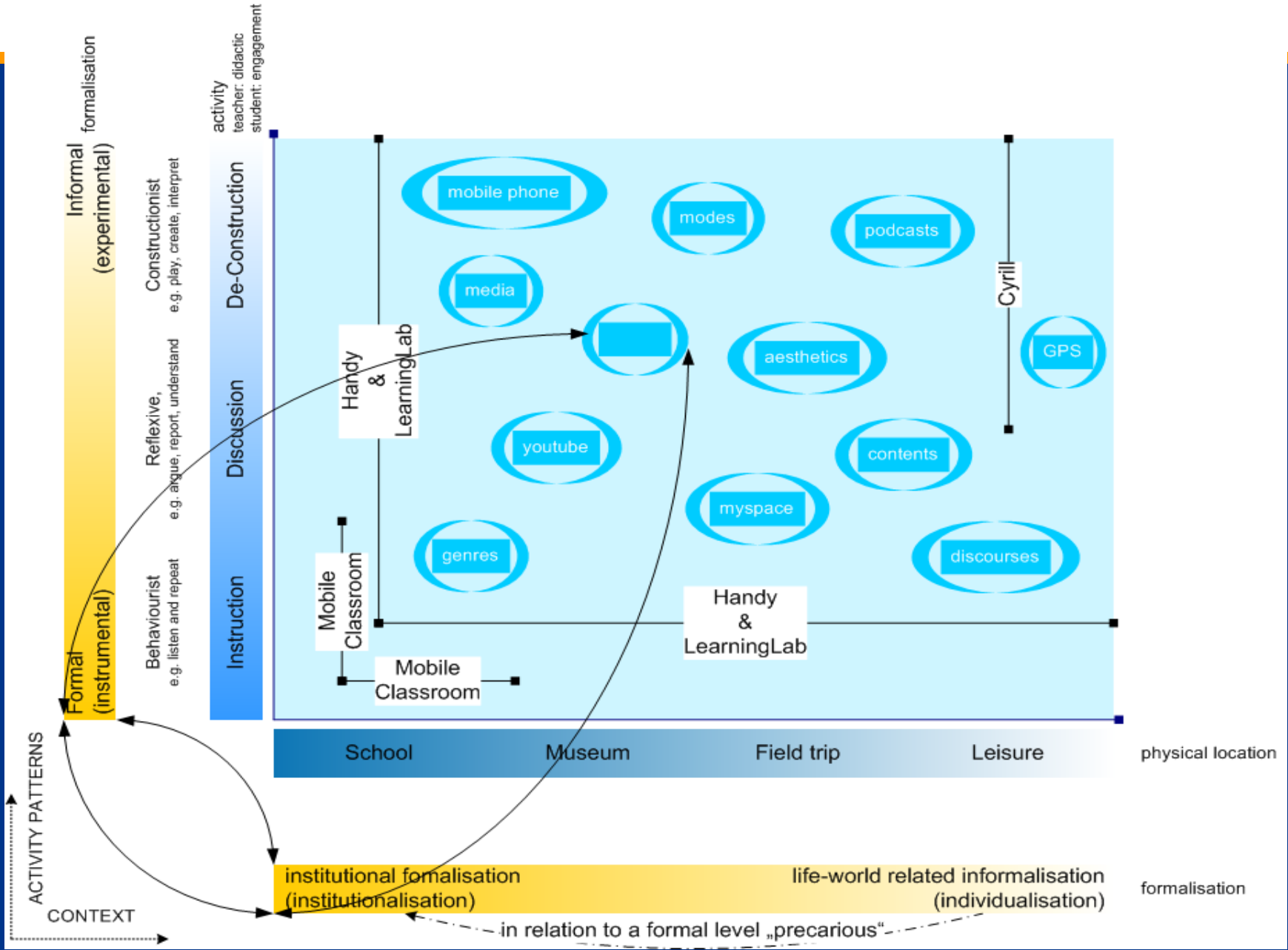


Figure: Judith Seipold 2008

# Analysis: Phenomenology and hermeneutics

- **Level 1:**  
the readily apparent, the core of an example of mobile learning
- **Level 2:**  
the salient/foregrounded structures of the example, which have to be extracted by a theoretically informed analysis:

# Categories for the analysis of projects

A agency, structure, cultural practice

B approaches to teaching and learning

C notions of mobility

D user-generated contents and contexts

E replicability and transferability

## 4. Discussion and conclusion

- approach to theory building by considering the experiences of learners' life worlds, their agencies and socio-cultural and media practices, be they in or out-of-school
  - foregrounded the conceptual and theoretical context of socio-cultural ecology to frame our understanding of various diverse cases
  - provide a novel and transferable frame for analysis of cases
  - framework and analysis has surfaced key issues related to the notions of mobility, mobility across contexts, as well as agency, cultural practices and approaches to teaching and learning
- ▶▶ more cross-case analysis is needed

# Outlook – Mo-LeaP

**Mo-LeaP**  
The mobile learning projects database

wle

Work-based learning for  
education professionals  
A Centre for Excellence  
at the Institute of Education



## Background

- About & Aims
- Partners

## Database

- Register with Mo-LeaP
- Submit Data
- Your submissions & data
- Search
- Browse
- Terms & Conditions
- Instructions

## Websites

- LMLG
- WLE Centre at the IOE

## Contact Details

- E-mail

## Copyright

- Imprint

## Welcome to the Mo-LeaP - The mobile learning projects database

Are you interested in mobile learning practice and curious about the latest ideas on the implementation of learning with mobile devices in educational contexts? Then have a look at our database! Just browse or search - or even submit your own project.



## Recent Mo-LeaPs

**Project: Handy**

**Resource: The London Mobile Learning Group (LMLG)**

**Application: Fring**

## Mo-LeaP tagcloud

project resource application  
Handy The London Mobile Learning Group (LMLG) Fring  
Mobile phone Windows Mobile  
Weblog Internet connection IM  
accounts Secondary school:  
intermediate school (Realschule)  
and grammar school  
(Gymnasium) Year 7 to 9 11/12  
to 16/17 year old pupils German  
French

**Mathematics  
interdisciplinary**



[www.londonmobilelearning.net](http://www.londonmobilelearning.net)

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