

Conference ICL2008  
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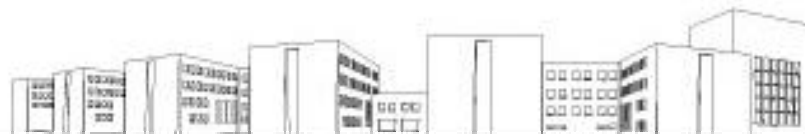
# E-assessment through Social Networks

in a Portuguese High School Context - A Conceptual Framework

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# Agenda

- Web 2.0 & Learning 2.0
- Assessment 2.0
- Research Hypothesis & Question
- Proposed Approach
- Conceptual Framework
- Treemap 4.1
- Learning Outcomes
- Expected Goals
- Ongoing Work

## Three years of a PhD research

Theoretical Background  
Class Observation & Inquiry  
Learning Scenarios



Conceptual Framework



System Specification



Evaluation

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# Web 2.0 & Learning 2.0

- **Interaction, communication & description process**
- **Social dimension**
  - Networks (Ning, Hi5, Facebook, Myspace, Orkut)
  - Web (MediaWiki, Blogger, Twitter)
  - Content ( Youtube, Flickr, Slideshare)
  - Tagging ( Delicious, Magnolia)
  - Voting (Digg)
  - Aggregating ( Technoratti, Twemes)
  - ...

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## Web 2.0 & **Learning 2.0**

- **Enhances conversation, sharing, participation**
- **Supports creation of digital activities**
  - Self motivation
  - Ownership
  - P2p learning
  - Purposeful
- **Faces changing**
  - Learning styles
  - Students attitude

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# Assessment 2.0

Assessment 1.0	Assessment 2.0
Paper-based	Tool supported
The same for all	Personalised
Classroom based	Collaboratively Produced
Formalised	Negotiated
Artificial	Authentic
Synchronous	Asynchronous
Teacher Controlled	Peer and self assessed
Curricula Oriented	Problem oriented
Static process	Dynamic process
Identifies missing skills	Recognises existing skills
Certification	Deep Knowledge

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Adapted from Bobby Elliott 2008

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# Research Hypothesis

- Technology can be adapted to education in order to reach higher levels of effectiveness.
- Establish bridges between formal learning to informal learning.
- Learning do happens outside the classroom.
- Linking school subjects with students' lives.

# Research Question

How can we engage students with teacher assessment activities, embedded in social networking sites?

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# Proposed Approach

- Distinct Actors & Roles

	Students	Teacher
Digital Barriers	Digital Natives	Digital immigrants
Interests	Games	Activities
Motivations	Group activity	Better Practices
Role	Participation	Moderator
Workplace	Social networking (Hi5)	LMS (Moodle)
Organisation	Chaos	Structure
Style	Active	Reflective
Approach	Freedom	Methodology

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# Proposed Approach

- **Assessment Feedback in Social Networking Sites**
  - Expands classroom activity
  - Meets students in “their territory”
  - Benefits from the informal learning
  - Process is teacher mediated
  - Social peers involvement
  - Group support
  - Connected events
  - Added value -> Innovation

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# Proposed Approach

- Plug teachers with students roles

**People**

- Technology Enhanced Learning

**Technology**

- Teaching is a dynamic transformation process

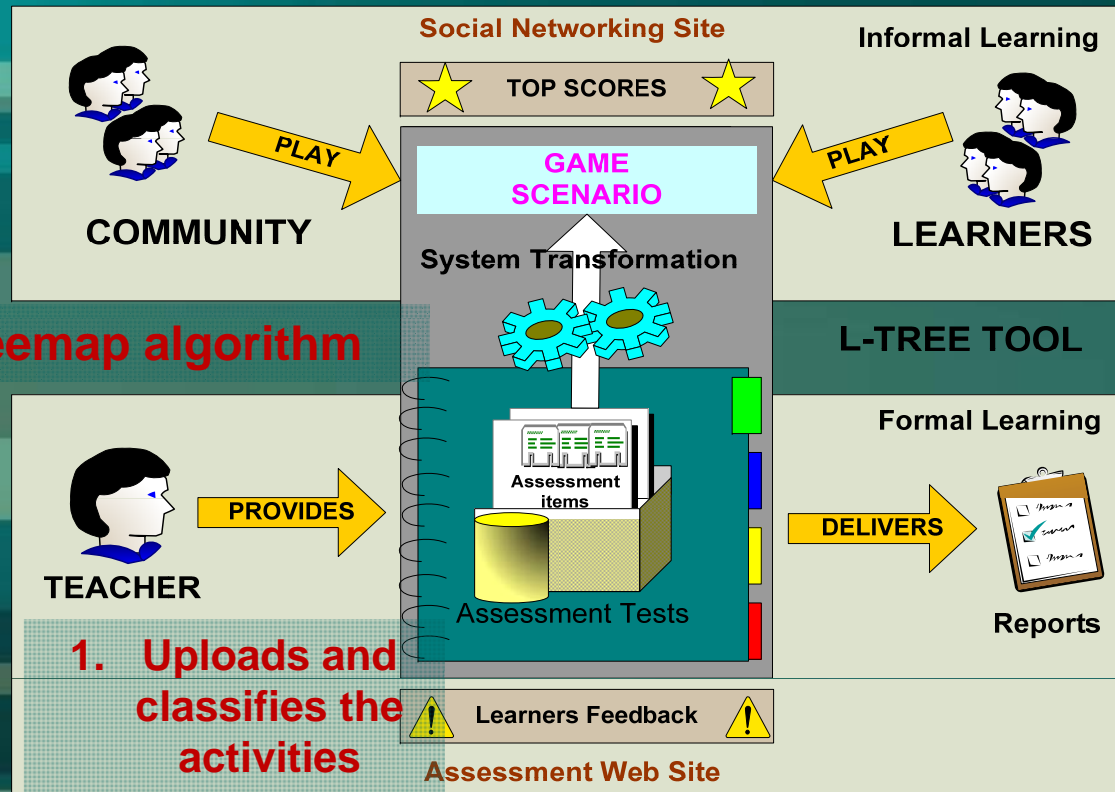
**Social Process**

- Learning becomes a meaningful activity

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# Conceptual Framework

## 3. Treasure Map



## 2. Treemap algorithm

1. Uploads and classifies the activities

## 4. Navigational System

5. Register Scores & gives hints for doing better next time

6. Delivers actors Feedback

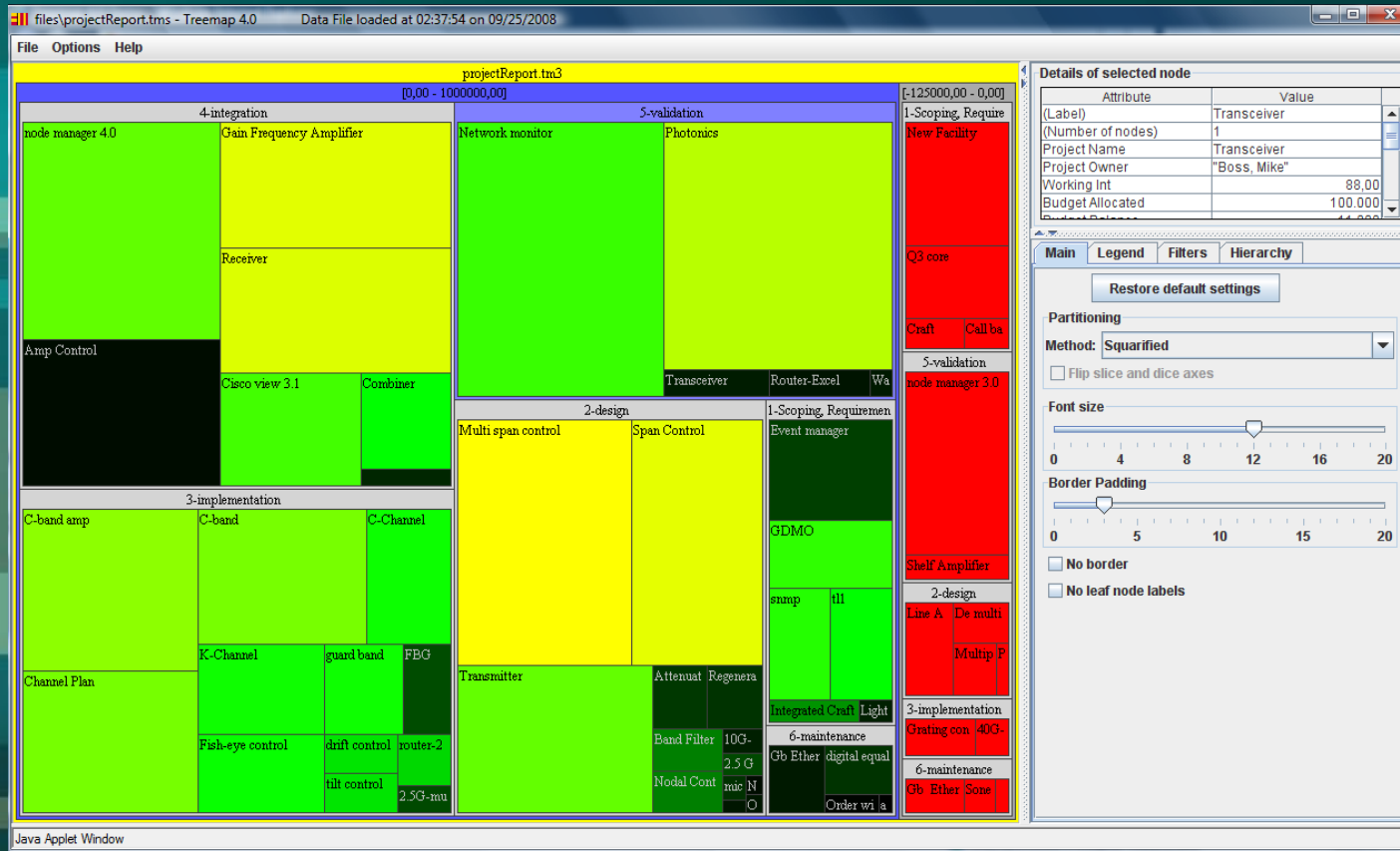
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# Conceptual Framework

- Knowledge representation and visualisation
- Treemap algorithm
- Competitive educational game
  - Mini-game gadget
  - Treasure game
  - Actors feedback support

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# TreeMap



<http://www.cs.umd.edu/hcil/treemap/applet/index.shtml>

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# Learning outcomes

- Evaluate the tool in a professional informatics course of about 70 students aged between 15-17 years old in a three year time period
- Expect to measure the student's tool usage with his/her success in the module completion of a particular domain
- Inquiry teachers and students about the tool usefulness

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# Expected Goals

- Class activities complement
- Social importance
- Self directed learning
- Competitive game environment
- Assessment of achieved skills
- Teacher feedback about group and individual involvement

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# Expected Goals

- Engage students with learning activities
- Feedback support
  - Teachers adjust classroom practices
  - Informs the learners about their progress
- Marriage between formal and informal learning settings

# Ongoing Work

- Deliver teacher/student questionnaires about the tool
- Analysing the results and make some changes
- Develop the tool using :
  - OpenSocial platform (Hi5)
  - Ajax & PhP
  - Treemap 4.1
- Perform an evaluation experiment in a High School

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# Thank you For listening Questions?



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