



HoTEL

Holistic Approach to
Technology Enhanced Learning

Innovators – Opinions – Perspectives

Supporting Innovation in Technology Enhanced Learning

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Workshop at EC-TEL 2014 Conference

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Graz, Austria

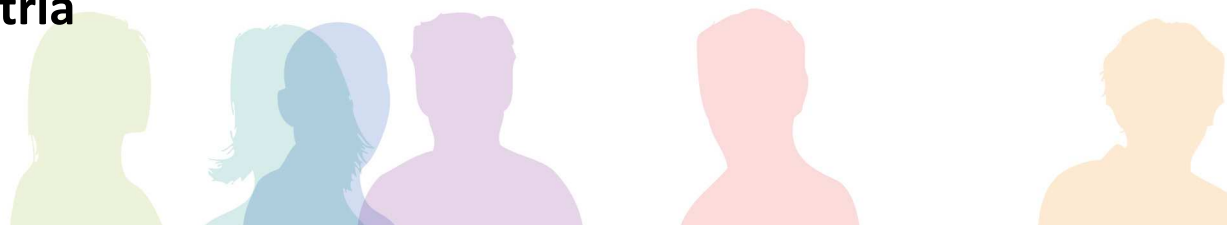


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The HOTEL project: An overview



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HOTEL: Holistic Technology Enhanced Learning

- FP7 Support Action
- Oct 2012 – Sept (prob Dec 2014)
- Consortium

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Issues addressed by HOTEL

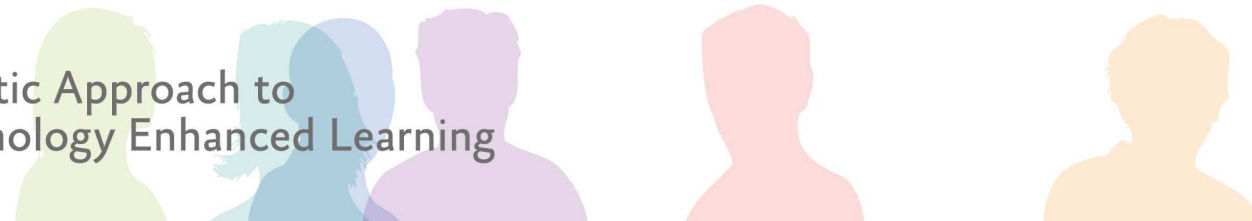
- TEL research so far focused mostly on technologies developed «ad-hoc» for learning
- Bottom up innovation in TEL not yet sufficiently considered by research (input to learning theories)
- Impact of available learning theories on TEL practices not sufficiently analysed



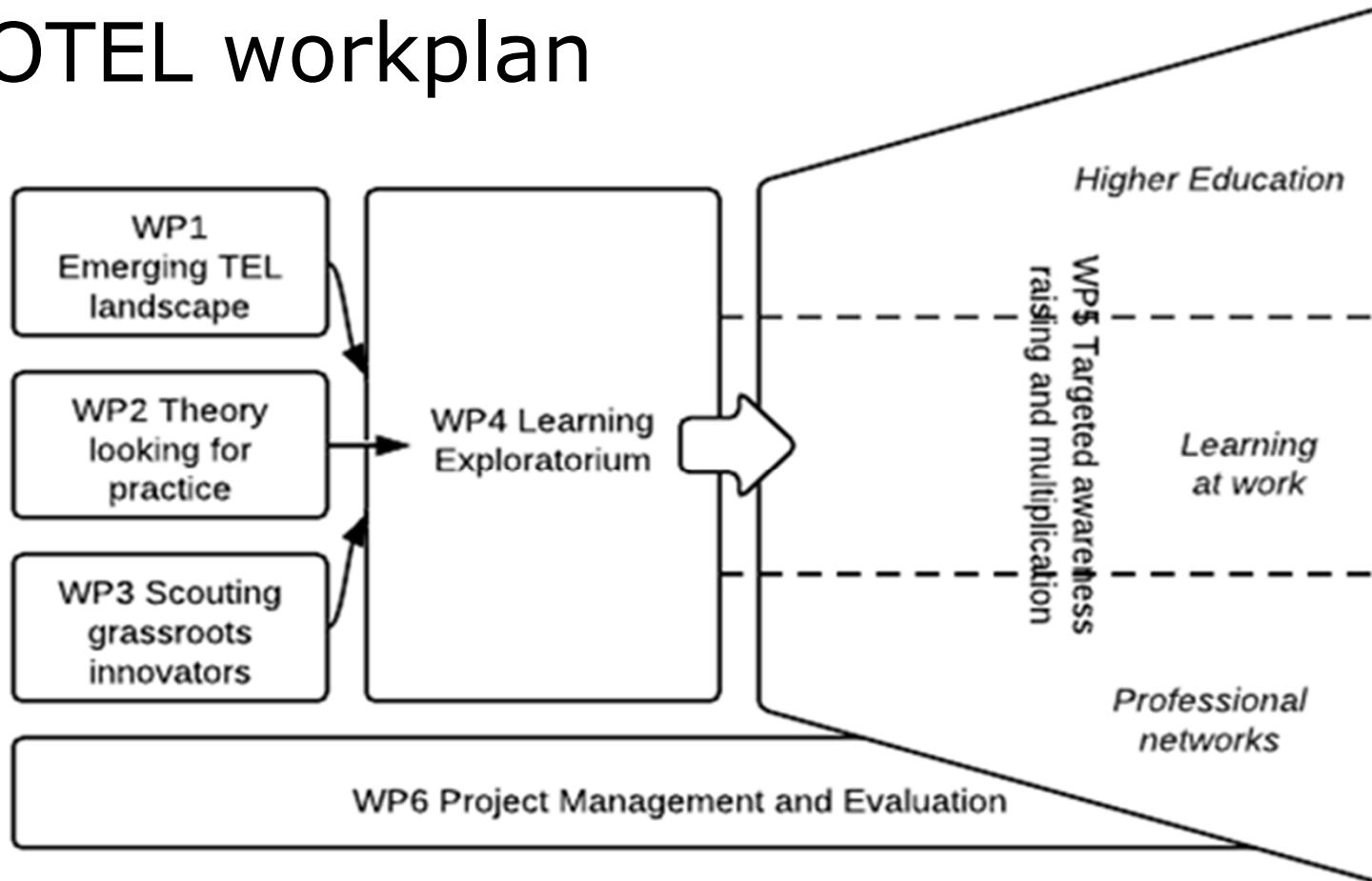
Need for working paradigms on how to support innovation and mainstreaming

The HOTEL objectives

- To design an **innovation support model - ISM** to speed up innovation adoption
- To **pilot** the designed ISM in three real life environments (Learning Exploratorium Labs on Higher Education, Workplace and Individual Professional Learning)
- To **disseminate** and create awareness in the research and practice community about the results of HOTEL
- To help **FP7 projects** to identify new challenges and include TEL projects in the Labs, where relevant
- To ensure **sustainability and multiplication** of HOTEL by providing to TEL actors and stakeholders a validated shortened Innovation Cycle for TEL.



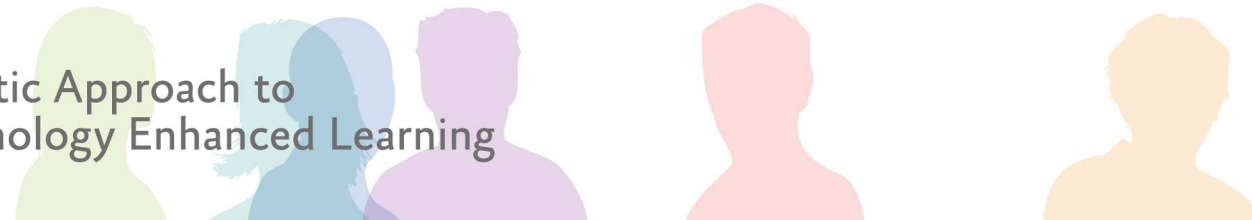
The HOTEL workplan



Emerging Technologies Landscape (WP1)

Current selection:

- Augmented reality
- Learning Analytics
- Gesture based computing
- Wearable technologies
- Internet of Things
- Context aware computing/ Context enriched services
- Immersive technologies
- 3D printing
- Audio Mining/Speech analysis/Natural language processing
- Computer Brain Interfaces/Neuro-gaming



Looking for Practice (WP2)



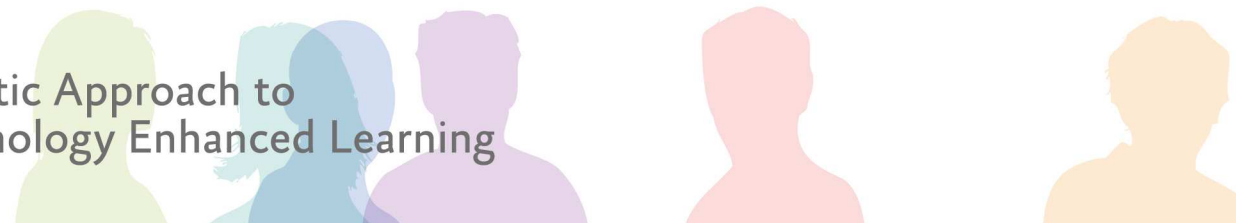
'The Learner at the Centre' by Richard Millwood is licensed under a Creative Commons Attribution-ShareAlike 2.0 License. Based on a work at blog.richardmillwood.net

(Milwood, 2013)



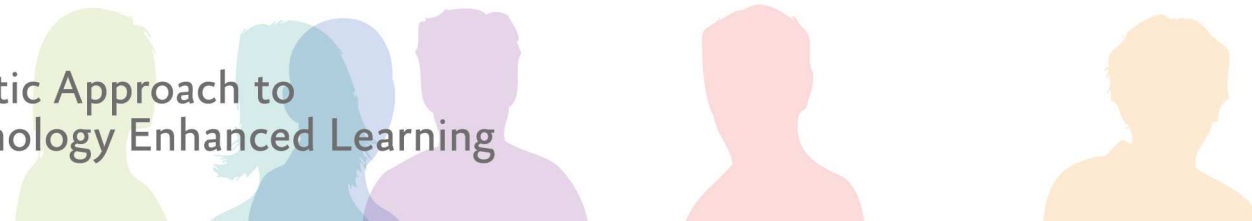
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Scouting Grassroot Innovators (WP3)

- Open call for innovators via the HOTEL website
- C. 60 applications received – 21 tested conceptually/concretely
- LinkedIn Community on Innovation in TEL
(TEL Innovation Laboratory Group)



Exploratorium Labs (WP4)

- Lab 1: Learning in Higher Education – hosted by UNIR
- Lab 2: Learning at Work – hosted by ELIG
- Lab 3: Learning in Professional Networks – hosted by EFQUEL

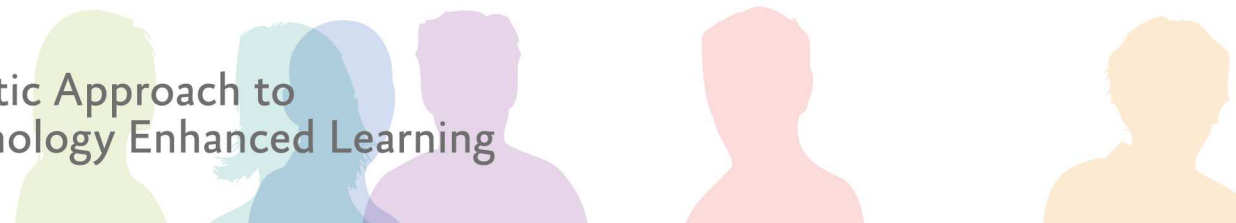
Each lab serves as a live test-bed for testing and implementing **innovations** and the **ISM** itself

The Innovation Support Model



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The Genesis models of innovation in TEL

1. **Technology and Industry-led (WP1)**, in which the availability of a new technology, normally not specifically designed for learning, finds a number of educational or informal learning applications that may lead to large adoption out of massive industrial and commercial investment.
- 2 **Research-led (WP2)**, in which learning theories search and find application in experimental learning settings that are created and monitored to check learning effectiveness, usability and other key features of both generic and learning-specific new technologic applications.
- 3 **Practice-led (WP3)**, spontaneous bottom up innovation emerging from individuals or communities of teachers and learners that find original ways of using technology to materialise new ideas about learning and teaching and are able to demonstrate their effectiveness in new contexts of use

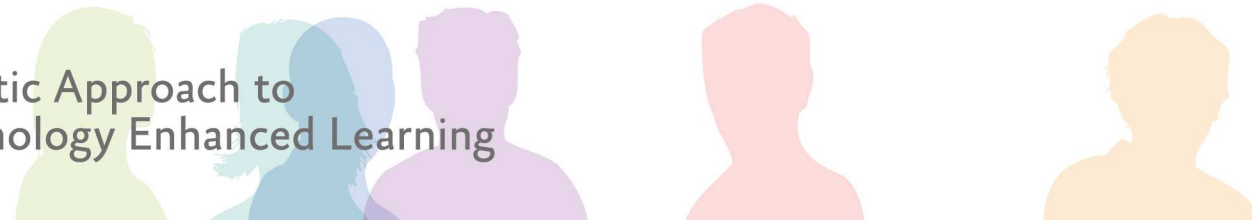
ISM Definition

- We believe that Innovation in TEL may take **very different forms** than the **classic paradigm** that moves from research through prototypes to massive commercial exploitation
- An Innovation Support Model (ISM) refers to the way a **"professional body" of analysts and stakeholders** representing users categories, advisors, fund raisers, institutional and private investors, etc. **can help innovators to succeed**, or to succeed more quickly than they could do without this support
- From this perspective, **an ISM is essentially a relational model, linking innovators to their context through a structured set of interactions that, in the case of HoTEL, take place within and around the "Exploratorium Labs"**, real test-bed environments to support TEL innovation in Higher Education, Workplace learning and Informal learning in professional networks

Aims

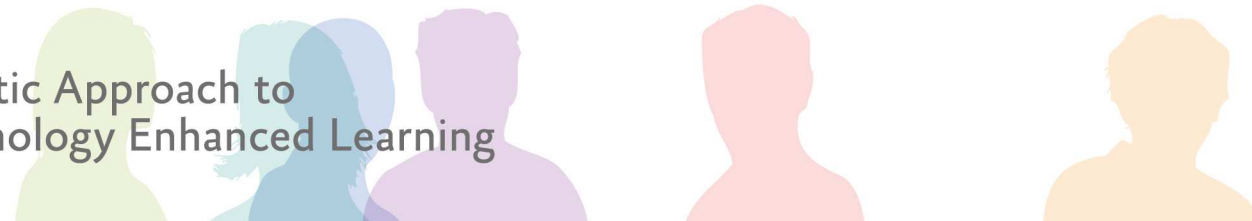
Our **Innovation Support Model**, after several iterations should:

- Provide an **analytical framework to classify innovations**, and properly understand their **advantage/contribution within a pedagogical context**
- Assist **decision-makers/funders** to pick ‘winners’
- Help innovators to:
 - **properly formulate their ideas** in a way which aids introduction
 - highlight lacunae in their **diffusion/adoption strategies**
 - assist them in developing indicators to improve their diffusion/adoption
- OVERALL: Accelerate **mainstreaming of technologies** into education



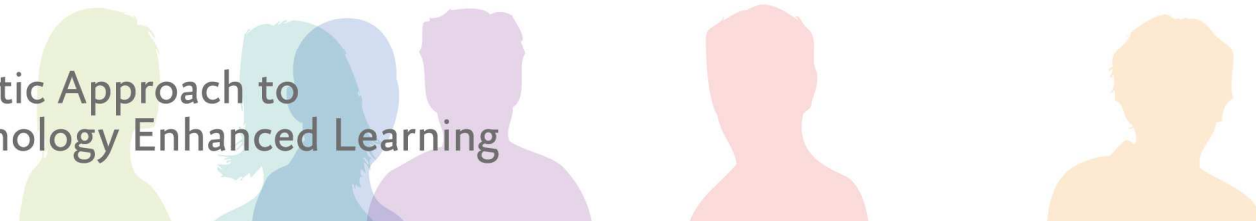
Structuring assumptions of the HOTEL ISM:

- Recognition of **diversity**
- Recognition of an existent **difficulty on measuring 'success'** within a TEL innovation setting
- **Embedded flexibility, adaptability and context sensitivity** of the support model in order to match **different stages of innovation development and different contexts and innovation paths.**
- **Multi-stakeholder ecosystem** in the 3 targeted educational areas
 - a) Practical, on the ground, with real users and in a real context-setting
 - b) Theoretical, with a deep-thinking test bench by experts and qualified users

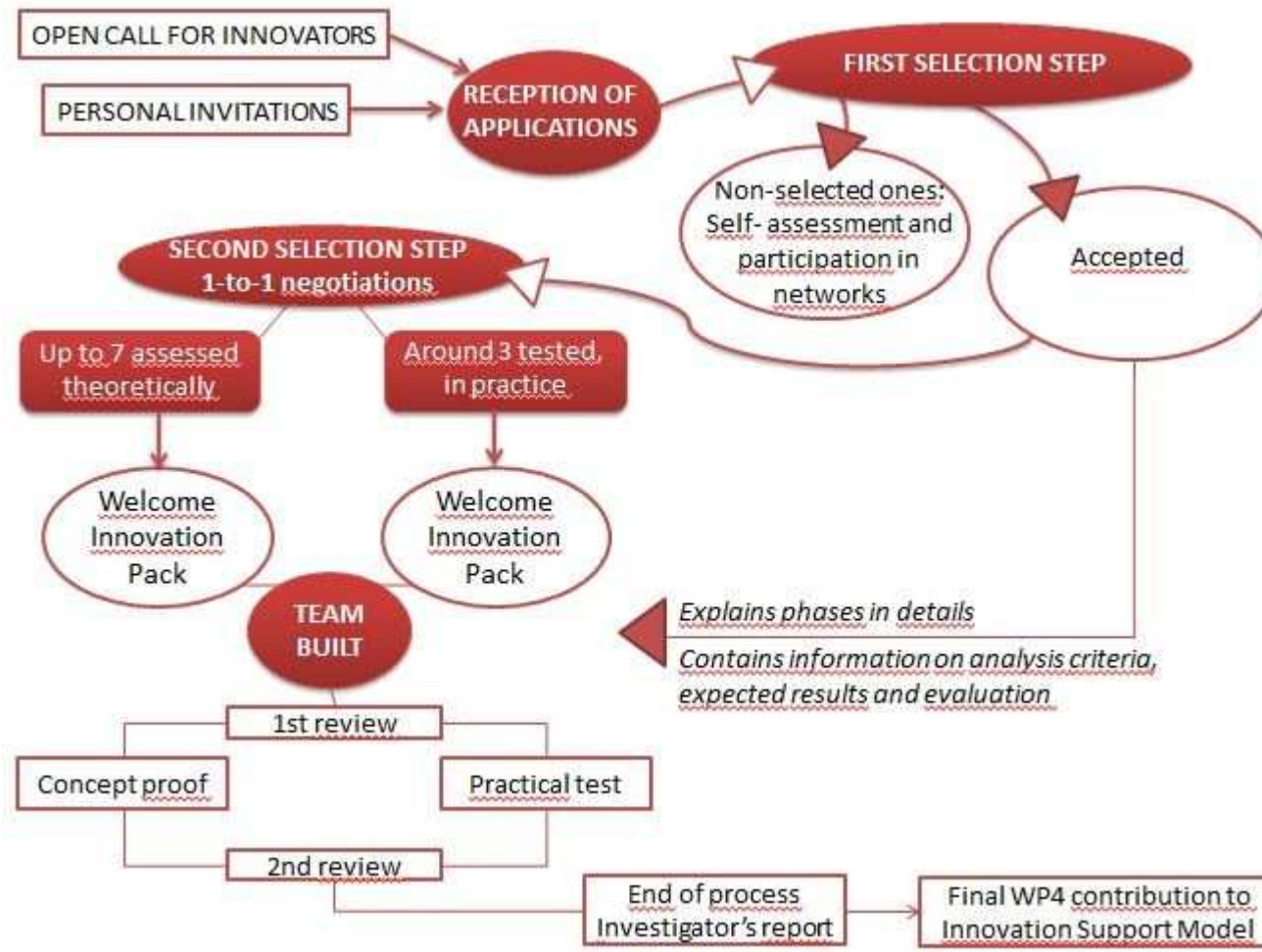


Dimensions considered to analyse and classify innovation within the labs (inspired by IPTS)

- Kind of innovation addressed (product, service, process?)
- Nature of the innovation (disruptive, radical, incremental)
- Lifecycle stage of the innovation (development; pilot; scale; mainstream)
- Territorial level addressed (Local, Regional/national, EU)
- Target groups dimension addressed (Individual actors; multiple actors, wide range of actors)
- Potential impact of the innovation (It will improve the range of technological products/services available in the field; It will have an impact on the learning processes; It will contribute to organisational change)
- Stakeholders to be activated to support the innovation implementation.

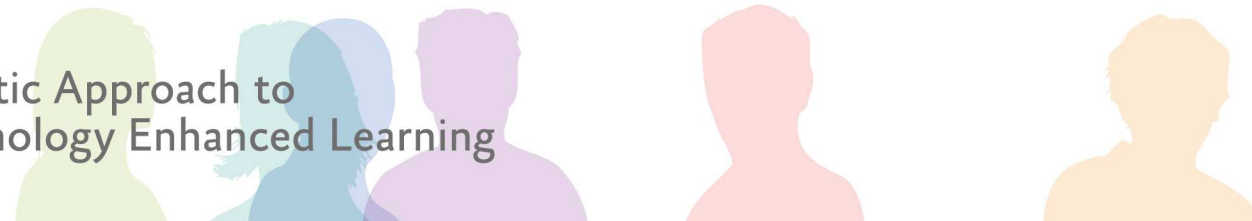


The Innovation support process



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Introducing an innovation



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An innovation in TEL: overview

- MOOC on Quality in e-Learning (product) tested in EFQUEL Lab
- Nature of the innovation (incremental)
- Lifecycle stage of the innovation (development)
- Territorial level addressed (EU)
- Target groups dimension addressed (multiple actors)
 - Decision makers
 - Quality professionals
 - E-learning practitioners, i.e. course managers and designers
- Potential impact of the innovation
 - The MOOC will support and enrich a knowledge-oriented community of professionals around the topic of Quality for e-Learning.
 - The MOOC will provide an introduction into the field for education professionals who are faced with the challenge of transforming traditional learning environments.
- Stakeholders to be activated to support the innovation implementation
 - Network of experts (authoring)
 - Target groups
 - Educational institutios



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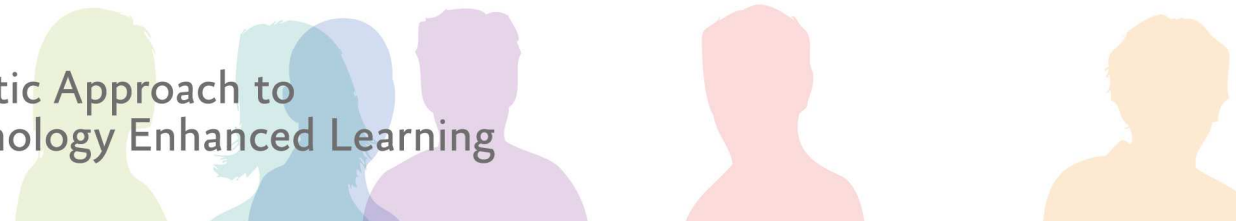
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Hands-on session



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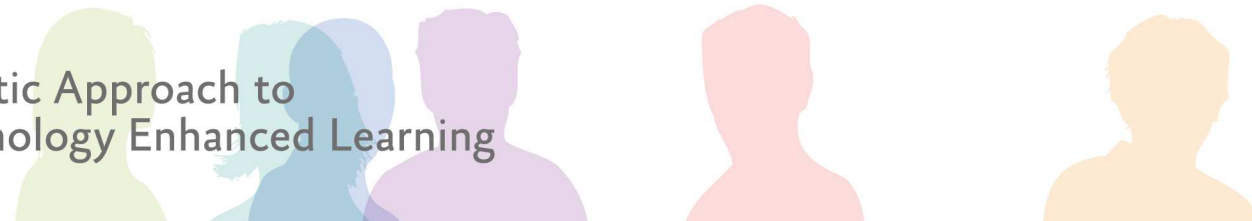


How to better support an innovation in TEL?

- Presentation of an innovation example to be used during the session
- Overview of the HOTEL tools to support innovators
- **Brainstorming session:** Participants will be asked to form groups to analyse how the previously presented tools can be used to better support the owners of the innovation introduced as working example.

Hints: Please consider benefits, drawbacks of the use of HOTEL tools to support innovators and possible suggestions

- **Reporting time:** A representative of each group will present the results of their brainstorming activity.



HOTEL Tools



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The innovation support tools

- Report on [emerging technologies](#)
- Report on [learning theories and practices](#)
- Questionnaires:
 - a) self-assessment compiled by the innovator
 - b) [innovation review sheet compiled by each reviewer](#) (expert in tel/innovation selected by lab leader)
 - c) innovation review sheet [summarizing the results and recommendations](#) by reviewers
- [Meeting](#) (launching seminar, workshops with end users and stakeholders, multiplication workshop, inter-lab seminar)
- [Innovator progress report](#) (by innovators on the adoption of reviewers recommendations and impact on the innovation)
- [Final collective review sheet](#) (by reviewers on the new version of the innovation)
- [Evaluation of the ISM](#) (by innovators and aside by lab leaders)

Brainstorming time

A row of colorful silhouettes of people's heads and shoulders, representing diversity. The colors include green, blue, purple, red, orange, light green, light blue, purple, pink, and yellow.

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Many thanks for taking part in this event!

**More info about HoTEL can be found at
<http://hotel-project.eu>**

A graphic for the HoTEL logo consisting of several overlapping, colorful silhouettes of human heads in shades of green, blue, purple, red, and orange.

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