

Global Trends and Forecasts for TEL – some results from the TEL-Map project

Tore Hoel
Oslo and Akershus University College of Applied Sciences
Oslo, Norway
Tore.Hoel@hioa.no

Abstract— This short paper presents the TEL-Map project and gives a brief outline of the expected results of the project that focusses on foresight activities. The project ends March 2013.

Keywords – EU projects, roadmapping, foresight studies, Technology Enhanced Learning

I. INTRODUCTION

TEL-Map is a Coordination and Support Action funded by the European Commission under the Technology-Enhanced Learning programme [1]. It focuses on exploratory and roadmapping activities for new forms of learning. In this short paper we will give an overview of the foresight activities of the project, and some intermediate results. The 30 month project will end in March 2013.

Europe's TEL communities and their constituencies need coordinated actions and support to achieve earlier, stronger and longer-lasting results from their investments in TEL and use of TEL [2]. The TEL-Map project is exploring which new forms of learning will play a role in the future of TEL, and what technologies will support learning, education and training. TEL-Map aims to build together with TEL stakeholders the tools and the understanding that makes the TEL community create the roadmap for the unknown learning landscape. The questions addressed are

1. What is the actual impact of recent and current TEL research?

2. How can impact be increased?
3. How can a better 3-way interaction between researchers, adopters and policy makers be established; and
4. What are the desired future visions of technology adopters, and how can their needs and visions be attended to?

II. PROJECT APPROACH

The diversity of education and training in Europe calls for a multifaceted approach. TEL-Map is working towards d

- developing multiple desired futures across a 10 year timescale, by working with clusters of stakeholders that already work together
- seeking recognition that different desired futures are not necessarily in conflict but may be complimentary
- searching for underlying the common ground and the disagreements/conflict areas across these desired futures,
- and seeking ways for the future whereby learners can move seamlessly between these emergent approaches to learning according to culture, context, learning need and type of provision.

All of the relevant drivers will be monitored through a process that encompasses Weak Signal Analysis, Horizon scanning and Delphi filtering. The intelligence gained from these will be used to assess the emerging actualities to determine the near term future context which will have to

handle significantly less uncertainty. This in turn allows the range of alternative Future Context Scenarios to be reduced, with perhaps some small variations for the near term future. This will allow the Roadmaps for Desired Future Scenarios to likewise be reduced to one for the near term future. Figure 1 gives a diagrammatical overview of the methodology TEL-Map applies to involve stakeholders in their development of future visions and roadmaps.

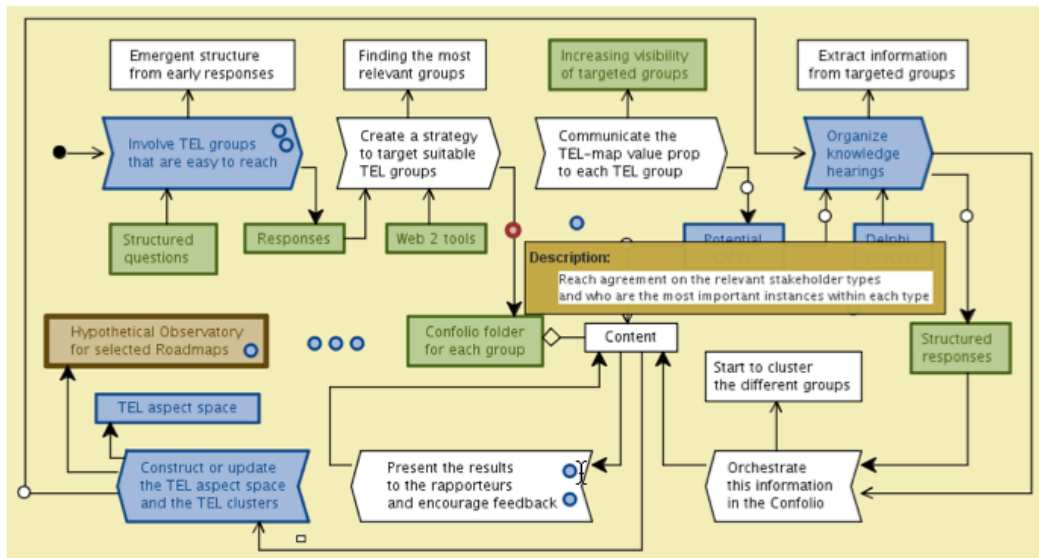


Figure 1: Involving Stakeholders

III. PROJECT RESULTS

In time for the ICALT 2012 European project track the TEL-Map project will have published their first results and will be able to give their answer to questions like

- What are the future technologies and developments in the field of technology-enhanced learning in a 10-20 year time horizon?
- Which are different needs for future solutions across the globe?
- How can we arrange global strategic partnerships to those challenges?

In the following we report some intermediary results form public deliverables in pipeline. The Report on Scenarios for TEL Futures [3] is collecting and analysing the views of the future held by other foresight projects in Europe and international. Lesson learnt is that to convince people of the potential benefits of futures thinking takes time but is time well spent. One project found it necessary to gain a deep understanding of the stakeholders' needs and help them see how the process contributes to achieve their goal. Another project addressed the ethical challenges of long term futures work, e.g., defining the objective to be to challenge assumptions rather than to produce "predictions", keeping in mind that the future is not defined by its technologies.

The TEL-Map scenarios will emerge towards the end of the project. However, a first version of a Higher Education scenario is reported [3], which in the United Kingdom version is played out within a quadrant defined by the two axis, Organisational mono vs. Organisational hetero, capturing the differentiation of universities; and F2F preference to TEL vs. Online preference, capturing the student demand. In the quadrants this gives the Traditional Univerity, the Oxbridge model, the De-Campus model and the new OERu, P2Pu, Udacity, etc.

Another TEL-Map report analyses socio-economic developments relevant to emerging new learning paradigms [4]. Weak signals are analysed together with expert opinions to identify these new paradigms. Looking at the blog scene, this report states that what is believed to be broadly representative TEL-relevant blogs in English neglect economic, legal and political matters. "Even when these topics were detected, the content of the post rarely made a connection to education or training even though this is where the centre of gravity of the blog lay" [4]. In practice, as far as the TEL related blog sphere concerns, it therefore seems that the "ethical" point made that education is not about technology is not taken up by the most active member of the TEL community.

Via text-mining and analysis the following weak signals were derived from the TEL "blog-sphere" [4]:

Economic:

- increased student loans/debt
- the relationship between technical and non-technical innovation/revolution and economic factors (education and training may need re-orientation)
- youth unemployment and protest
- new perspective on "open source" (open source is no longer limited to software)

Legal:

- international copyright

Political:

- social capital and political bias ("social capital beneficial for knowledge sharing")
- undesirable consequences of corporatisation of higher education

Social:

- leadership theory in crisis
- emerging globalisation and mediasation of education policy
- playing games and brain development

What interpretation these weak signals will have for the future of TEL will be elaborated in further reports from the project. In the meantime, these signals can serve as seeds for a further and focussed discussion, the ultimate objective of foresights activities. The www.learningfrontiers.eu portal is one forum offered for such discussions.

IV. CONCLUSION

The project presentation of TEL-Map at ICALT 2012 will provide a balanced insight on technological and pedagogical developments as well as rigorous studies on future trends. It will initiate a collaboration process on shaping the future of technology enhanced learning as the floor is still open to participate in the foresight activities through the online tools developed by the project.

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V. REFERENCES

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