Meta-Model Flexibility as a Significant Factor for Increasing End-User Involvement
Experiences from the NEXT-TELL Project

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ABSTRACT

This paper describes experiences of using meta-modelling tools supporting technology enhanced learning in European Commission’s project NEXT-TELL. Due to a target group of the project (teachers with limited experience in modelling) it was very important to provide them with easy to use environment. This resulted in trying to identify least best fit of features needed by teachers while removing “distractions” - both in regards to tool functionality and modelling method applied. Such adjustments of the modelling tool were possible thanks to the underlying ADOxx® meta-modelling platform that allowed adjustment to feedback received from end users/subject matter experts in terms of functionality and usability.

Keywords: 21st Century Education, Meta-Modelling, NEXT-TELL, Technology Use In Classrooms, TEL

NEXT-TELL PROJECT

The NEXT-TELL project’s goal is to provide ICT tools and methods for supporting teachers and students. This general goal can be divided into the following objectives.

Articulate a conceptual framework for designing and implementing methods that can be used to formatively assess ICT-enhanced learning and to negotiate the assessment process amongst stakeholders.

Provide resources and ICT support for teachers and students to develop learning activities and appraisal methods appropriate for 21st Century learning based on this conceptual framework.

Provide IT support in the classroom so that teachers and students have available nuanced information about students’ learning process when it is needed and in a format that is supportive for decision making, thus optimizing levels of stimulation, challenge, and feedback.

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Provide IT support for making students’ activities in informal learning places – and in general in the “learning ecology” outside of school – part of ‘accountable work’, thus building on students’ interests, fostering their identity development and supporting their social networks.

Foster in-service teachers’ professional development by providing new methods and tools for learning from students’ learning and for learning from peers’ teaching.

Increase a school’s capacity for data-driven decision making by means of leadership development, including ICT support for the strategic planning of teachers’ professional development. (www.next-tell.eu)

In order to facilitate capturing knowledge of subject matter experts and sharing that knowledge, NEXT-TELL project uses models and meta-modelling software – described more extensively in the following chapter.

The project calls for a “21st Century classroom learning” (being used as a slogan on many project materials, including webpage), stressing several factors that require new approach towards education such as growing usage of cloud-based solutions, ICT as well as Open Learner Models in education.

The first factor fosters collaboration and allows easy insight into the student’s learning process thanks to the tracking possibilities. On the other hand it renders traditional assessment methods less usable.

ICT – the second factor – needs to support the formative classroom assessment (Kickmeier-Rust, 2011). Also ICT support for teachers is very important if they are expected to be drivers of innovation (especially when student’s assessment is concerned). Additionally - usage of ad-hoc selected ICT tools is not seen as a best practice. Instead, ICT tools selection should be aligned with the school strategy resulting in a consistent ICT environment.

Last factor – Open Learner Models – is important as it supports the decision making and allows better planning of personalized learning paths.

Out of several ICT tools comprising NEXT-TELL innovation platform, the follow-

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Figure 1. NEXT-TELL tools (adapted from www.next-tell.eu)
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