



# Mash-Up Personal Learning Environments (MUPPLE'09)

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## Editorial

A change in perspective can be certified in the recent years to technology-enhanced learning research and development: More and more learning applications on the web are putting the learner centre stage, not the organisation. They empower learners with capabilities to customize and even construct their own personal learning environments (PLEs).

These PLEs typically consist of distributed web-applications and services that support system-spanning collaborative and individual learning activities in formal as well as informal settings. These PLEs typically complement or interface with Learning Management Systems (LMS) with additional widgets, services, and data integrated from and with organization-external learning tools.

Consequently, the aim of this workshop is not to discuss the concepts 'PLE vs. LMS', but to focus more generally on how learning experiences can be enriched using mash-ups of widgets and services with microformats and how technology can help to respond automatically to competence level, need, or context. Moreover, the investigation of necessary competencies to deploy mash-up technologies is dedicated special attention in this workshop.

Technologically speaking, this shift manifests in a learning web where information is distributed across sites and activities can easily encompass the use of a greater number of pages and services offered through web-based learning applications. Mash-ups, the 'frankensteining' of software artefacts and data, have emerged to be the software development approach for these long-tail and perpetual-beta niche markets. Core technologies facilitating this paradigm shift are Ajax, javascript-based widget-collections, and microformats that help to glue together public web APIs in individual applications. Interoperability is the enabler to allow these different components to be worked together facilitating the achievement of the underlying learning task.

In a wide range of European IST-funded research projects such as LTfLL, Palette, STELLAR, TENcompetence, Mature, iCoper, Role, and OpenScout a rising passion for these technologies can be identified. This workshop therefore serves as a forum to bring together researchers and developers from these projects and an open public that have an interest in understanding and engineering mash-up personal learning environments (MUPPLEs).

The aim of this workshop is to bring together the various research and development groups in technology-enhanced learning that currently focus on the development of the next generation learning environments – learning environments that put the individual centre stage and empower learners with design capabilities

by deploying modern mash-up principles to establish system-spanning interoperability.

As this approach is rather young, the workshop sought to attract both research results and work in progress in order to chart out the current state-of-the-art of MUPPLEs in TEL and to define main enablers and future challenges. Naturally, it serves as a forum for establishing new collaborations.

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