

Bilag 13

Project Interaction and Learning Platform

Issued by	Initials	Department	Date
Marie Gottlieb	MG	Interaction and Learning Unit	2009-02-11

Background

Defining Interaction and Learning Platform

The term “interaction and learning platform” in this context means a technical platform in which interaction and learning activities can be planned, carried out, (and possibly also assessed and evaluated).

It should be emphasised that the interaction and learning activities, which should be supported by the platform, include a broad array of activities involving students, teachers and researchers acting alone, in pairs, in groups or in large networks; and that any such activity can happen locally or globally distributed in collaboration with external partners. Defining scope and content of such interaction and learning activities is part of this project.

Previous initiatives and drivers

The project is rooted in several previous initiatives as well as an explicit strategy result goal;

- During the last couple of years a growing pressure from the teachers and students at ITU has caused the IT department to launch two pilot projects (Wordpress, Wiki) with the aim to choose a standard technology available for course homepages/blogs and wikis.
- Simultaneously during 2008 a pre-analysis was carried out among students and teachers attempting to map out needs and expectations to a future learning platform. The pre-analysis was created on the basis of a written questionnaire.
- In the IT University strategy of 2009-11, the following result goal is included: “*By the end of 2010, the IT University will have an experimental online infrastructure, which supports students and researchers in global interaction, up and running.*”

The current situation at ITU

Apart from the 6 courses offered as blended learning, at this point in time, ITU does not provide access for the teachers and students to a learning platform. Teachers are provided with an empty space at the ITU server and a simple html template. The result is a situation where students are forced to navigate in a multitude of different “home-made” course-homepage solutions of varying quality.

Neither does ITU currently provide any support of online interaction in the form of communication tools, file sharing tools (apart from empty server space), project platforms, group or network facilities.

From a technical perspective the IT-department pilot projects have already outlined a technical procedure for providing access to wordpress pages, and wikis are soon to follow. However in its current state, these pilots are not a full solution to the range of existing needs at ITU. The pilot solutions:

- are not integrated with existing IT-systems at ITU (e.g. STADS, mit.ITU)
- are not integrated with the administrative procedures at ITU and therefore is not accessible to most teachers
- are most likely not scalable, since it is not possible to integrate with ITUs administrative system STADS (via LDAP)
- have not yet been evaluated from a pedagogical perspective – to make sure it can support relevant learning activities
- have not been evaluated with regard to cost-effectiveness compared to other solutions
- do not support all the teachers’ needs (e.g. using IT-supported interaction as a learning activity, ability to use podcasts in learning activities, administering contact to students incl. digital hand-in of exercises etc.)
- do not support all the students’ needs (e.g. single sign-on, having a unified interface to course material for each course, access to learning-relevant online network activities supported by ITU)

Purpose

2-year perspective:

A group of teachers at ITU (5-10 people) have re-evaluated learning activities for their specific course at ITU and are actively using IT to support such learning activities. This could include; activity on course-homepage, wiki-building, blogging, podcast, web.2.0 networking and communication tools etc.

Students can begin to feel the integration of new pedagogies, increased focus on interaction and use of IT in learning activities in a group of courses (5-10).

Experience with IT support for interaction and learning is described in detail, an experimental online infrastructure is up and running (strategy goal) and a set of requirement specifications for ITUs learning platform are finalised.

- The platform will most likely be a module based patch of different technologies jointly fulfilling the teachers' and students' requirement
- The platform will most likely consist of both well-known LMS-type learning facilities as well as a range of newer Interaction/communication tools and web 2.0 tools
- The requirement specification should take into consideration the need for integration with both existing IT-platforms (STADS, mit.ITU) and administrative processes.

5 year perspective:

Teachers, researchers, and students have access to a learning/interaction/networking/communication platform, which appears from the outside as a unified ITU-platform. It should be accessible through a single sign-on and integrated with mit.ITU, STADS, the intranet etc.

Teachers will be able to receive pedagogical/technical support for planning and execution of courses in the ITU-platform.

Students will experience a unified interface to online course pages (with exceptions), and they will benefit from a range of learning activities tailor-made to specific courses.

Faculty, students, as well as external partners, including; industry people, students and professors from other universities, individual nerds etc. can access an open part of the ITU-platform and interact with ITU students and faculty with regard to networked learning/peer-to-peer learning and mutual knowledge building. The exact nature of such a facility is still to be defined but will aim to support student-to-student, student-to-external student/expert, teacher-to-student, researcher-to-researcher interaction and learning.

A full platform operation plan has been defined and includes not only the day-to-day operations, but also a plan for continuous evaluation of new technology and the need for exchange of platform modules or incorporation of completely new modules.

Action plan

The project will be centred on experiments with actual *learning activities* going on at ITU. The 2-year sequence of actions is suggested to be:

<p>Phase 1 (1 semester)</p>	<p>Research Map and describe - current learning activities at ITU and at other institutions - Existing platform solution - Existing and available tools - Best case examples from other universities/organisations/businesses</p>	<p>Lab establishment Establish experimental *low-cost* lab facilities for podcasts, video-conferencing, sound- and video editing etc. (since equipment is meant for web-use, it will be inexpensive)</p>	<p>Teacher collaboration Invite all teachers to participate in a pilot-project, where they engage with Interaction and Learning Unit in re-thinking learning activities Choose 5-10 pilots representing a spectrum of different learning activities; including both class-room activities as well as interaction-based learning activities involving both local and global interaction.</p>
<p>Phase 2 (3 semesters)</p>	<p>Pilot projects In collaboration with teachers - use pilots to experiment with actual *learning activities* on the bases of pedagogical theory and new technology</p>	<p>Continuous evaluation Continuously evaluate results of pilot projects Continuously work with a reference group of participants from all relevant department at ITU in order to make sure that the future platform will be integrated into existing systems and processes</p>	<p>Experimental infrastructure Create an experimental online infrastructure to support pilots</p>
<p>Phase 3 (the last semester of phase 2)</p>	<p>Requirement specs Create a set requirement specification for a platform on the basis of pilot experiments</p>		

Scope

Relation to current practises

The project does not have a major impact on current practises the first two years, during which it will continue to have an experimental status. The project activities should be experienced as added value by providing teachers with the possibility to receive support for improvements of course activities.

Luvit remains in action operated by Interaction and Learning Unit until a new platform is in place.

A detailed plan for the interface between the IT-department and Interaction and Learning Unit with regard to the use of wordpress pages and wikis should be outlined.

Role of Interaction and Learning Unit

The project will be anchored in the Interaction and Learning Unit, which is also expected to drive the implementation and operate the future learning platform (w/ the IT-department and/or external providers).

Interface to other departments

A reference group of representatives from relevant parts of ITU should be established as soon as possible; including, as a minimum, representatives from the IT-department, the Communication Department, the Study Administration, as well as faculty members.

The project will have an interface to the *IT-department* with regard to technical advice, small scale experiments and suggestion of technical / provider solutions.

The project will have an interface to the *Communication Department* in working with visible online learning activities and knowledge sharing (networked/peer-to-peer learning).

The project will have an interface to the *Study Administration* on the link between the learning platform and the administrative processes.

Costs

An experimental budget has been set aside in the Interaction and Learning Unit for this project in 2009. The amount should be reevaluated for the 2010 budget.

The project aims to provide a learning platform proposal including an estimation of implementation and operation costs for the budget planning in the autumn 2010.

Given the experimental nature of the project it is not possible to provide an estimation of the final costs at this point in time.

2009-02-11 Marie Gottlieb