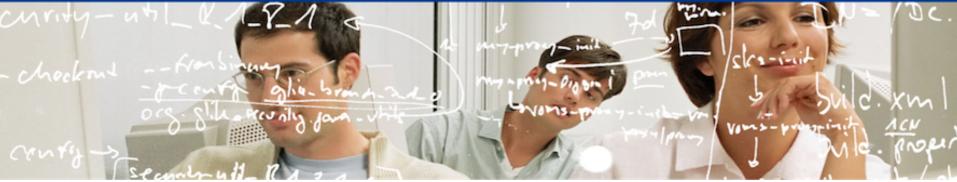
eduhub days 2014

Learning Infrastructure Project



SWITCH

Rolf Brugger & Petra Kauer-Ott learninfra-pm@switch.ch

Geneva, February 18 2014

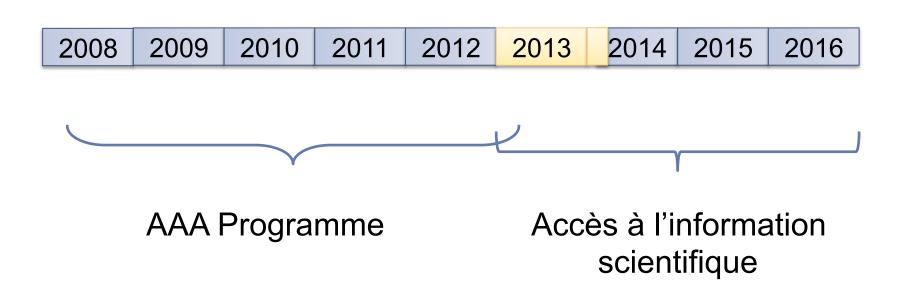
Project Status & Outlook



Learning Infrastructure

a National Cooperation & Innovation Initiative

Learning Infrastructure





Results



Results Personal Learning Env.

About Us	For universities	For all Internet users	Search:
Security & Identity Network & Int	ernet Collaboration & E-Learning	Projects & Working Groups In	novation

Home > For universities > Projects & Working Groups > Learning Infrastructure > Personal Learning Environment > Aims and Results

Projects & Working Groups	• WP 1.1: Requirement Analysis of Integrated Collaboration in Life-Long- Learning Environment				
Scientific Computing	Institutions: FHNW; SUPSI(IFeL), UNIGE, UNIFR, UNIBE				
> E-Infrastructure for E-Science	10.1 PM				
Cloud Computing					
Learning Infrastructure	Official Website: https://blogs.fhnw.ch/learninginfrastructure/				
News	This work package focuses on life-long student-centered collaboration in various social forms. The aim				
> E-Assessment	is to identify the usage scenarios of students and their requirements to a collaboration platform.				
 Personal Learning Environment 	Results:				
> Aims and Results	 Overview of scenarios and requirements 				
> Contact	• Description 2 of current practices, needs, benefits and risks of an integrated collaboration and				
> E-Identity	 working environment. Validated scenarios of supporting the student life-cycle. 				
> ICT Law WG	 <u>Requirements and specification</u> Ø of a collaboration and working environment. 				
> Mail WG					
> Network WG	WP 1.2: Identifying, Testing and Selecting Collaboration Environments and Feature Requests				
> Procurement WG	WP 1.3: Integration of 3rd party Environments with e-portfolios and institutional services				
> Security WG					
Storage WG	WP 1.4: Pre-Study: Long-term Storage of Forgery-Proof Certificates in User Centric Environments				
	WP 1.5: Using the e-Portfolio as Base for a Long-Term Digital Identity				
	WP 1.6: Mobility and Ubiquity resources for learners and teachers				

http://www.switch.ch/uni/projects/learn_infra/ple/wp.html

Results E-Assessment

About Us	For universities	For all Internet users	Search:
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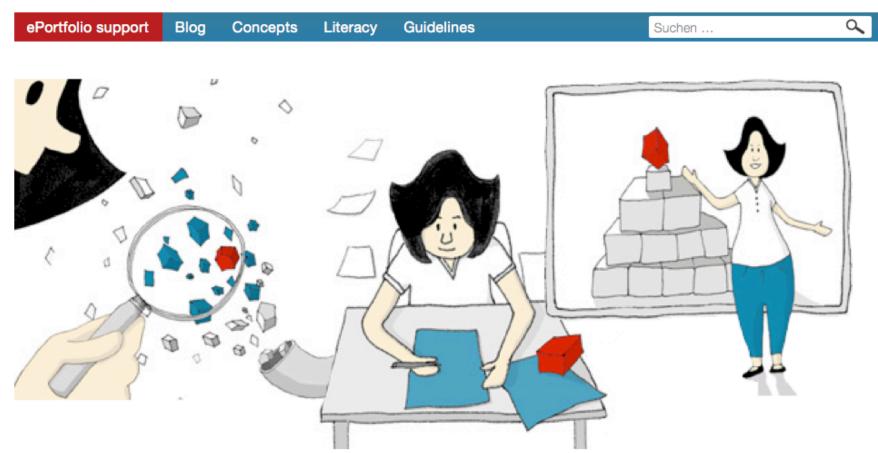
Home > For universities > Projects & Working Groups > Learning Infrastructure > E-Assessment > Aims and Results

Projects & Working Groups	▼ WP 2.1: e-Assessment Portal				
Scientific Computing	Institutions: SWITCH, ETHZ, FHO, UNIBAS, UNIBE, UNIGE, UZH, SUPSI, ZFH				
> E-Infrastructure for E-Science	2.05 PM				
Cloud Computing	This work package focuses on the delivery of an e-assessment portal providing status quo informatio				
Learning Infrastructure	and best practice to support the decision process about assessment infrastructure at HEI's.				
> News					
> E-Assessment	Results available at https://www.eduhub.ch/resources/eassessment and https://eassessment.eduhub.ch/				
Aims and Results					
 Personal Learning Environment 	 Identification of information sources and <u>definition of portal structure</u> ▶ Implementation of portal (internal test environment http://eassessment-test.eduhub.ch/ 				
> Contact	 Structured information (<u>information collection sheet</u>) available via portal (https://www.eduhub.ch/resources/eassessment 				
> E-Identity	http://eassessment.eduhub.ch/ [2])				
> ICT Law WG					
> Mail WG	WP 2.2: Local Information				
> Network WG	→ WP 2.3: Tools				
Procurement WG	> WP 2.4: Scenarios				
> Security WG	> WP 2.5: Community				
Storage WG	> WP 4.1: Field Tests and Pilots				
	> WP 4.2: Enhancements				
	→ WP 5.1: Business Models				
	→ WP 5.2: Single-Sign-On				
	WP 5.3: Deployment Support				
	WP 7.1: Overview of Competence-Oriented Assessments				
	WP 7.2: Advanced Competence-Oriented Testing				

<u>http://www.switch.ch/uni/projects/learn_infra/eassess/wp.html</u> © 2014 SWITCH

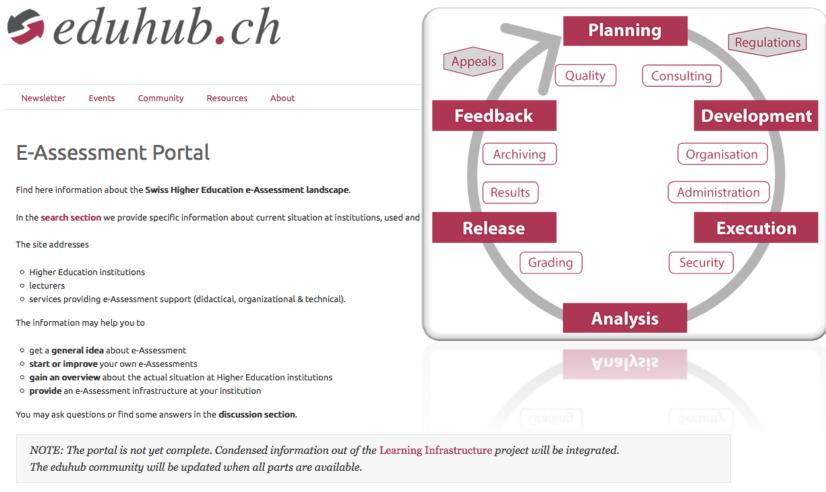
E-Portfolio Portal

ePortfolio support material for eduhub.ch





E-Assessment Portal



http://www.eduhub.ch/resources/eassessment



E-Assessment Search

🦻 eduhub.ch

Start Institutions Tools Scenarios

E-Assessment Portal Search

Search here for specific e-Assessment information about institutions, tools and scenarios. Click in the navigation bar above to start your search.

Institutions

Start at the Institutions section for questions like

- What institutions (and units) use e-Assessment?
- What tools does institution/unit XY apply?
- What scenarios uses institution/unit XY ?

or to compare institutions/units and look at them in detail.

Tools

Start at the Tools section for questions like

- What tools are used for e-Assessment at Swiss Higher Education institutions ?
- What institutions/units apply tool XY?
- What scenarios are supported by tool XY ?
- or to compare tools and look at them in detail.

Scenarios

Start at the Scenarios section for questions like

- What e-Assessment scenarios are used at Swiss Higher Education institutions ?
- What institutions apply scenario XY ?
- What tools are used in scenario XY?

or to compare scenarios and look at them in detail.

We need Feedback!

If you would like to add or edit information about your institution/unit, a tool or a scenario please use this form 🗐 and send it to info@eduhub.ch

http://eassessment.eduhub.ch

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← Back to eduhub

Institutions: Local Information

Lehrentwicklung und -technologie ETHZ (LET)

URL	www.let.ethz.ch
Contact	Main Contact: Tobias Halbherr Lehrentwicklung und -Technologie (LET), ETHZ Daniel Schneider Lehrentwicklung und -technologie (LET), ETHZ Thomas Piendl Lehrentwicklung und -Technologie (LET), ETHZ
Experience	high
Experience Details	- Several years of experience with execution of online exams - Support for e-assessment with different tools - Development of assessment software and settings (SEB, SIOUX, VDI, Fedora Linux Setup for exams)
Infrastructure	Rooms & Hardware: - 5 rooms with 284 places - a maximum of 568 candidates can pass the same exam (2 groups) - no speciif exam rooms but multi-functional rooms are prepared for exams - 170 desktop computers and periphery are on stock for exams
Tools	SEB Inhouse development & regularly used Moodle Regularly used SIOUX Inhouse development & regularly used ILIAS



Scenarios

Computer based summative assessment (CBA) with the software suite CAMPUS (Summative assessment with CAMPUS)

Туре	summative
Category	institutional hardware scenario
Category Annex	Institutional desktop Windows PC in computer rooms CAMPUS software with 3 components: authoring, server, player
Group Size	medium
Institutions	Médecine / UNIGE
Implementation	Started in 2006 with one exam and, in 2013, about half of all the exams held at the faculty are computer-based.
Usage Level	During the two end of semester exam session. Each exam session is about 2 weeks long.
Short Description	Exams are composed of a series of clinical or basic sciences cases followed by a series of independent (students can jump from one question to the other, students can change their answers) multiple choice questions (MCQ). The short cases consist of dependent (students can jump from one case to the other, but within a case, the progression is linear and the students cannot change his answers) questions organized in a logical narrative order.
Detail Description	see file below
Files	CAMPUS scenario description 🖉
More about	
URL	www.unige.ch
Advantages / Disadvantages	Advantages: • Since many oral exams based on clinical cases are now replaced by this CBA, the faculty saved money and time • Potential to use video and sound, but not yet used • Speed of analysis • Objectivity of the automatic analysis versus a possible arbitrary (oral exam) Drawback: • A relatively heavy logistic



Tools

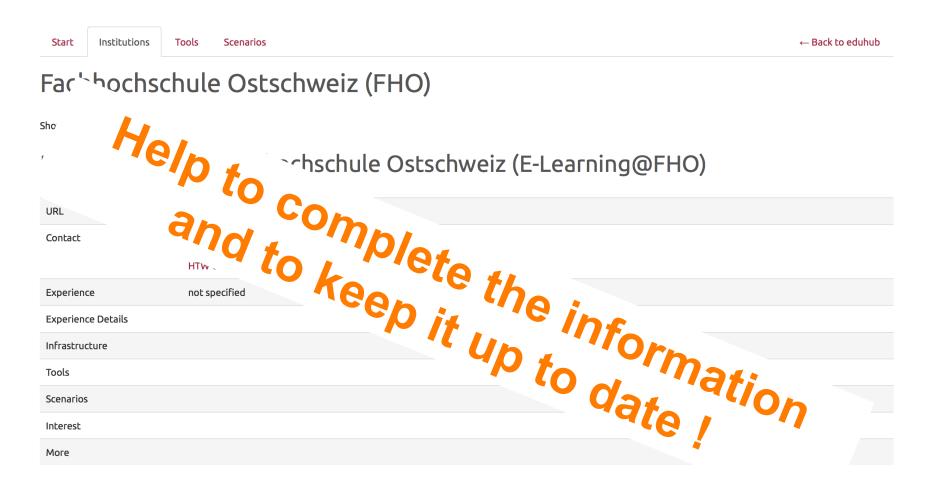
Electronic Registration of Objective Structured Clinical Examinations (e-OSCE)



URL	www.e-osce.ch
Contact	Main Contact: Philippe Zimmermann Institute for Medical Education, UNIBE Kevin Gaunt - <i>Technical responsible</i> Institut für Software, HSR Sebastian Hunkeler - <i>Technical responsible</i>
Туре	Web-client application
Keywords	OSCE exams, tablets, iPad apps, electronic examiner questionnaire
Description	E-OSCE is used to prepare and execute OSCE exams electronically. The system consists of three separate apps, one for preparing exam data, one for examiners to assess students and one for supervising the examinations and to ensure proper functioning. Other than similar systems, the main assessment components all work online as well as offline (without a functioning internet connection).



Fill the gaps !





Lists

All Tools

#	Туре	Phase	Tool -	Keywords	Institutions/Units	Scenarios
	Non-web client application	Preparation & Execution & Analysis	acadima acadima	learning cards, flash cards, mobile	UZH / Biology	acadima scenario
	Third party application	Execution	Adobe Reader Adobe Acrobat Reader		ETHZ / LET	VDI based Online-Exams
	Deployment tool	Preparation	Apple Configurator Apple Configurator	device, install, apps, mobile, remote	UNIBAS / LMZ	OSCE @UNIBAS
	Analysing tool	Analysis	AWP Auswertungs-Paket	statistical analysis of exams/question formats, graphical plots, quality improvement	UNIBE / IML	MCQ Exams OSCE @UNIBE MEASURED MCQ > scenarios using AWP
	Deployment tool	Preparation	Baramundi Baramundi	automated installation, maintenance	ETHZ/LET	Browser based Online-Exams VDI based Online-Exams SIOUX-based Exams -> scenarios using Baramundi
	Question/management tool	Preparation	BME Better MC Exam	administration, question pool, text-based MC questions	UNIBAS / LMZ	мс
	Web-client application	Execution & Analysis	BULATS BULATS Language Assessment	commercial online speaking and writing tests	PHBern / IT Grundausbildungen	
	Third party application	Execution	CAD Software Computer-aided design Software		FHO / IFS	
	Non-web client application	Preparation & Execution	CAMPUS CAMPUS	modular system used in Medicine, server- client	UNIGE / Médecine	Summative assessment with CAMPUS
	Monitoring/tracing tool	Execution	CCevaluator CCevaluator	record exam sessions, video of real room including sound	UNIGE / Médecine	Stations formatives (SF) - Video





All Institutions / Units

			Experience			
#	Institution	Unit	•	Tools	Scenarios	Contact
	UZH	Teaching Center, Department of Banking and Finance UZH (Teaching Center IBF)	high	Moodle Excel -> tools used at Teaching Center IBF	MC test @IBF MC and Excel @IBF > scenarios used at Teaching Center IBF	Elisəbeth Liechti
	UNIBAS	Lernzentrum Medizin UNIBAS (LMZ)	high	e-OSCE Filemaker Word VLC PowerPoint TeleForm Apple Configurator LimeSurvey LogBook Scan software Ergotron Sync Cart OLAT BME OSCE Manager > tools used at LMZ	MC PC OSCE OSCE @UNIBAS MC 5th year LogBook scenario > scenarios used at LMZ	David Böhler
	UNIGE	Faculté de Médecine UNIGE (Médecine)	high	DataScan Excel CCevaluator CAMPUS -> tools used at Médecine	Stations formatives (SF) - Classic Stations formatives (SF) - City Stations formatives (SF) - Patient instructor Stations formatives (SF) - Video Summative assessment with CAMPUS > scenarios used at Médecine	Bernard Cerutti
	UNIBE	Institut für Medizinische Lehre UNIBE (IML)	high	e-OSCE WebPool MEASURED Excel TeleForm AWP	MCQ Exams OSCE @UNIBE MEASURED MCQ > scenarios used at IML	Philippe Zimmermann



Comparison

Comparing Scenarios

	Local 3rd party Online-Exams	Task Market scenario 2	MC 5th year	Screening Test	acadima scenario
Туре	summative	formative	formative	formative	formative
Category	public computers scenario	self-assessment scenario	third party applications scenario	self-assessment scenario	self-assessment scenario
Category Annex	also third party application and LMS scenario (SEB)	- Self-assessment on students' or public computers	browser-based	also student hardware scenario, specialized assessment etc.	self-organized learning; learning with flash cards
Group Size	small-medium	all	large	large	large
Institutions	LET / ETHZ	ZHAW LSFM / ZFH (incl. PHZH)	LMZ / UNIBAS	FFHS / SUPSI	Biology / UZH
Implementation	~15 exams	scenario implemented before without task market (is a new tool)	2 times	Various times	pilot with 300 students
Usage Level	No new exams are designed with scenario, but are designed as VDI exams instead. Scenario includes several historically grown and tested pioneer projects	The scenario (without task market) is regularly used in mathematics and applied informatics, if the class is not too big (up to now without task market)	Once a year	Widely used (the click-rate of this questionnaire is very high)	
Short Description	Same functionality as browser based Online- Exams. Additionally: • Any software can be included in the exam process as a tool, and students required to solve tasks using the software	The students get a pool of tasks on different topics and different difficulty levels. Solving practical problems supports the self-assessment. Students can upload tasks and exchange them with other students.	MC exam in browser	On the FFHS website, persons who are interested in a study program at a distance Higher Education Institution can fill out an online-questionnaire in order to find out if they are able to do such a program.	acadima is a digital flashcard system created for Swiss university students. The system is used throughout Switzerland. Students write, review and share learning and test flashcards to study on their modules and prepare themselves for final



"Creative Tables"



Creative Tables

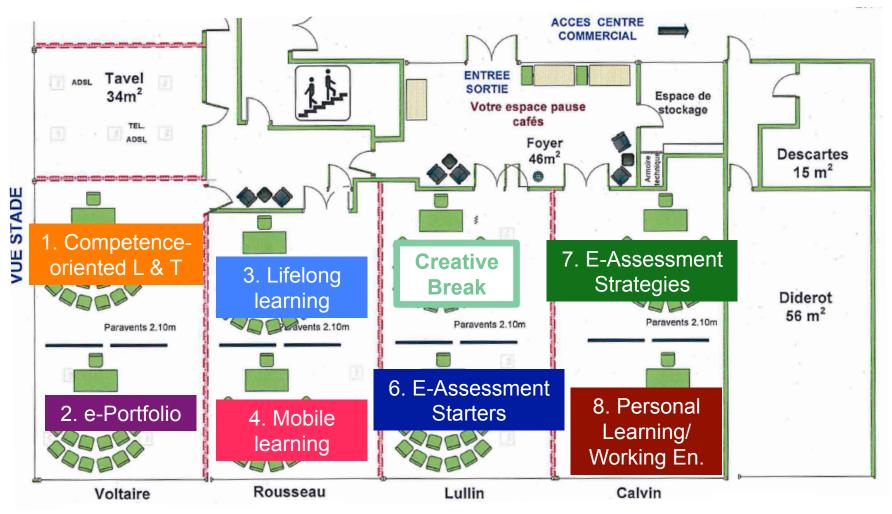




Table 1: Competence-oriented Learning and Testing

State of the art/White paper about peer & collaborative e-assessment

Requirement documents for different scenarios (as VDI)

- Competence-orientation
- Changes in learning culture
- Transfer into exams
- Requirements and problems

From concept design to exam implementation

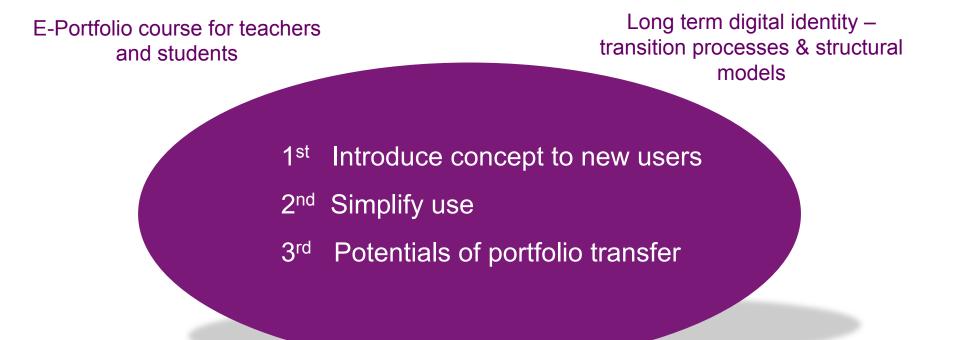
Definitions & categorization

Reports about competence-oriented e-assessment perspectives

Hosts: Laurent Moccozet, Tobias Halbherr



Table 2: e-Portfolio

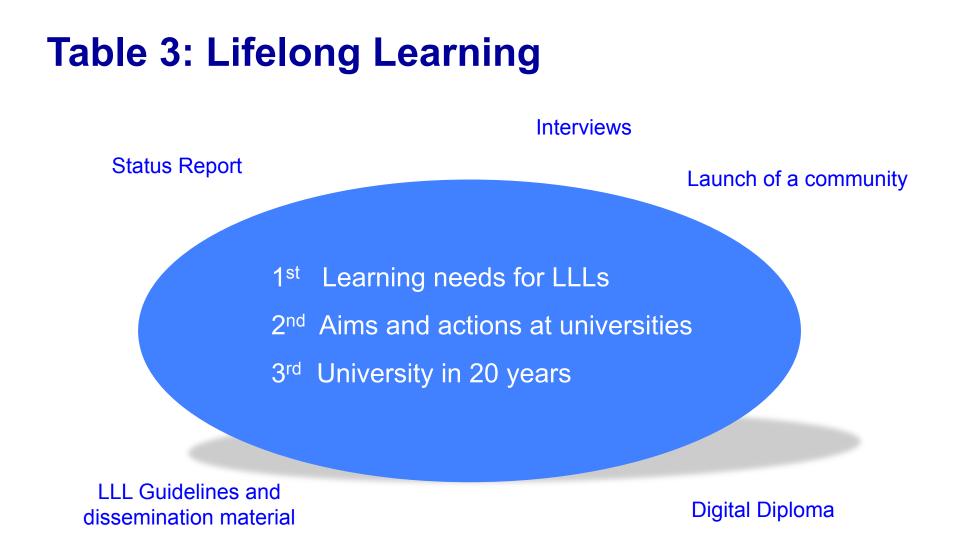


Portfolios at universities: concepts and arguments

Portfolios and social business platforms – relations and integration

Hosts: Céline Restrepo, Andreas Hediger





Hosts: Bineta Ndiaye, Suzanne de Jonckeere



Table 4: Mobile Learning

Trend report: technologies and usage scenarios

Annotated best practices (web site)

- Most promising mobile scenarios
- How to realize a mobile scenario
- Required local/national infrastructure

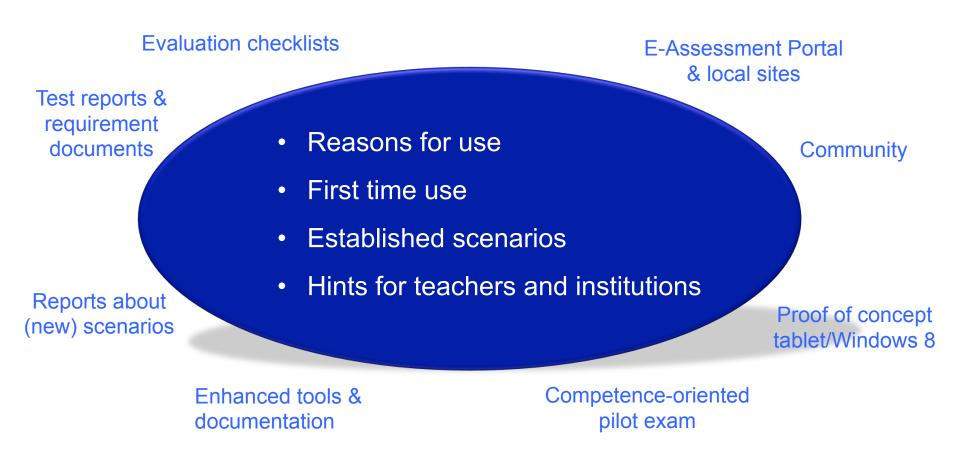
Guidelines and requirements for mobile services

Tool: collaborative flash cards

Hosts: Karin Niffeler, Hervé Platteaux, Christian Glahn



Table 6: E-Assessment Starter



Hosts: Marc Sohrmann, Elisabeth Liechti



Table 7: E-Assessment Strategies



Concept for Single-Sign-On exams & proof of concept

Hosts: Daniel Schneider, Daniel Scherly, David Böhler



Table 8: Personal Learning / WorkingEnvironments & Collaboration

Tool selection report

Requirement analysis

Pilot and didactical evaluation report

- Collaborative learning vs. working
- Institutional support
- Requirements in academia
- Institutional motivation

Tools: further development of collaboration platforms

Guidelines: introducing students

Hosts: Cincia Garcia, Denis Gillet, Laurent Opprecht



Take a Creative Break!

This is a free table without rules

- Burning issues to be shared
- What visionary/crazy e-learning project would you start if you had all the resources



No host

Creative Tables

