



Education and Culture DG

Lifelong Learning Programme

# **Innovative eLearning Tool for Quality Training Material in VET**

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SZÁMALK / Dennis Gabor Univ.

**iQTool Final Conference Budapest 2009**



iQTool Project



EU Life Learning Programme

Leonardo da Vinci 3.2: **Multilateral project for transfer and development innovation**

- Priority: **Innovative eLearning content**





iQTool aims

## Objectives

- Support improvements in quality and innovation in eLearning

## Innovative aim

- **Softver tool**, integration of evaluation system and LMS



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# Partners



- **Hungary:** SZÁMALK Education and Information Technology Ltd.
- **Norway:** The Research Foundation TISIP
- **Greece:** Technical University of Crete, Laboratory of Distributed Multimedia Information Systems and Applications
- **Hungary:** MTA SZTAKI (Computer and Automation Research Institute, Hungarian Academy of Sciences)
- **Germany:** f-bb (Research Institute for Vocational Training)
- **Portugal:** CENFIM (Vocational Training Centre for Metallurgy and Metalwork Industry)





## Target Groups

- VETs and other eLearning institutions
- Users, managers, tutors, trainers
- Content developers
- Service providers





iQTool

Duration: 2 years

- Begin on 01-12-2007

Total eligible cost EUR 618.728



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## Parts of the project

I. Part: Setting up working groups  
Research work, evaluating results

II. Part: Software and content development

III. Part: Testing, feedback  
Dissemination, exploitation





## iQTool WORKPACKAGES

- WP1 Management (SZÁMALK)
- WP2 Research (TU Crete)
- WP3 Software Development (SZTAKI)
- WP4 Educational Content Development (f-bb)
- WP5 Testing and Pilot Training (CENFIM)
- WP6 Quality and Evaluation (TISIP)
- WP7 Dissemination (SZÁMALK)
- WP8 Exploitation (SZÁMALK)







## WP1. Workshops

### Project workshops

- January 2008 Lisbon
- June 2008 Chania (HE)
- November 2008 München
- May 2009 Trondheim (NO)
- November 2009 Budapest

+ netmeetings



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## WP1. iQTool websites

### Websites

#### 1. Project website

[www.iqtool.eu](http://www.iqtool.eu)

- Public  
Summary, research reports, eLearning contents
- Working area  
for partners

#### 2. Website for software development

[www.iqtool.com](http://www.iqtool.com)







Innovative eLearning  
Tool for Quality Training  
Material in VET

username:

password:

[Forget your password...]

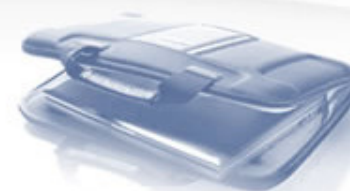
## NEWS

### Trondheim Meeting

The fourth partner meeting of the iQTool project was held in Trondheim, Norway on 28-29 May 2009. The main topics of the meeting were the project evaluations (one from Brussels, and the other from the external evaluator), WP3, WP4, WP5, WP6 and finally WP7 on dissemination.

[Project Summary](#)[Events](#)[Partners Profile](#)[Contacts](#)

## Project Summary



[ Project Summary ] >>

### iQTool - Innovative eLearning Tool for Quality Training Material in VET

Quality is becoming a strategic issue for web-based learning providers and users. The need for quality management in web-based learning has risen in European educational policy discussions as well as quality surveys and questionnaires targeted at students and teachers.

The aim of the project is to develop an open source software tool integrated in LMS (s), which is suitable to assess the teaching quality management of eLearning training programs and training materials for supporting the application of the quality measurement tool for institutions dealing with vocational training and which therefore can promote the establishment and development of quality culture. The project implementation integrates testing of software and pilot training of the training material as well. Thus the aims of the project are:

1. to elaborate an eLearning quality tool which can be applied at European level and which enables the teaching of quality management,
2. to provide the management and quality assurance of vocational training with an effective tool.



## WP2. Research

Coordinator: TUC (EL)

- Evaluation of open-source eLearning platforms
- Evaluation of quality management systems applicable in VET







## 1. Open Source LMS Research

- Research plan
- Work out criteria system
- **Research: *Open source LMSs***
- *Identification of related projects, surveys, open source LMS's*
- Evaluation the results
- Research report





## Open Source LMS Search



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- **Fle3 1.5.0** - <http://fle3.uiah.fi/>
- **eFront 3.1.2** - <http://www.efrontlearning.net/>
- **Ilias 3.9.1** - <http://www.ilias.de/>
- **Moodle 1.8.4** - <http://moodle.org/>
- **ATutor 1.5.5** - <http://www.atutor.ca/>
- **Sakai 2.4.1** - <http://www.sakaiproject.org/>
- **dotLRN 2.3.1** - <http://dotlrn.openacs.org/>
- **Claroline 1.8.8** - <http://www.claroline.net/>
- **OLAT Online Learning And Training 5.2.3** - <http://www.olat.org/>

- **LON-CAPA 2.6.2** - <http://www.lon-capa.org/>
- **KEWL.NextGen 1.3.0** - <http://kngforge.uwc.ac.za/>
- **Docebo 3.5.0.3** - <http://www.docebo.org/>
- **Dokeos 1.8.4** - <http://www.dokeos.com/>
- **Interact 2.4.1** - <http://www.interactole.org/>
- **Metacoön 1.9.5** - <http://www.metacoön.de/>
- **OpenElms 5.0** - <http://www.openelms.org/>
- **Bodington 2.8.0** - <http://bodington.org/>





## Review criteria

- Active Development Community
- Existence of Stable Versions
- Support English Language (at least)
- SCORM compliance
- Support Learning Objects as Minimum
- Granularity of Learning Content
- Support Core LMS Functionality

- Availability of Information about their User Base
- Existence of Organization to and derived works.
- Review Result
- Support
- Further Development
- Availability of Third Party Reviews
- OSI approved license or, if they use a different license, ensure that it allows modifications



## 2. Quality Assurance Research

- Research plan
- Work out criteria system
- **Research: *Quality management systems***
- *Identification of related projects, surveys, open source LMS's*
- Evaluation the results
- Research report
  - *Suggestions of Quality assurance systems in iQTool*
  - *Suggestions to QM material of iQTool*





Title:  
Quality Management in eLearning – Results of the Online-  
Questioning

Authors:  
Julian Huff

Published in:



## Quality Management in eLearning – Results of the Online- Questioning

### 0. Abstract

This survey is an approach to explore on how and to what extent quality assurance is applied in the participating European (educational) institutions. The findings presented apply to those institutions only and are not to be considered representative.

We found that very few respondents consider their procedures “excellent”. The category “excellent” varies between 5% and 25% to every question. Most respondents rate their procedures “good” (between 40% and 50% to each question). Receiving between 12% and 25% to almost every question, “understandable” is the second



## WP3. Software development

Coordinator: MTA SZTAKI

Partner: TUC (EL)

Partner: SZÁMALK (ILIAS plugin)



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## WP4 Content Development

Coordinator: f-bb (DE)  
eLearning materials:

A. Quality Management in Vocational Training and eLearning

B. Web-based Training IQTool Users Manual





Quality Management in Vocational Training and eLearning  
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## Quality Management in Vocational Training and eLearning

learning time	learning objective	study content

- The IQTool project develops an innovative content and software tool to support quality of vocational training and eLearning. In order to meet this goal, several quality assurance systems must be identified and their applicability to the institutions dealing with eLearning should be studied. This module assists you in doing so.

Please move your mouse pointer over the terms.





## The concept of quality

Conceptions of quality can be grouped into several categories, for example:

### Quality as ...



**... fitness for purpose.** There is no general quality. An operational quality must always be specific: quality of something for specific purpose. For instance a study programme may be good at preparing developers but not teachers to work in practice.

Please move mouse pointer over the pictures.

However, the two major aspects of quality are **quality management** on one hand and **quality assurance** or quality control respectively on the other hand. Both of them can be built up, introduced and used standardised or independent from standards. In the following we attempt to draw up the difference between them.



Quality Management in Vocational Training and eLearning  
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## Create question and questionnaire statistics

First select a questionnaire by using a search term and clicking the 'Select' button and in a new page select a question in it. This mechanism ensures that the selected question has been already added to a questionnaire.

In our example the question 'TestSingleQuestion' was selected. In the appearing form the statistic type can be chosen from the above 13, and by setting the visibility the user also can decide whether the newly created statistic will be public or private. Public statistics can be accessed by any QAM or Publisher, while private ones are only seen by the creator. When you have finished, save the statistic by clicking the 'Create' button.

Create question statistic

Statistics for

Question: TestSingleQuestion

Set the statistical parameters

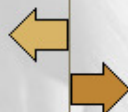
Type of the statistic: count of answers given

Visibility: public

Create

The mechanism to create questionnaire statistics is pretty similar: first select a questionnaire and in the now appearing form please choose the type of statistic and visibility, then save your choice.





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## Exercise: User roles

Administrators...	
Publishers...	
Quality assurance managers...	

... can create and edit questions and questionnaires and are able to define evaluations as well. Besides, they can create, edit and view: questions, combined statistics or questionnaire statistics.

... can edit the organizations, manage user accounts and they can delete questions or questionnaires.

... can inspect and revise questions and questionnaires and they can view: questions, combined statistics or questionnaire statistics.

☒ ☐

Please drag the statements with your mouse to the area they belong





## WP5. Tests

Coordinator: CENFIM (PT)

Tests on ILIAS platform of SZTAKI

A (Quality)

B (Manual)

8 eLearning materials / each partners

Evaluation by test groups



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Open Source eLearning

Logged in as iQTool Evaluator

[Logout](#)

Personal Desktop Repository Search Mail

- Repository
  - Category
  - Evaluation of the 2 iQTool Deve
  - f-bb
  - iQTool Project Internal tests of
    - MUSIC-TUC
    - MUSIC-TUC - Copy
    - NO TITLE
    - SCORM Module....2/2004 (JavaS
  - SZAMALK
    - Portuguese WP5 pilot-tests
  - TISIP

Refresh

Repository

Repository

[All Commands](#)

Categories

Category [Info](#) [Add to Desktop](#)

Evaluation of the 2 iQTool Developed Modules [Info](#) [Remove from desktop](#)

This is to implement the evaluation, using the iQTool methodology, of the 2 Modules developed by the iQTool Project: ....

f-bb [Info](#) [Add to Desktop](#)

Evaluation of German Learning-Modules

iQTool Project Internal tests of WP3 [Info](#) [Add to Desktop](#)

Project iQTool - Internal tests of WP3 - iQTool web interface testing

MUSIC-TUC [Edit](#) [Info](#) [Add to Desktop](#)

Example of SCORM Module - This was directly added as SCORM 1.2/2004 (JavaScript-RTE)

MUSIC-TUC - Copy [Info](#) [Add to Desktop](#)

Example of SCORM Module - This was directly added as SCORM 1.2/2004 (JavaScript-RTE)

NO TITLE [Info](#) [Add to Desktop](#)

SCORM Module - This was directly added as SCORM 1.2/2004 (JavaScript-RTE) Content type

[Info](#) [Add to Desktop](#)

Start

WP2.research iQTool Proj...

2008-12-04...

Dokumentu...

Dokumentu...

ILIAS - Repo...

HU 18:50 szombat

# Quality Assurance and Evaluation of

## iQTool

*Innovative eLearning Tool for Quality Training Material in VET*

**Leonardo da Vinci, development of innovation**

by



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[www.iqtool.org](http://www.iqtool.org)

April 2008

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## WP6. Quality assurance and monitoring

### Internal monitoring

- web-based questionnaires,
- Reports, minutes of meetings

### External evaluator (PT)

- External reports ( interim, final)

### Reports for Brussels (EACEA)

- Evaluation: good





## Project Outcomes & Results

- Research reports
  - Open-source eLearning LMSs
  - Quality management systems
- Software for evaluation of quality of eLearning courses, contents
- eLearning training materials
  - Quality management
  - Manual







## WP6.-7 Dissemination



- Project website
- EU ADAM database
- Project leaflets 5 languages (EN, HU, NO, GE, GR, PT)
- Conference papers, newsletters, (national and international)
- Final conference, Budapest, November 2009



Thank you for your attention

[www.iQTool.eu](http://www.iQTool.eu)

**iQTool Final Conference Budapest 2009**