

OPEN QASS TOOLKIT SYSTEM PLAN AND PROTOTYPE

The OpenQAsS project will develop an open source software toolkit to support the management of QA systems in vocational schools and training providers. The main focus of the development has been shaped by the results of a large-scale, online survey of teachers and other stakeholders, in four of the participating countries, and through meetings and workshops at Multiplier Events. The survey collected 266 responses (HU: 102, ES: 49, IE: 37, IT 78). This information highlighted the perceived most-important processes in each country. In order to ensure that the project took a systematic approach to the focus of the development,



the UAH team created comparative tables where the information on the percentage importance for each process or feature returned in the survey, plus any suggestions or comments on each particular need, was catalogued and analyzed. The final development decisions were taken based on selecting processes that exceeded the 35% demand threshold, indicating where support for quality management system in VET centers is most necessary. The most frequently requested processes to be supported by the system were as follows:

- Planning of learning activities (55.56%)
- Measurement of student satisfaction (50.74%)
- Professional development and motivation of staff (45.56%)
- Document repository (45.18%)
- Measurement of teacher satisfaction (44.81%)
- Communication between the different users of the system and the educational centre (44.35%)
- Control of learning objectives, exam results and individual student progress relative to a baseline standard. (44.07%)
- Teacher reflections on progress and the effectiveness of their approach (42.96%)
- Strategic direction, leadership and planning (35.18%)

Following this decision, taken at the Edinburgh project meeting, there was debate about the relevant underlying architecture and technology for the system and its development. Several options were analysed ranging from a centralized system with a content management system (CMS) as a core (e.g. Joomla or Drupal) to a set of existing heterogeneous tools integrated with a central application and a MySQL database.





OpenQAsS

Open Source **Quality Assurance System for Vocational Education**





To help partners to arrive at a decision, UAH designed a prototype to help with the evaluation of possible system functionalities and interaction, thereby also providing examples for possible future implementation. Based on the key processes identified above, UAH looked for open source web tools that could work with MySQL databases and which could support these processes. The search for the tools relied heavily on the web site http://alternativeto.net/. Use cases with UML notation with activity diagrams were created for each functionality to provide a formal specification. Following a detailed requirements analysis, it was agreed that the design of the OpenQAsS system should focus on the common components of QA practices and systems that have been depicted in each National report (the QA core).

Specifically, **QA indicators** defined at national level, and which could be mapped to EQAVET, were to be used as a primary source of information for the OpenQAsS system. Other issues defining the main requirements for the planned system included suggestions from headmasters interviewed in the first project phase and included in the country reports:

- **Modular design** is essential for two main reasons: firstly, to meet the different QA requirements which characterize QA practices in each member state and in each VET sector; secondly, to be able to react to the dynamic nature of the VET sector with its rapid evolution of QA regulations and criteria.
- **User-centred design** is necessary both to raise awareness about QA in education, but also to answer to practical and real end-user needs. OpenQAsS explicitly foresees the involvement of stakeholders, through interviews of headmasters, questionnaires for teachers, and multiplier events.
- **Exemplary IT-based solutions.** The application include functions noted above are interpreted as being extremely effective process to support QA practices in VET schools and providers¹. As a part of the system design, the team will carry out a deeper analysis of each functionality and service of the actual processes selected.
- The new system should not increase the administrative workload of the teachers. The question on how to avoid redundancy of stored data is crucial to achieve a very usable solution: e.g. avoid storing data and indicators of students separately in several different systems

¹ Refer to the document "Aica suggestions for 02-Teachers' requirements and 04-OpenQAsS Toolkit based on ReQuS teachers' and school self-assessment online platform")



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Finally, the general ideas for the development of the system were outlined in a development plan,



also presented at the Edinburgh meeting in June 2016. This was intended to promote an effective technical implementation within an iterative approach employing different mechanisms for quality assurance in the developed system. A decision was made o use Drupal as one alternative for an implementation given its modularity and the experience of the team in using it.

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Detailed information, studies and documents are available publicly on the website, under the menu Results/Studies, documents.



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http://opengass.itstudy.hu/



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Project

The OpenQAsS project vision is to utilise the potential of today's networking technology in all areas of the implementation of the EQAVET Reference Framework principles, and so make the resulting tools part of the daily practice of institutional Quality Assurance in our VET schools.

Target groups

- Teachers and headmasters of VET schools; managers and trainers of VET provider companies;
- VET schools and VET providers;
- Researchers working in the field of the vocational education;
- Software developers joining the OpenQAsS.org community.

Objectives

- To improve the culture of quality assurance by involvement of VET teachers and trainers into online consultation in the partner countries;
- To develop Open Source Software toolkit (OpenQAsS) to promote and facilitate QA management in VET schools and adult educational VET providers;
- To develop a certificate Institutional Quality Assurance Manager (IQAM) – for VET teachers and trainers who take responsibility for quality management tasks in institutions.

Partners

<u>iTStudy Hungary Educational and Research</u> <u>Centre for ICT</u> - Hungary <u>Universidad de Alcala</u> - Spain <u>AICA, Associazione Italiana per l'Informatica e</u> <u>il Calcolo Automatico</u> - Italy **Programme:** Erasmus+, Strategic Partnership, Vocational Education and Training

Participating countries: Hungary, Spain, Italy, United Kingdom, Ireland

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http://openqass.itstudy.hu/en

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