

OpenQAsS

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

2014-1-HU01-KA202-002356

ERASMUS+ Strategic Partnership

2014-2017



OpenQAsS O1 Research Plan

CNR

Palermo, 17th February 2015.

Document data

Author: Giovanni FULANTELLI
Version: published
Theme: Research Plan
Outcome: O1-A1
Date: 17th February 2015
Document Type: Guide
File: O1_OpenQAsS_Research_Plan.docx
Lector: Ildikó Balassa, István Bessenyei
Product ID: O1-A1
Target group: partners

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Chapter 1: Aims of the research plan

The critical points hindering the effectiveness of EQAVET have been identified in various earlier, relevant studies and reports¹.

These studies offer supporting reasons, and strongly suggest the need for ICT based solutions to support institutional quality assurance systems, but also that a **systematic research plan** is needed to guarantee that any work will lead to the development of a consistence package that answers questions such as:

- how can institutional quality assurance systems contribute to the development of transversal skills within students;
- how can it help to decrease the skills gap between education and work;
- how can the potential of 21st century ICT and networks be utilized in order to significantly improve the present situation?

By having this in mind, **the aim of the research plan illustrated in this document is to guide the development of all the activities foreseen in the projects, which are necessary to analyse the state-of-the-art of the implementation of Quality Assurance (QA) systems in European VET institutions.**

One of the main outcomes of this working phase are the **National Reports** on the implementation of QA systems in the five partner countries (HU, UK, IE, IT, SP), together with a comparative analysis of national results.

The reports will focus on practical methods within the different QA systems with the aim of identifying common elements for standardization in an ICT model.

Based on the National Reports, the consortium will select and document the **best practices** regarding QA in VET, and perform a **review of the existing ICT solutions** for supporting QA in VET.

At least three countries will be added in the review - Netherland, Denmark, Finland which have long traditions and effective results in EQAVET implementation. Two partner countries (Scotland and Ireland) also have established and proven systems, hence they will represent the starting point, and be the knowledge exporters of this project phase.

These activities will be followed by the second part of the requirement analysis, which is related to "O2 - Teachers' Requirements against OpenQAsS". After O1, an online repository with the most important issues of Quality Management in VET schools will be released, and teachers and trainers will be invited to collaborate online in order to identify what kind of IT tools they would prefer in running Quality Management Systems, and how an IT toolkit could simplify their task.

Starting from some specific hypotheses described in section 2, and following the methodology reported in section 3, the partners will activate the tasks described in section 4 to perform a National study on the implementation of Quality Assurance (QA) systems in European VET institutions in Hungary, Ireland, Italy and United Kingdom.

¹ E.g. The EQAVET network's feedback to the public consultation on the European Area for Skills and Qualifications, 2014

Chapter 2 – Preliminary research issues

Some preliminary issues have been raised during the kick-off meeting held in Budapest on 6-7 November 2014. These issues have introduced some questions related to the tasks to be completed to fulfil the O1 aims.

Questions have been partly answered during the specific session on „O1 - QA System in European VET institutions” held during the kick-off meeting, and partly through the discussion threads run in the OpenQAsS platform.

Responses given by the partners contribute to shed light on the specific aims of O1, as well as on the general objectives of the project as a whole.

In answering all raised questions, the partners have followed a pragmatic approach, always under a perspective of providing solutions which are feasible for a normal VET centre.

The questions are presented in the following sub-sections, together with the responses shared by by the partners.

Chapter 2.1 - Q1 - Which form of VET

The first issue related to the development of the project is a general one: **Which form of VET is the project addressing?**

In order to respond fully to this question, some specific issues have been identified.

- The VET levels to be addressed by the project.
- The educational path addressed by the project, with reference to the involvement of VET institutions: formal vs. informal VET paths.
- The learning place (and time) investigated in the project: e.g. traditional VET; e-VET (distance courses); blended VET; flipped classroom; MOOCs

Answer to Q1

OpenQAsS is focusing on formal education for VET schools (public sector) and for VET providers (mostly private sector).

In fact, the primary target groups of the project are:

- the teachers and headmasters of the VET schools, the managers and trainers of VET provider companies.
- VET schools and VET providers.

To the aim of the project, and in particular in planning the *OpenQAsS Toolkit*, the partners have to define the core activities of the Quality Management Systems used in different types of institutions (secondary schools, private companies, high schools, universities offering vocational education), independently from the form (F2F, distance learning, e.c.t.) of the delivery.

For this reason, partners agree on addressing EQF levels 4, 5 and 6.

Furthermore, it should be noted that more and more institutions are offering the same educational path through different access paths; at some EQF levels, several VET proposal contain:

- both face-to-face activities and home activities (really unusual 100% F2F, in eLearning it can exist 100% home activities),
- both traditional and innovative methodology (for example Flipped classroom),
- at least some form of use of ICT/eLearning.

Accordingly, in some circumstances a combination of a plurality of methods and methodologies can ensure a good quality. Therefore, the toolkit developed in the project should be open for further development, so that new modules (aligned with the special needs of the institute) could be added to the *OpenQAsS Core* developed during the project.

Finally, in order to agree on the definition of the main concepts of VET, the partners will adopt the terms defined in the EQAVET (EU Quality Assurance in VET) glossary available at <http://www.eqavet.eu/qa/gns/glossary.aspx>.

Chapter 2.2 – Q2 - Target groups and the role of learners

The second issue concerns the clarification of the **target groups**, with special focus on the role of **learners** as beneficiaries and their potential involvement in the analysis tasks foreseen in the project.

So, a specific question about this issue is if the learners' perspective should be considered in the analysis. (e.g. by interviewing some of them in order to know if their comments are reflected in any change at the VET institution, and if they think they can really influence the QM of the institution).

In addition to the **primary target groups** already mentioned in the previous section, which are listed again for clarity:

- the teachers and headmasters of the VET schools, the managers and trainers of VET provider companies.
- VET schools and VET providers

the project also considers the so-called **secondary target groups**, which include:

- **VET students and adult learners**
- policy makers
- researchers working in the field of the vocational education
- software developers who join the community of OpenQAsS.org (developed throughout the project lifespan)

Answer to Q2

The main objective of the OpenQAsS project is to make easier the QM activities for teachers and headmasters.

Accordingly, the learners (young and adults) will not be directly involved in the analysis research activities of the project.

Nevertheless, since **OpenQAsS is about the quality of teaching**, the main beneficiaries of the project will be learners.

Chapter 2.3 – Q3 – Level of abstraction of the research analysis

The third issue is strictly related to the National studies on the implementation of Quality Assurance (QA) systems in European VET institutions to be carried out in Hungary, Ireland, Italy, Spain and United Kingdom.

In particular, one of the aim of these studies is to focus on **practical methods** within the different QA systems in order to identify common elements for standardization in an ICT model.

A specific issue has been raised in order to achieve a common understanding, amongst the partners, of the term „**practical methods** „ in the framework of QA in VET and, in particular, in the OpenQAsS context.

The issue has been rearranged into a list of specific questions:

- What do we mean by ‘practical methods’?
- Are ‘practical methods’ immediately transferable from an Ntl system to another?
- Can cultural factors hinder transferability (between sectors and countries)?

Answer to Q3

On Quality Assurance there is a huge amount of theoretical work. The analysis of all these documents is out of the scope of the project; therefore, we adopt a very pragmatic perspective, and focus on the practical QA solutions adopted in the different countries:

- what kind of QA activities are carried on in VET institutions?
- what Quality Management System do they use?
- what data they have to collect to fulfil the QA requirements?
- What questionnaires are used to measure quality of teaching?

Furthermore, ‘practical methods’ should be immediately transferable from an Ntl system to another, and cultural factors should not hinder transferability between sectors and countries, specially in Europe, since the member countries are asked to follow the EU initiatives on QA as defined in EQAVET.

Chapter 2.4 – Q4 – On the „Best Practice” concept

The fourth issue aims at clarifying the definition of the term „Best Practice” and it concerns the Academic debate around the use of the term „Good Practices” instead of „Best practices”

In order to respond fully to this question, some specific issues have been identified:

- Which are the factors to be investigated?
- How do we measure them?
- Which are the threshold values? (What does transform a practice into a good/best practice?)

- How many initiatives should be investigated?

Answers to Q4

The partners have agreed that precise answers to the previous questions can be provided only after the analysis of the state-of-the-art of VET in the partner countries.

Nevertheless, some preliminary general ideas have been formulated:

- An evaluation grid should be defined in order to fix the indicators to be investigated;
- A strong pragmatic approach will be adopted in order to select these indicators:
 - They should be accepted (and acceptable) by the VET community (teachers and headmasters mainly)
 - They should serve as insights for O3 (OpenQAsS System plan and prototype) study/analysis
 - A holistic approach should be taken in the selection of indicators

Chapter 2.5 – Q5 – Defining dimensions of analysis for ICT-based QA tools

The final issue concerns the **review of ICT tools** to be done as a part of the analysis at national level.

In particular, the following questions have been formulated:

- Along which dimensions should the ICT-based QA systems be analysed? (efficiency; usability; openness; ...) (e.g. rules and methods of accountability, school inspection, control and monitoring, etc.)
- In particular, which are the specific features that will be reviewed to the aim of the project? (e.g. rules and methods of accountability, school inspection, control and monitoring, etc.)

Answers to Q5

We should consider this task as a sort of market research on ICT tools that support QA solutions.

In particular, the OpenQAsS goal is to develop a real and effective ICT-based toolkit. Preliminary analysis has shown that some authorities already have 'toolkits' for QA - but not ICT implemented toolkits. They are more like a set of forms, procedures and methods of analysis, so they represent a halfway house between a statement of QA and an ICT implementation. They are therefore a first logical step towards a full ICT implementation.

Consequently, no constraints should be posed in the identification and analysis of any such 'toolkits' that the partners will might come across during the analysis phase, since all of them will be show how some authorities are thinking.

Chapter 3 – Main research hypotheses

The main hypotheses behind the development of the National studies are:

1. Most of the vocational schools and institutions in the partner countries operate certain type of QA systems, or there are governmental rules for them to implement certain QA components.

2. There are systematic controlling processes (in both IVET and CVET) in every partner country; these processes impose strict requirements for establishing internal and/or external evaluation processes.
3. We know that the level of usage QA systems and the rules of QAs differ from country to country, but we assume that these systems share common components (a sort of *QA Core*), that are the same in every country. This assumption is based on the fact that EC has required all EU countries to introduce the components of EQAVET.
4. We assume that most of the VET schools running QA are mostly using traditional methods (for example paper-based surveys), without comprehensive ICT support.

Chapter 4 – Research methodology

In order to run the requirement analysis and elaborate the National reports, desktop research, analysis of documents and interviews will be used to collect data and elaborate them. Surveys could be also used if necessary (using online tools, such as *Limesurvey*).

Firstly, desktop research will be done to find *cold* data on the national VET systems in the **partner countries**, as well as in **Netherland, Denmark, Finland**. The analysis should also include some background information (e.g. what authorities or other regulations indicate QA as compulsory for VET centres). European Commission documents and national VET agencies reports are examples of documents that will be used to run this research activity. For example, the CEDEFOP website <http://www.cedefop.europa.eu/en/country-data> publishes reports on the VET state-of-the-art in EU countries. More information sources have been included in the bibliography section. The analysis

Afterwards, in each of the partner countries (HU, UK, IE, IT, SP), **2 case studies** will be investigated: one with public VET school (IVET), and one with private VET provider (CVET).

To this aim, the partners have defined a „Headmasters’ interview outline” to describe the QM practice of two exemplary schools [see annex].

The interview has been structured in 4 sections:

1. Planning - education program, vision, concept, mission
2. Development Process
3. Quality management, evaluation, self-assessment (Implement a quality management system)
4. Feedback, development

Data collected with the interviews will be supplements for the country case studies.

Finally, desktop research will guide the comparative analysis of the results at national level.

All the results of the research activities described above will be described in the **National Reports** (refer to Annex for the National Report structure).

References

CEDEFOP website with country reports on the VET systems of the member states:

<http://www.cedefop.europa.eu/en/country-data> (Hungary, Ireland, Italy, Spain, UK)

European Quality Assurance Framework (EQAVET): <http://eqavet.eu>

VET Glossary on EQAVET website: <http://www.eqavet.eu/qa/gns/glossary.aspx>

EQAVET. The EQAVET network's feedback to the public consultation on the European Area for Skills and Qualifications, 2014.

Scottish Qualifications Authority (SQA): <http://www.sqa.org.uk/sqa/64144.4345.html>

Quality Assurance Guidelines and Criteria for Further Training Providers:

<http://www.qqi.ie/Publications/Quality%20Assurance%20Guidelines%20FET%202013.pdf>

ANNEX 1: Headmasters's interview outline for the school case study

The aim is to describe the QM practice of two exemplary schools. These descriptions are supplements for the country case studies.

1. **Planning - education program, vision, concept, mission**
 - *By which preparations, decision-making mechanisms, discussion methods, negotiations, approval mechanisms was the school pedagogic concept and the school's vision created?*
 - *Did you use problem-solving tools when planning the steps?(e.g. brainstorming, force field analysis, tips card, mind maps, circles of questions of data collection tools, internal organisational and management related problem circles)*
 - *What are the key elements of the school program?*

2. **Implementation (operative steps)**
 - *By which school discussion forums, in what steps were the operative goals of the pedagogic program identified? Was a process map created?*
 - *Were external experts, consultants involved in this work?*
 - *What specific points were taken into account regarding the expectations of the law, the maintainer and parents, expectation of labor market or of students?*
 - *Did you have an innovation among the steps that were different from the routine of the recent years? If so, what were they?*

3. **Quality management, evaluation, self-assessment (Implement a quality management system)**
 - *What are the documents of institutional self-evaluation?*
 - *Do you have an own institutional quality assurance manual? If so, what documents is it based on?*
 - *Did you involve external experts in the quality management?*
 - *Do you have a quality management working group or an expert who is responsible for QM in the school?*
 - *Is the visit of lessons and the evaluation of its results organised? Who can evaluate teachers' work in the school?*
 - *What are the documents of the control and evaluation of teachers' work?*
 - *Besides the evaluation of teachers' work, what other activities of the school are evaluated regularly or at times?*
 - *What indicators have been planned?*
 - *What methods to evaluate the results of the different activities were used in the survey from among the ones listed here?(Teacher questionnaire, student questionnaire, leadership questionnaire, parents' questionnaires, self-monitoring competence catalogues)*
 - *Have you used the online version of the tools?*

- *What kind of quality assurance tools and methods were used? (data collection charts, process map, cause-and-effect diagram, control cards, histogram, Effect analysis - Pareto analysis, correlation chart, matrix of criteria, cause-effect analysis - Fishbone diagram (Ishikawa diagram), tree diagram*
- *Have you used the online version of the tools?*
- *Was a systematic SWOT analysis carried out? (Strengths, Weaknesses, Opportunities, Threats)*
- *If you have a website, is there a problem-feedback, discussion forum for teachers, students, parents, employers and places of professional practice?*
- *Can you trace the walk of life of your graduates? If so, how can you incorporate these experiences into quality management?*
- *Do you have contacts with partner schools? Do you organize an exchange of experience of quality management?*

4. Feedback, development

- *How do you publish the results of the quality assurance?*
- *What kind of documents do you have to identify areas that need improving?*

ANNEX 2: National Report Structure

1. Vocational Educational System

Partner countries should introduce the educational system of their country, emphasizing VET and adult education, and their institutions. (It is important to use standard definitions, so the first entry in our terminology-dictionary (glossary) should be the term we use for „Vocational education” and „adult education”). (10 pages)

1.1 National Qualification Framework

Connected with the previously mentioned (1) every country should place its trainings in a standard system (either ISCED or if the country already has an accredited and elaborated National Qualification Framework, then according to that, framed into EQF) (3 pages)

1.2 Statistics of vocational and adult education

It means that data should be provided of the previous three completed school years: training (educational) institutions (their division – state, church, private), number of students, maybe the number of graduates per year). It is possible to analyse them separately (regarding vocational and adult education) or together (as a whole), if there is no distinctive data for each. The order of magnitude is important regarding the institutions and the number of students taking part in different types of education (vocational or adult) as well. (3 pages)

2. Legal obligations

Recommendations regarding institutions and courses in vocational and adult education. (if it is divers, only the important elements of each should be explained). (4 pages)

3. QM in the educational institutions

The suggested viewpoints and subpoints for its description:

- Is there any kind of QM in the institutions?
- What kind of system is used? (Standard, „home-made”, etc.)
- What is involved in self and external control?
- What kind of measurement has been done?
- What is evaluated in self-checking?
- If there is an external control, what does it measure and evaluate?
- What is the „philosophy” and type of the QM like? (process orientated, output orientated, input orientated, mixed etc.)
- How are the documents „created”?
- Would you use an electronic system to create QM documents or for measurement and evaluation? (15 pages)

4. Links to EQAVET

The EU has initiated the introduction of EQAVET system in member countries. Let’s specify what the indicators of the European system include and examine if these measurements have been carried out in our countries. If not, how can they be introduced? It is important to carry out standard measurements that can be compared with the help of an IT system. (5 pages)

5. Review of existing ICT tools

6. Summary in English (5 PAGES)

7. Summary in native language

8. Bibliography

9. Annex: case studies

10. OpenQAsS Basics