Work package WP2 Research

Report on Quality Assurance Research

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1. Executive Summary

The iQTool project develops innovative content and a software tool to support quality of vocational training and eLearning. In order to meet this goal, several quality assurance systems had to be identified and their applicability to the institutions dealing with eLearning had to be studied. Moreover, in order to ensure the fulfilment of the project's aim, research work had be done in order to develop a quality assurance methodology that will be further used in order to develop appropriate training material for the project's target groups.

This report documents the results of the research work on the evaluation quality assurance approached and related material applicable applicable in vocational training and quality assurance methodology. The research was conducted based on primary and secondary research. In the course of the research, the partners made exploration of the concepts suitable for training quality management through the synopsis of which are the main characteristics of the contents specialised for the field of vocational training. During the research the project members surveyed the EU projects already realised on the one hand, and conducted a questionnaire survey of the target groups on the other hand. With the help of the research, the factors were discovered that mostly influence the spread of quality assurance in the field of e-learning and vocational training. The final evaluation that is presented in this report will be used in WP4 to prepare an appropriate training programme and e-learning instruction material, which is suitable to train the specified target groups in the field of vocational training in connection with the usage of the quality assurance software to be developed in WP3.

Moreover, this report presents the results of the questionnaire survey of the project's target groups. 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. It was 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 most answer. Some procedures are considered "poor" (5% to 25%) and some are not even implemented yet (1% to 17%). These findings indicate that there may be a demand in educational institutions for a quality assurance tool as developed in the project iQTool – Innovative eLearning Tool for Quality Training Material in VET.

2.Introduction

2.1 Objective and Scope

This document presents the results of the research activities that took place in work package WP2 of the iQTool project with respect to quality assurance in VET. The work reported here is directly related to the following tasks of work package WP2:

- **Task 2.1 "Research Plan" (Task leader: TUC/MUSIC).** Among the activities of this preparatory task was the specification of the baseline for the research on quality assurance. SZÁMALK, TISIP, F-BB and CENFIM specified the research plan with respect to quality assurance in VET and with respect to the with respect to the questionnaire survey of the target groups.

- **Task 2.2 "Work out criteria system" (Task leader: TISIP).** Among the activities of this task was the definition of a criteria system and the corresponding evaluation methodology used for the evaluation of quality assurance models and methodologies including the specification of the questionnaire to be used for acquiring information from the target groups regarding the usage of quality assurance approaches and the awareness and acceptance/efficiency of such approaches. SZÁMALK, TISIP, F-BB and CENFIM specified the criteria system and the questionnaire used during the survey.

- **Task 2.4 Research: Quality management (Task leader SZÁMALK).** This task surveyed quality management contents applicable in vocational training. During the research the project members surveyed the material available (including material from EU projects already realised) on the one hand, and conducted a questionnaire survey of the target groups on the other hand. SZAMALK, CENFIM and TISIP were mostly engaged in the quality management contents survey based on the research plan of Task 2.1 and the criteria system of Task 2.2. F-BB was mostly engaged in disseminating the questionnaires prepared in Task 2.2 to the target groups (all partners contributed to the identification of candidate respondents) and collecting and processing the answers. An on-line questionnaire was used in order to facilitate the evaluation of the answers received in a more efficient way.

- **Task 2.5 Evaluation the results (Task leader: CENFIM).** SZÁMALK and TISIP analysed the results of the research regarding quality assurance approaches and methodologies. The exploration of the toolkit suitable for training quality management was carried out, through the synopsis of which are the main characteristics of the contents specialised for the field of vocational training. This evaluation will be used in WP4 to prepare an appropriate training programme and e-learning instruction material, which is suitable to train the specified target groups in the field of vocational training in connection with the usage of the quality assurance software to be developed in WP3. F-BB

analysed the answers received from the dissemination of the questionnaire to the target groups. The analysis aimed at the identification of quality assurance approaches used as well as the identification of factors influencing acceptance and efficient usage of quality assurance in VET.

- **Task 2.6 Research reports (Task leader: TUC/MUSIC).** This task integrated the results of the research and evaluation made in Tasks 2.3, 2.4, and 2.5 in the form of the final work-package reports providing also suggestions for WP3 and WP4. All partners contributed to the report according to their responsibilities and contributions in tasks 2.1, 2.2, 2.3, 2.4 and 2.5.

- **Task 2.7 Project workshop (Task leader: TUC/MUSIC).** The workshop was held in Chania, Greece, 12-13 June 2008. It was organized by TUC/MUSIC. All partners participated in the meeting were the major results of the research activities were presented and evaluated.

2.2 Structure of the document

The structure of the rest of this document is as follows: Section 3 presents the research plan produced in the first stage of the project in order to identify all relevant resources for the research on quality assurance issues. Section 4 presents the evaluation methodology used along with the corresponding criteria system as well as the statistical analysis of the questionnaire survey of the project's target groups. Section 5 presents the results of the evaluation of quality assurance policies / approaches / methodologies / systems in VET and eLearning. Section 6 presents the final suggestions for the project.

3. Identification of related projects, surveys, analyses, reports, quality assurance policies/approaches/methodologies/systems in VET and eLearning

3.1 Related Projects

The following tables present links and short description of related projects that are available either publicly or to the project partners with respect to the evaluation of quality assurance in VET (e.g. QUIS project) including research and analyses of quality assurance criteria for eLearning material.

Project name	MECA-ODL: Methodology for the Analysis of Quality in ODL through Internet
Project url	www.adeit.uv.es/mecaodl
Project description	The main aim of the project is to develop a methodology to analyse the quality of ODL training projects in all its phases: conception, development, teaching and evaluation from different quality criteria: in terms of methodology, of contents and of technology. As a final objective, the project is seeking the unification of criteria to develop quality standards in ODL, that could be used as references for organising entities and users of this type of training. *Project outcomes* - Methodological Guide of quality criteria regarding ODL training via Internet - Quality analysis software available via Internet - Application of the quality analysis software in training actions using the net. - Entity network to promote quality training throught Internet

Project name	NEWORKERS: New Models for Enhancement of ODL use in Life-long Learning of Workers
Project url	http://leonardo.euproject.net/go.cfm?PageId=4822
Project description	The main goal of this project is the setting up of an authentic forum for debate, discussion, promotion and dissemination around the topic of the uses of Internet as a tool for continuous training, through the experiences at European level of different previous projects and actions carried out in Leonardo and Socrates. This forum must generate reference for the promotion of open and distance training through Internet.

Project name	GreTel: eLearning in Europe: needs, experiences and instruments

	Collaboration of European experts on the development of internationally applicable eLearning modules
Project url	http://www.poolweb.it/gretel/interne/project.asp?M=1
Project description	By adapting and developing eLearning-Modules for the use in different countries the GreTel-eLearning experts improve their expertise and international experience. On this basis they create various instruments for translational adaptation and implementation of eLearning-modules, which are made accessible to the general public on the project's Website.

Project name	E-LEN: A network of e-learning centres
Project url	http://www2.tisip.no/E-LEN/
Project description	The E-LEN project is a project under the Socrates Programme which aims to create a Network of E-Learning Centres and leading organisations in the learning technologies. The E-LEN network will support a diverse constellation of learning centres around the world, have a strong capacity for developing and delivering pedagogically-informed technology for effective e-learning experiences and disseminate these experiences to other institutions

Project name	EQO: European Quality Observatory
Project url	www.eqo.info
Project description	The main objective is to provide a comprehensive platform for developers, managers, administrators, decision makers and end-users to find a suitable quality approach that fits their needs.

Project name	SEEQUEL: Sustainable Environment for the Evaluation of Quality in eLearning
Project url	http://www.education-observatories.net/seequel/index
Project description	The SEEQUEL - Sustainable Environment for the Evaluation of Quality in E-Learning - project originates from the joint initiative of the e-Learning Industry Group (eLIG) and of a number of European expert organizations and associations at all levels of education and training, co-ordinated by the MENON Network. It therefore brings together, in a fundamental way, the companies in the e-learning industry who provide the tools and services, the users,

	the expert organizations and agencies. In order to define a cohesive, inclusive and robust approach to the Quality in the implementation and use of e-Learning systems and processes, the SEEQUEL project aims at taking the required step to establish a European "eLearning Quality" Forum.

Project name	QUAL-E-LEARNING: La qualité de I'eLearning
Project url	http://www.qual-elearning.net/
Project description	Project Background and Objectives - Contribute to the definition of a general framework of e-learning quality; - Form the basis of an European debate on the characteristics of use and on e-learning quality; - Promote a better coordination of the actions carried out in this field both by each Member State and at Community level; - Guide the reflection and the choices of those which are and especially which could become teachers, producer-users, customers or users of these training instruments.

Project name	UNFOLD: Understanding New Frameworks of Learning Design
Project url	http://www.unfold-project.net/
Project description	The UNFOLD project is supporting the adoption of open eLearning standards for multiple learners and flexible pedagogies *Project outcomes* • Providing access to public resources about Learning Design (many of which are on this Web site) • supporting and facilitating the Communities of Practice (CoPs) • Organising regular face to face meetings • Organising workshops, and attending conferences and

Project name	EUA: Developing an Internal Quality Culture in European Universities
Project url	http://www.eua.be/eua/en/projects_quality.jspx

	http://leonardo.euproject.net
Project description	The Quality Culture Project aims at contributing to the development and embedding of a systematic and coherent quality culture in universities as well as to the general goals of the Bologna process through increased transparency and attractiveness of European higher education. It increases the awareness within the institutions for the need to develop an internal quality culture and to promote the introduction of internal quality management. This in turn helps the institutions to approach external procedures of quality assurance in a constructive

Project name	**Open and Distance Education Quality Council** **ODL QC Standards**
Project url	http://www.odlqc.org.uk/index.htm
Project description	Open and Distance Learning Quality Council ODL QC is the UK guardian of quality in open and distance learning. *Project outcomes* The Standards are subdivided into ten sections ▪ Course Objectives & Outcomes ▪ Course Contents ▪ Publicity & Recruitment ▪ Admission Procedures ▪ Learning Support ▪ Open Learning Centres ▪ Learner Welfare ▪ The Provider ▪ Joint Provision ▪ Accreditation

Project name	ELUE Improving quality of e-learning in universities e-learning project
Project url	http://europa.eu.int/comm/education/programmes/elearning/projects_2003/elue.pdf
Project description	ELUE is a European project chosen by the European Commission as part of the "Preparatory and innovative actions 2003/b - eLearning" invitation to tender. It is led by the CRUI (the Italian Conference of

	University Rectors, which is equivalent to the French CPU) and piloted in France, by the CPU assisted by the AMUE. ELUE has three objectives : The analysis of the experiments underway and already completed in the universities of the countries involved (Italy, Finland and France) The comparison of these different experiments and the identification of "best practices" on the basis of shared standards The establishment of an eLearning and higher education observatory.

Project name	SEEL: Supporting excellence in E-Learning
Project url	www.selnet.org
Project description	Supporting Excellence in E-Learning (SEEL) is a project dedicated to the quality in eLearning, taking the point of view of a learning territory: what does quality mean for a learning region (or city) becoming an eLearning region (or city). In the framework of the project, we define an eLearning territory (region or city) as a territory using knowledge, information and learning technologies (KILT) to value all its assets, individual, organisational, industrial, cultural, patrimonial, social etc. The SEEL project has now moved forward and is part of the creation of the European Foundation for Quality in E-Learning (www.qualityfoundation.org).

Project name	mENU: A model for a European Networked University
Project url	http://munin.hsh.no/lu/inf/menu/index.htm
Project description	The MENU project sets out to create a model for a European Networked (Virtual) University, providing a variety of e-learning opportunities. The model will be based on experiences from previous projects and activities at the partner institutions. It will include an organisational structure, a quality assurance system, examples of joint courses and study programmes across institutional borders, guidelines and a demonstrator of a practical e-learning environment. The demonstrator will focus on ICT-related studies.

Project name	QUIS – Quality, Interoperability and Standards in e-learning
Project url	http://www2.tisip.no/quis/index.php

Project description	The activities in the QUIS project were directed towards QUality in e-learning, Interoperability and reusability of e-learning material and development of Standards. The project also looked at cost effectiveness in e-learning.In the context of this project an analysis of commercial and experimental eLearning systems was made.

Project name	Peer Review as an Instrument for Quality Assurance and Development in Initial VET in Europe
Project url	
Project description	The Leonardo da Vinci project 'Peer Review as an Instrument for Quality Assurance and Development in Initial VET in Europe' aims at introducing Peer Review as a new instrument for quality assurance and development to the initial VET sector throughout Europe. The multi-actor partnership of 22 partners comes from eleven European countries: Austria, Germany, Switzerland, Netherlands, United Kindom, Portugal, Italy, Hungary, Romania, Denmark and Finland. duration of the project: October 1st, 2004 to September 30th, 2007.

Project name	Development of Elements for Quality Assurance within practice oriented Higher Education
Project url	
Project description	The DEQU project aims at developing elements of quality assurance in selected “key processes” for practice and professional field oriented higher education under the outlines of the Bologna process as well as the Bruges-Copenhagen process. The focus is on practice oriented higher education institutions with an outlook to their integrative role between vocational education and training and higher education.

Project name	transnational quality project - quality guidelines for providers of vocational education and training
Project url	http://www.leonardo-tqp.eu

Project description	In the project different quality experiences of the European partners (framework conditions, methods, standards) will be compared and aggregated to an experience oriented knowledge base, following the Common Quality Assurance Framework. Using this as a basis, the requirements of a practice model shall be described and the model be tested. Different levels shall be possible. The implementation shall be compared transnationally and examined scientifically. The work aims at facilitating a consensus in respect of quality and at drawing up a report on the analyzed need for European regulation. In addition to QUALITY GUIDELINES, an internet supported Competence Center will be developed. This virtual quality workshop that can be used transnationally shall be made available for information exchange and shall make the results accessible also to other users of the working platform.

Project name	Peer Review Extended II - Transfer and further development of the European Peer Review methodology as an element of the Common Quality Assurance Framework (CQAF)
Project url	http://www.peer-review-education.net
Project description	The project aims at the transfer and further development of the European Peer Review methodology as an element of the Common Quality Assurance Framework (CQAF). Tangible outcomes are 1) a version of the European Peer Review Procedure which takes into account the needs and requirements of a) continuing VET and b) the "new" countries participating; 2) instructional/promotional material addressing the whole range of stakeholders in VET to support further dissemination and transfer of the Peer Review methodology (material developed by partners, Peer Review Readers, website); 3) face-to-face peer training/guidelines for peers. Intangible outcomes are the further improvement and implementation of the Peer Review methodology as an element of the CQAF.

Project name	EQUIPE - European Quality in Individualised Pathways in Education
Project url	http://equipe.up.pt/
Project	As universities become life-long learning institutions, arrangements

description	for quality assurance and enhancement need to be taken into account of a more diverse range of learner's needs and of new practices that include, for example: guidance services, accreditation of prior learning, ODL and individual programmes of learning, alongside with more traditional styles of provision. 32 partners will develop over a period of three years a web based tool kit to support quality projects in university adult learning particularly focusing in these new forms of practice. The tools include a handbook, case studies from at least 38 universities across 30 countries of Europe, an annotated review of quality models, an interactive web site with examples of good practice, and a series of comparative and reflective articles. The tool kit will be available in EN. The case studies will be also translated into GE, EN and ES. A parallel range of related services will be made available through face-to-face or virtual dialogue.

3.2 Related Surveys, Analyses, Reports

- QUIS Quality Assurance System

  http://www2.tisip.no/quis/index.php

- Quality in eLearning results

  http://leonardo.euproject.net/go.cfm?PageId=4822

- New Methods of Evaluating Student's Performance in the Vocational Training System

  www.e-methods.hu

3.3 Links to quality assurance policies/approaches/methodologies/systems in VET and elearning

- European Foundation for Quality in eLearning

  http://www.qualityfoundation.org/ww/en/pub/efquel/index.htm

- Qualitypedia

  http://www.qualityfoundation.org/quality-wiki/index.php/Main_Page

- European Quality Observatory

  http://www.eqo.info/index.cfm

- The European Quality Forum

  http://community.eun.org/entry_page.cfm?area=2049

- eTutorsPortal

  http://www.etutors-portal.net/

- CEN/ISSS/WS – LT Project Team Quality Assurance and Guidelines, http://jtc1sc36.org/doc/36N0299.pdf

- Quality Assurance Agency for Higher Education http://www.qaa.ac.uk/aboutqaa/aboutQAA.htm

- European University Association http://www.eua.be/eua/en/projects_quality.jsp

- Quality Assurance, The Changing faces of Virtual Education, http://www.col.org/virtualed/

- Guidelines on the Quality Assurance of Distance Learning, http://www.qaa.ac.uk/public/dlg/dlg_textonly.htm

- Open and Distance Learning Quality Council, Standards in Open and Distance Learning, http://www.odlqc.org.uk/odlqc/standard.htm

- European University Association EUA, http://www.unige.ch/eua/En/Publications/Survey_Master_Joint_degrees.pdf

- Quality on Line

  http://www.ihep.com/Pubs/PDF/Quality.pdf

- Review of Recommended Quality Assurance Standards for Distance Education

  http://www.academic.com/academic_com/library/Distance_Ed.pdf

- Improve Quality Assurance in Open Distance Learning. Guidance

  www.szamalk.hu/projects

4. Evaluation methodology and questionnaire survey results

The objective of the criteria system is to facilitate the evaluation of Quality Management in VET, in order to be able to select the most appropriate one for the needs of the iQTool project.

In order to meet these needs, we should be able to identify the most important QM systems and practice and proceed with a more detailed evaluation of each one of them in order to propose the one(s) that suit the best the needs of the project.

The evaluation is proposed to proceed in 3 phases:

1. Decide the final version of questionnaire based on Quality Criteria
2. Survey involved VET institutions which use eLearning
3. Evaluation of the results.

4.1 Results of the questionnaire survey of the project's target groups

4.1.1 Questions, Research Design

The aim of the Project iQTool[1] is to develop a platform for online-based learning. In this context it is of high interest to evaluate the quality management in eLearning that education providers, developers and resellers currently implement. How do educational institutions evaluate the quality of their platforms used? What opportunities do they offer for learners to give feedback, and how do they deal with this feedback internally?

To answer these questions, an online-questionnaire was developed and opened to interrogation from May 5th 2008 to July 11th 2008. Participation was voluntary. In order to increase response rates, possible informants were contacted several times via e-mail or by phone and asked to participate in the questioning. All partners from the participating countries Germany, Greece, Hungary, Norway and Portugal did contact education providers, developers and resellers in their countries and whole Europe.

The questionnaire contains 77 questions in total and is divided into seven parts:

Part 1: Institutional Support

Part 2: Analysis

Part 3: Design

Part 4: Development

[1] Financed by the EU-Programme LEONARDO

Part 5: Delivery (Teaching/Learning Process)

Part 6: Student Support

Part 7: Evaluation, Assessment

Each of these parts contains a set of items to measure the corresponding construct.

4.1.2 Data

Until July 11th 2008 the online-questionnaire received 114 replies. The obtained data is based on a non-random sample, as the participation was voluntary and volunteers were non-randomly pre-selected by the recruiting process using mail databases. Thus, findings are valid for this sample only; they are not to be considered representative. [2]

Reducing dimensions of the several items measuring a specific construct into one variable by applying factor analyses or building indexes seems appropriate, but is, due to the quality of the data, not practicable. There is hardly any variance in between the questions of any specific part as well as between the different parts. In average most questions have been answered more or less the same way, resulting in an almost equal distribution and order of the answers to every question: "good" is mentioned the most, followed by "understandable", "excellent", "poor" and "not at all". [3]

As a result, every variable highly correlates with almost every other variable and every item can possibly be "factorized" with every other item(s). Hence the constructs created prior to the questioning can't be used to build robust factors as intended, nor can the variables be used to extract factors themselves. An experimentally applied factor analysis summing up all seven parts into one variable extracted one more or less robust factor in the end, but turned out to be a loss of information much more than a win.

Therefore, the evaluation is restricted to solely descriptive methods giving a quick overview over the dataset, its que questions and variables and the constructs measured.

4.1.3 Results

Question 1: Type of activity of your institution
73% of the respondents work at education providers, 39.9% are developers or content providers and 18% are education resellers. 2.2% did not answer this question.

[2] Online surveys in general are susceptible to coverage and sample errors and therefore are not suitable for non-probability sampling, which is the basic requirement for statistical inference. See Couper, Mick P. (2001): Web Surveys. A Review of Issues and Approaches. Public Opinion Quarterly 64: 464-494.

[3] In web surveys, influence on the quality of responses is to be expected from the design and length of the questionnaire as well as from the questions themselves. For further details see for example Gannassali, Stéphane (2008): The Influence of the Design of Web Survey Questionnaires on the Quality of Responses. Available online: http://www.websm.org/uploadi/editor/1210702592Ganassali_2008_the_influence_of_the_design_of_web_survey.pdf

Table 1: Type of activity of the institutions

Type of activity	Percentage
Education provider	73.0 %
Developer, content	39.9 %
Education reseller	18.0 %
Not answered	2.2 %

The values do not sum up to 100% because it was possible to give multiple responses.

Question 2: Quality system standard (if any)
19.3% of the respondents are ISO 9001 certified (some of them have other standards as well), 15.8% have other quality system standards and 7% have no standards at all. 42.1% of the respondents did not answer this question.

Table 3: Quality system standard

Quality system standard		Frequency	Percentage
Valid	ISO 9001	22	19,3
	Other	18	15,8
	No standard	8	7,0
	Total	48	42,1
Missing	System	66	57,9
Total		114	100,0

Question 3: Quality approaches
In total, 58.4% have a process orientated, 39.3% a product orientated and 44.9% a competence orientated quality approach. One institution mentioned a "credit skills system", and 7.9% did not give an answer to this question.

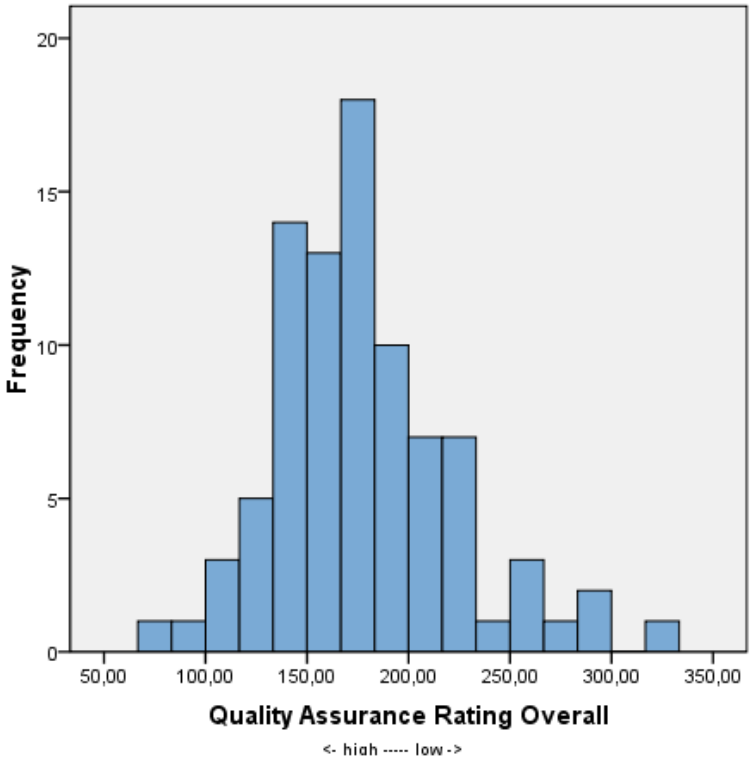
Table 3: Quality approaches

Quality approach	Percentage
Process oriented	58.4 %
Product oriented	39.3 %
Competence oriented	44.9 %
Other	1.1 %
Not answered	7.9 %

The values do not sum up to 100% because it was possible to give multiple responses.

Additive Index of Questions 6 to 76

To get an idea of the distribution of the answers given to questions 6 to 76 an additive index has been built over those variables[4]:



Low values indicate a high overall quality insurance rating, whereas high values indicate a low overall quality insurance rating.

The distribution is skewed to the left side indicating a rather high but not excellent overall quality insurance rating. This is due to the fact that the categories "good" (40% to 50%), "understandable" (12% to 25%) and excellent (5% to 25%) were the ones most mentioned.

Questions 6 to 18: Institutional support

Most of the answers are indicating that quality assurance in general is available in most institutions and VET-providers. Between 60 and 70 % of the answerers estimate that their quality assurance measures like routines and systems for quality assurance, specialized staff, description of goals and content and quality of the materials and delivery of the courses is good or even excellent.

But electronic security measures to ensure the integrity and validity of information get a lower approval. Almost 20 % of the respondents find these measures poor or even not existent. As well quality requirements for the course are not always documented regularly. Not more than about 50 % of the responses find this good or excellent,

[4] As a measure of reliability Cronbach's alpha was applied and returned a very high value of 0.978. This is most likely due to the lacking variance in and between the different parts and indicates that those parts as well as their corresponding questions might be lacking selectivity. Considering the data produced, they seem to be measuring quite the same.

more than 25 % answer with “poor” or “not at all”. This is an important result that demonstrates that our project is necessary because of a partial lack of such measures.

We presume that the answers show also a social desirability effect: most answerers would not like to commit freely that their institutions are not doing good work in providing sufficient institutional support.

Question 6: The institution has routines and systems for quality assurance.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	7	6,1	6,4	6,4
	good	57	50,0	51,8	58,2
	under/ble	28	24,6	25,5	83,6
	poor	11	9,6	10,0	93,6
	not at all	7	6,1	6,4	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 7: The institution has an organizational and administrative system and technical equipment that ensures that the education can be provided with sufficient quality.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,1	11,1
	good	56	49,1	51,9	63,0
	under/ble	28	24,6	25,9	88,9
	poor	11	9,6	10,2	99,1
	not at all	1	,9	,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 8: The institution has staff in charge of education with professional and pedagogical expertise that corresponds to the subject content and level of the programmes offered.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	21	18,4	19,1	19,1
	good	55	48,2	50,0	69,1
	under/ble	23	20,2	20,9	90,0
	poor	8	7,0	7,3	97,3
	not at all	3	2,6	2,7	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 9: For every course and study program there are descriptions that specify: goals, content, length of study time, learning material, teaching and learning activities, evaluation procedures, time constrains, any requirements of previous knowledge and the formal competence.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	27	23,7	24,5	24,5
	good	54	47,4	49,1	73,6
	under/ble	20	17,5	18,2	91,8
	poor	8	7,0	7,3	99,1
	not at all	1	,9	,9	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 10: Special requirements are identified, such as hardware, software, plug ins. Online sources for these items are provided.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	18	15,8	16,4	16,4
	good	51	44,7	46,4	62,7
	under/ble	24	21,1	21,8	84,5
	poor	14	12,3	12,7	97,3
	not at all	3	2,6	2,7	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 11: Can e-learning add value to your company's business?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	31	27,2	28,4	28,4
	good	53	46,5	48,6	77,1
	under/ble	16	14,0	14,7	91,7
	poor	8	7,0	7,3	99,1
	not at all	1	,9	,9	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question12: The institution regularly evaluates its systems and routines for course development, and quality of the materials and delivery of the courses.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	9	7,9	8,2	8,2
	good	54	47,4	49,1	57,3
	under/ble	26	22,8	23,6	80,9
	poor	19	16,7	17,3	98,2
	not at all	2	1,8	1,8	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 13: The institution keeps a list of errors found in the learning material and other comments from students and teachers and makes use of them in revising the course.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	11	9,6	10,0	10,0
	good	45	39,5	40,9	50,9
	under/ble	31	27,2	28,2	79,1
	poor	15	13,2	13,6	92,7
	not at all	8	7,0	7,3	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 14: The institution has systems and routines for the evaluation and documentation of teaching results.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	16	14,0	14,5	14,5
	good	48	42,1	43,6	58,2
	under/ble	26	22,8	23,6	81,8
	poor	19	16,7	17,3	99,1
	not at all	1	,9	,9	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 15: Electronic security measures are in place to ensure the integrity and validity of information.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	18	15,8	16,5	16,5
	good	41	36,0	37,6	54,1
	under/ble	28	24,6	25,7	79,8
	poor	17	14,9	15,6	95,4
	not at all	5	4,4	4,6	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 17: Quality requirements for the course are documented regularly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	16	14,0	14,7	14,7
	good	40	35,1	36,7	51,4
	under/ble	25	21,9	22,9	74,3
	poor	23	20,2	21,1	95,4
	not at all	5	4,4	4,6	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 18: The institution gives teachers, consultants, tutors necessary guidance and training regarding aspects of eLearning in order to assure quality in their work.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	17	14,9	15,5	15,5
	good	54	47,4	49,1	64,5
	under/ble	17	14,9	15,5	80,0
	poor	15	13,2	13,6	93,6
	not at all	7	6,1	6,4	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Questions 19 to 23: Analysis

More than a half of the answerers estimate the analysis of requirements as good or excellent, but also almost 16 % find them weak or not available. This proves again that an instrument to measure the training needs is necessary.

Methods of data collection are not available in more than 6 % of the institutions. Better is the definition of the target group, 66 % are content with it. Very good is

the definition of learning objectives, more than 76 % estimate it good or excellent. Learning outcomes and course levels are defined properly in most cases.

Question 19: The requirements of the learners have been analyzed.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	15	13,2	13,6	13,6
	good	46	40,4	41,8	55,5
	under/ble	31	27,2	28,2	83,6
	poor	16	14,0	14,5	98,2
	not at all	2	1,8	1,8	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 20: Methods of data collection are appropriate for source and the kind of information expected.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	9	7,9	8,3	8,3
	good	44	38,6	40,7	49,1
	under/ble	36	31,6	33,3	82,4
	poor	12	10,5	11,1	93,5
	not at all	7	6,1	6,5	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 21: The target group is defined properly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	25	21,9	23,1	23,1
	good	47	41,2	43,5	66,7
	under/ble	25	21,9	23,1	89,8
	poor	9	7,9	8,3	98,1
	not at all	2	1,8	1,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 22: Learning objectives are defined properly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	25	21,9	23,4	23,4
	good	57	50,0	53,3	76,6
	under/ble	17	14,9	15,9	92,5
	poor	7	6,1	6,5	99,1
	not at all	1	,9	,9	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 23: Objectives specify learning outcomes related to knowledge, skills, competences and attitudes.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	13	11,4	12,0	12,0
	good	60	52,6	55,6	67,6
	under/ble	24	21,1	22,2	89,8
	poor	10	8,8	9,3	99,1
	not at all	1	,9	,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 24: The course level is identified.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	24	21,1	22,4	22,4
	good	54	47,4	50,5	72,9
	under/ble	21	18,4	19,6	92,5
	poor	6	5,3	5,6	98,1
	not at all	2	1,8	1,9	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Questions 24 to 33: Design

The relationship between learning and the job is poor or not available in almost 18 % of the answers. Only 51 % are content with it. Astonishing is that in almost 8 % of the cases exist no guidelines regarding minimum standards for course development, design and delivery. But in 50 % they are regarded as good or excellent. Assessment instruments to assure learning styles of students are not used in almost 10 % of the cases. In less than 50 % is a consistent structure of course design evaluated as good or excellent. Better is estimated the periodical revision of course materials, good or excellent in 52 % of the answers. Learning outcomes are summarized also better, good or excellent in 56 % and in 54 % are students instructed in proper methods of effective learning. Very often are courses divided into separate modules, good or excellent in 64 % of the cases. Only 42% say that each module requires students to engage themselves in analysis, synthesis and evaluation as part of their course assignments, but in this question find it 32 % understandable, this is more in this answering category as in the other questions. Only 41 % answer with good or excellent that courses are designed to require students to work in groups utilizing problem-solving activities.

Question 24: Learners can clearly see the relationship between the activities and the job.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,2	11,2
	good	45	39,5	42,1	53,3
	under/ble	31	27,2	29,0	82,2
	poor	17	14,9	15,9	98,1
	not at all	2	1,8	1,9	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 25: Guidelines exist regarding minimum standards for course development, design and delivery.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	15	13,2	14,2	14,2
	good	42	36,8	39,6	53,8
	under/ble	26	22,8	24,5	78,3
	poor	14	12,3	13,2	91,5
	not at all	9	7,9	8,5	100,0
	Total	106	93,0	100,0	
Missing	not answered	8	7,0		
Total		114	100,0		

Question 26: Assessment instruments are used to assure the specific learning styles of students.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	5	4,4	4,6	4,6
	good	49	43,0	45,4	50,0
	under/ble	26	22,8	24,1	74,1
	poor	17	14,9	15,7	89,8
	not at all	11	9,6	10,2	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 27: Courses are designed with a consistent structure, easily discernible to students of varying learning styles.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,2	11,2
	good	41	36,0	38,3	49,5
	under/ble	35	30,7	32,7	82,2
	poor	12	10,5	11,2	93,5
	not at all	7	6,1	6,5	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 28: Course materials are reviewed periodically to ensure they meet program standards.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	16	14,0	14,8	14,8
	good	44	38,6	40,7	55,6
	under/ble	33	28,9	30,6	86,1
	poor	11	9,6	10,2	96,3
	not at all	4	3,5	3,7	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 29: Learning outcomes for each course are summarized in a clear statement.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	18	15,8	16,8	16,8
	good	46	40,4	43,0	59,8
	under/ble	24	21,1	22,4	82,2
	poor	13	11,4	12,1	94,4
	not at all	6	5,3	5,6	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 30: Students are instructed in proper methods of effective learning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,1	11,1
	good	49	43,0	45,4	56,5
	under/ble	28	24,6	25,9	82,4
	poor	14	12,3	13,0	95,4
	not at all	5	4,4	4,6	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 31: Courses are divided into modules that can be used to assess student mastery before moving forward in the course program.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	21	18,4	19,6	19,6
	good	52	45,6	48,6	68,2
	under/ble	22	19,3	20,6	88,8
	poor	10	8,8	9,3	98,1
	not at all	2	1,8	1,9	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 32: Each module requires students to engage themselves in analysis, synthesis and evaluation as part of their course assignments.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	10	8,8	9,3	9,3
	good	38	33,3	35,2	44,4
	under/ble	37	32,5	34,3	78,7
	poor	19	16,7	17,6	96,3
	not at all	4	3,5	3,7	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 33: Courses are designed to require students to work in groups utilizing problem-solving activities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	6	5,3	5,5	5,5
	good	41	36,0	37,6	43,1
	under/ble	34	29,8	31,2	74,3
	poor	19	16,7	17,4	91,7
	not at all	9	7,9	8,3	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total			100,0		

Questions 34 to 40: Development

Most of the answerers say that courses conform to usability standards and guidelines, almost 57 % find this good or excellent. The updating of course content is good or excellent in 55 % of the answers. 53 % find that interactivity of the courses is good or excellent, but 29 % find it understandable. This could be interpreted that they would like to have more interactive elements. Very high with 75 % good or excellent is the approval to the question if the course content is easy to access, use and navigate. Also high ranks get that the question if the Visual display of the content structure is included. 63 % answer with good or excellent. Very low was the approval to the question if users can control the level and modes of interactivity with only 36 % finding it good or excellent. Audio and visual material is adaptable to technology of learners is good or excellent in 47 % of the answers.

Question 34: The course content conforms to usability standards and guidelines.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,3	11,3
	good	55	48,2	51,9	63,2
	under/ble	29	25,4	27,4	90,6
	poor	7	6,1	6,6	97,2
	not at all	3	2,6	2,8	100,0
	Total	106	93,0	100,0	
Missing	not answered	8	7,0		
Total		114	100,0		

Question 35: The course content is regularly updated.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	13	11,4	12,4	12,4
	good	50	43,9	47,6	60,0
	under/ble	28	24,6	26,7	86,7
	poor	13	11,4	12,4	99,0
	not at all	1	,9	1,0	100,0
	Total	105	92,1	100,0	
Missing	not answered	9	7,9		
Total		114	100,0		

Question 36: The course content is interactive.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	15	13,2	14,0	14,0
	good	45	39,5	42,1	56,1
	under/ble	33	28,9	30,8	86,9
	poor	12	10,5	11,2	98,1
	not at all	2	1,8	1,9	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 37: The course content is easy to access, use and navigate.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	36	31,6	33,3	33,3
	good	49	43,0	45,4	78,7
	under/ble	18	15,8	16,7	95,4
	poor	4	3,5	3,7	99,1
	not at all	1	,9	,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 38: Visual display of the content structure is included.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	16	14,0	14,8	14,8
	good	56	49,1	51,9	66,7
	under/ble	21	18,4	19,4	86,1
	poor	11	9,6	10,2	96,3
	not at all	4	3,5	3,7	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 39: Users can control the level and modes of interactivity.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	7	6,1	6,5	6,5
	good	34	29,8	31,8	38,3
	under/ble	27	23,7	25,2	63,6
	poor	21	18,4	19,6	83,2
	not at all	18	15,8	16,8	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 40: Audio and visual material is adaptable to technology of learners.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	15	13,2	13,9	13,9
	good	39	34,2	36,1	50,0
	under/ble	32	28,1	29,6	79,6
	poor	18	15,8	16,7	96,3
	not at all	4	3,5	3,7	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Questions 41 to 49: Delivery (Teaching/Learning Process)

Delivery of the training seems to be the core competence of elearning providers. Almost every question in this field gets high approvals. High approval means that the questions are answered with “good” or “excellent”.

A very good approval gets the question if the learners are provided with general information at the beginning of the course. 35 % find this excellent and 42 % good, together 77 %. This is the highest approval in the whole questionnaire.

Also quite high with almost 60 % good or excellent is that specific expectations are set for students with respect to a minimum amount of time for study and homework assignments.

The question if feedback to student assignments and questions is provided in a timely manner is answered by 68 % with good or excellent, and also the question if forums (e-mail systems) are provided to encourage students to work with each other and their tutors, mentors by 67 %.

Easily accessible technical assistance is available to all students throughout the duration of the course gets the same approval of 67 %.

With 61 % are the answers with good or excellent a little bit lower for the question if mentoring resources are available.

Only 53 % approval gets the question if students are provided with hands-on training and information to aid them in securing material through electronic databases.

Also high with 67 % is estimated the question if learner records are sufficient, accurately maintained and up to date.

Question 41: At the beginning of the course the learners are provided with general information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	40	35,1	37,0	37,0
	good	48	42,1	44,4	81,5
	under/ble	17	14,9	15,7	97,2
	poor	2	1,8	1,9	99,1
	not at all	1	,9	,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 42: Specific expectations are set for students with respect to a minimum amount of time for study and homework assignments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	16	14,0	14,8	14,8
	good	52	45,6	48,1	63,0
	under/ble	31	27,2	28,7	91,7
	poor	7	6,1	6,5	98,1
	not at all	2	1,8	1,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 43: Feedback to student assignments and questions is provided in a timely manner

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	20	17,5	18,5	18,5
	good	56	49,1	51,9	70,4
	under/ble	24	21,1	22,2	92,6
	poor	5	4,4	4,6	97,2
	not at all	3	2,6	2,8	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 44: Forums (e-mail systems) are provided to encourage students to work with each other and their tutors, mentors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	29	25,4	26,6	26,6
	good	47	41,2	43,1	69,7
	under/ble	23	20,2	21,1	90,8
	poor	5	4,4	4,6	95,4
	not at all	5	4,4	4,6	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 45: Easily accessible technical assistance is available to all students throughout the duration of the course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	23	20,2	20,9	20,9
	good	53	46,5	48,2	69,1
	under/ble	22	19,3	20,0	89,1
	poor	11	9,6	10,0	99,1
	not at all	1	,9	,9	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 46: Mentoring resources are available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	21	18,4	19,4	19,4
	good	49	43,0	45,4	64,8
	under/ble	26	22,8	24,1	88,9
	poor	9	7,9	8,3	97,2
	not at all	3	2,6	2,8	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 47: Students are provided with hands-on training and information to aid them in securing material through electronic databases

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	18	15,8	17,0	17,0
	good	42	36,8	39,6	56,6
	under/ble	27	23,7	25,5	82,1
	poor	13	11,4	12,3	94,3
	not at all	6	5,3	5,7	100,0
	Total	106	93,0	100,0	
Missing	not answered	8	7,0		
Total		114	100,0		

Question 48: Learner records are sufficient, accurately maintained and up to date.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	17	14,9	15,7	15,7
	good	59	51,8	54,6	70,4
	under/ble	23	20,2	21,3	91,7
	poor	7	6,1	6,5	98,1
	not at all	2	1,8	1,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 49: The technology being used to deliver course content is based on learning outcomes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	7	6,1	6,5	6,5
	good	58	50,9	53,7	60,2
	under/ble	27	23,7	25,0	85,2
	poor	15	13,2	13,9	99,1
	not at all	1	,9	,9	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Questions 50 to 72: Student Support

"Appropriate administrative and academic advice and guidance is available to all learners" is estimated good or excellent by 67 %.

Only 45 % say good or excellent for the question if "quality standards for the delivery of the course are determined".

The question “The institution has functioning systems to follow up and support of its students through the duration of the study” gets 45 %, but more than 30 % find it acceptable.

Quite good with 57 % is the approval to the question if the technology being used to deliver course content is based on learning outcomes.

The learning support of students is estimated good or excellent by only 49 %.

“The institution has a system for quality assurance of teachers work” is estimated good or excellent also by only 49 %.

“Teacher’s tasks include real teaching and guidance of students” is answered with good or excellent by 52 %, but also 30 % find it understandable.

The support of lessons and activities is good or excellent for only 47 %.

Opportunities for learners to discuss issues are good or excellent in 70 % of the answers.

54 % answer with good or excellent if learners are informed about group-work activities.

Providing the opportunity to take part in on-line discussions is good or excellent in 57 %.

Availability of technical support is good or excellent in 61 % of the answers.

Very few, only 38 %, answer that learners are guided to web sites that help them determine whether online education is appropriate for them. With “poor” answer 18 % and with “not at all” 17 % to this critical question.

A similar result do we get for the question if learners are directed to a source for answers to frequently asked questions, 42 % answer with good or excellent.

56 % answer with good or excellent if an accessible support-desk is available.

55 % find it good or excellent if learners are able to track their own progress.

The learning is based on interaction is good or excellent for 51 % of the answerers.

Better is the approval if the system records the learner usage time, 64 % find this good or excellent.

Guidance notes for tutors are good or excellent in 54 %.

A very low approval of only 37 % gets the question if there are regular meetings for tutors.

Guidance for tutors in special requirements of eLearning gets 42 % good or excellent.

47 % estimate the administrative backup or tutors good or excellent.

Monitoring of the competence of all staff is estimated very low with only 35 % good or excellent.

“Time limits are set for responding to external approaches, marking and returning assignments to learners, or reviewing course materials” gets 40 % good or excellent answers.

Question 50: Appropriate administrative and academic advice and guidance is available to all learners

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	24	21,1	21,8	21,8
	good	52	45,6	47,3	69,1
	under/ble	22	19,3	20,0	89,1
	poor	9	7,9	8,2	97,3
	not at all	3	2,6	2,7	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 51: Quality standards for the delivery of the course are determined

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	13	11,4	11,8	11,8
	good	39	34,2	35,5	47,3
	under/ble	27	23,7	24,5	71,8
	poor	23	20,2	20,9	92,7
	not at all	8	7,0	7,3	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 52: The institution has functioning systems to follow up and support of its students through the duration of the study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	14	12,3	12,7	12,7
	good	48	42,1	43,6	56,4
	under/ble	37	32,5	33,6	90,0
	poor	8	7,0	7,3	97,3
	not at all	3	2,6	2,7	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 53: The institution makes sure that the students receive the learning support they need

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	10	8,8	9,1	9,1
	good	61	53,5	55,5	64,5
	under/ble	26	22,8	23,6	88,2
	poor	11	9,6	10,0	98,2
	not at all	2	1,8	1,8	100,0
	Total	110	96,5	100,0	
Missing	not answered	4	3,5		
Total		114	100,0		

Question 54: The institution has a system for quality assurance of teachers work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	16	14,0	14,7	14,7
	good	40	35,1	36,7	51,4
	under/ble	29	25,4	26,6	78,0
	poor	13	11,4	11,9	89,9
	not at all	11	9,6	10,1	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 55: The teacher's tasks include real teaching and guidance of students in a way that takes care of the individual student's needs.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	13	11,4	11,9	11,9
	good	47	41,2	43,1	55,0
	under/ble	34	29,8	31,2	86,2
	poor	12	10,5	11,0	97,2
	not at all	3	2,6	2,8	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 56: All lessons and activities are facilitated, adapting to learner needs and course conditions

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	excellent	10	8,8	9,3	9,3
	good	43	37,7	39,8	49,1
	under/ble	35	30,7	32,4	81,5
	poor	16	14,0	14,8	96,3
	not at all	4	3,5	3,7	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 57: Learners are given opportunities to discuss issues and concerns

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	17	14,9	15,6	15,6
	good	63	55,3	57,8	73,4
	under/ble	19	16,7	17,4	90,8
	poor	7	6,1	6,4	97,2
	not at all	3	2,6	2,8	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 58: Learners are informed about group-work activities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	23	20,2	21,3	21,3
	good	39	34,2	36,1	57,4
	under/ble	27	23,7	25,0	82,4
	poor	14	12,3	13,0	95,4
	not at all	5	4,4	4,6	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 59: Participating in online discussions are provided

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	excellent	24	21,1	22,0	22,0
	good	41	36,0	37,6	59,6
	under/ble	29	25,4	26,6	86,2
	poor	10	8,8	9,2	95,4
	not at all	5	4,4	4,6	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 60: The availability of technical support is stated and links to online technical information are provided

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	24	21,1	22,0	22,0
	good	45	39,5	41,3	63,3
	under/ble	29	25,4	26,6	89,9
	poor	8	7,0	7,3	97,2
	not at all	3	2,6	2,8	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 61: Learners are directed to a web site that helps them determine whether online education is appropriate for them

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	7	6,1	6,6	6,6
	good	36	31,6	34,0	40,6
	under/ble	24	21,1	22,6	63,2
	poor	20	17,5	18,9	82,1
	not at all	19	16,7	17,9	100,0
	Total	106	93,0	100,0	
Missing	not answered	8	7,0		
Total		114	100,0		

Question 62: Learners are directed to a source for answers to frequently asked questions pertaining to online learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	14	12,3	13,0	13,0
	good	34	29,8	31,5	44,4
	under/ble	29	25,4	26,9	71,3
	poor	18	15,8	16,7	88,0
	not at all	13	11,4	12,0	100,0
	Total	108	94,7	100,0	

Missing	not answered	6	5,3		
Total		114	100,0		

Question 63: An easily accessible support-desk is available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	19	16,7	17,6	17,6
	good	44	38,6	40,7	58,3
	under/ble	24	21,1	22,2	80,6
	poor	13	11,4	12,0	92,6
	not at all	8	7,0	7,4	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 64: Learners are able to track and evaluate their own progress

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	24	21,1	22,2	22,2
	good	39	34,2	36,1	58,3
	under/ble	27	23,7	25,0	83,3
	poor	13	11,4	12,0	95,4
	not at all	5	4,4	4,6	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 65: The learning is based on interaction (forums and chat), case studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	14	12,3	12,8	12,8
	good	44	38,6	40,4	53,2
	under/ble	31	27,2	28,4	81,7
	poor	16	14,0	14,7	96,3
	not at all	4	3,5	3,7	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 66: The system records the learner usage time for each module

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	30	26,3	27,5	27,5
	good	43	37,7	39,4	67,0
	under/ble	17	14,9	15,6	82,6
	poor	10	8,8	9,2	91,7
	not at all	9	7,9	8,3	100,0
	Total	109	95,6	100,0	
Missing	not answered	5	4,4		
Total		114	100,0		

Question 67: There are guidance notes for tutors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,1	11,1
	good	49	43,0	45,4	56,5
	under/ble	25	21,9	23,1	79,6
	poor	16	14,0	14,8	94,4
	not at all	6	5,3	5,6	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 68: There are regular meetings for tutors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	8	7,0	7,4	7,4
	good	34	29,8	31,5	38,9
	under/ble	35	30,7	32,4	71,3
	poor	19	16,7	17,6	88,9
	not at all	12	10,5	11,1	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 69: Guidance for tutors in the special requirements of eLearning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	11	9,6	10,2	10,2
	good	36	31,6	33,3	43,5
	under/ble	33	28,9	30,6	74,1
	poor	21	18,4	19,4	93,5
	not at all	7	6,1	6,5	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 70: Adequate administrative backup is provided for tutors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	13	11,4	12,0	12,0
	good	40	35,1	37,0	49,1
	under/ble	26	22,8	24,1	73,1
	poor	20	17,5	18,5	91,7
	not at all	9	7,9	8,3	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 71: Monitor and review the continuing competence of all staff on a regular basis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	8	7,0	7,5	7,5
	good	32	28,1	30,2	37,7
	under/ble	37	32,5	34,9	72,6
	poor	22	19,3	20,8	93,4
	not at all	7	6,1	6,6	100,0
	Total	106	93,0	100,0	
Missing	not answered	8	7,0		
Total		114	100,0		

Question 72: Time limits are set for responding to external approaches, marking and returning assignments to learners, or reviewing course materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	8	7,0	7,6	7,6
	good	38	33,3	36,2	43,8
	under/ble	42	36,8	40,0	83,8
	poor	12	10,5	11,4	95,2
	not at all	5	4,4	4,8	100,0
	Total	105	92,1	100,0	
Missing	not answered	9	7,9		
Total		114	100,0		

Questions 73 to 76: Evaluation, Assessment

Only 37 % answer with good or excellent if the program's educational effectiveness is measured using several methods, but 36 % answer with "understandable".

40 % find it good or excellent that "specific standards are in place to compare and improve learning outcomes".

An evaluation process is used to improve the learning process is estimated good or excellent by 46 %.

The question if "feedback on the assessments is build in" is answered with good or excellent by 48 %.

Question 73: The program's educational effectiveness is measured using several methods

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	7	6,1	6,5	6,5
	good	35	30,7	32,4	38,9
	under/ble	41	36,0	38,0	76,9
	poor	17	14,9	15,7	92,6
	not at all	8	7,0	7,4	100,0
	Total	108	94,7	100,0	
Missing	not answered	6	5,3		
Total		114	100,0		

Question 74: Specific standards are in place to compare and improve learning outcomes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	8	7,0	7,7	7,7
	good	37	32,5	35,6	43,3
	under/ble	27	23,7	26,0	69,2
	poor	20	17,5	19,2	88,5
	not at all	12	10,5	11,5	100,0
	Total	104	91,2	100,0	
Missing	not answered	10	8,8		
Total		114	100,0		

Question 75: An evaluation process is used to improve the learning process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	7	6,1	6,5	6,5
	good	45	39,5	42,1	48,6
	under/ble	32	28,1	29,9	78,5
	poor	20	17,5	18,7	97,2
	not at all	3	2,6	2,8	100,0
	Total	107	93,9	100,0	
Missing	not answered	7	6,1		
Total		114	100,0		

Question 76: Feedback on the assessments is build in

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	12	10,5	11,4	11,4
	good	43	37,7	41,0	52,4
	under/ble	25	21,9	23,8	76,2
	poor	20	17,5	19,0	95,2
	not at all	5	4,4	4,8	100,0
	Total	105	92,1	100,0	
Missing	not answered	9	7,9		
Total		114	100,0		

5. Results of the evaluation of quality assurance policies/approaches/ methodologies/systems in VET and eLearning

Quality management and quality assurance is a complex subject area because every educational institution does have their own quality system ranging from simple assessments and questionnaires give to the learners to formal and comprehensive systems like ISO 9000:2000. Regarding Pawlowski and Ehers [8] educational quality is a multi-perspective construct that strongly depends on the specific educational context. It is therefore only possible to develop quality for a specific situation. This is also the explanation of the diversity of quality approaches that exists in the existing educational institutions.

Pawlowski and Ehlers [8] are also asking "what makes elearning successful?" This is a dominant question through the whole elearning community. Instructors consider themselves more and more as tutors and facilitators for learning processes and not as the conventional lecturer. Developers of learning material have to work together with teachers, authors and learners. Authors are required to think in a new way since current learning material is not built as a series of consecutive units where each presentation is based on the preceding one, but learning modules are created decontextualised and therefore easier to reuse.

Different educational systems, learning cultures, learning habits and other national characteristics lead to different requirements for quality management and quality assurance. According to Pawlowski and Ehlers [8] it is therefore very difficult if not impossible to find a universal definition of quality for vocational training. This is also reflected through the many quality approaches that exist. The way around is to select one that fits best.

In order to compare all the available quality approaches for various purposes it is necessary to identify a classification scheme. Classification schemes have different views of quality assurance. The two dominant approaches are:

- **Lifecycles models** that originates from software development and focuses on different phases of the development of a software product. ISO 9000 is an example of a life cycle model.

- **Functional models** are made for functional areas of educational activities. Examples are administrative issues, learning activities and how to design learning material.

Pawlowski and Ehers [8] and talks about the European dimension of elearning that makes it difficult to produce a universally valid definition of quality for vocational training because "….. different educational systems, learning cultures, learning habits and national or regional characteristics lead to different requirements for quality management and quality assurance".

The European Quality Observatory (EQO) [11] has developed a scheme for analysis and description of quality approaches called the EQO Model [3]. The EQO Model is based on the work done in the CEN/ISSS [6] Workshop Learning Technologies [12] there a classification scheme was developed to describe, analyse and compare quality approaches. Starting with the classification scheme and the process model presented at CWA (CEN Workshop Agreement) the EQO Model is based on a specification scheme similar to that used in LOM (Learning Object Model) using definitions and data elements.

The quality approaches are divided into several categories:

- Scope: quality policies, quality management, quality assurance, quality assessment
- Target group: learners, developers, decision makers
- Method: Process, product or competency orientation

The **EQO Model** will cover the whole range of quality approaches, from generic process oriented approaches like ISO 9000 and EFQM's Excellence Model in one end of the scale to specific process oriented approaches as BAOL Quality Mark and to specific product oriented approaches like Criteria catalogs and ETB Quality Criteria in the other end.

The EQO Model consists of four sections that are each divided into categories and subcategories.

1. The *General* category describes general information of the Quality approach being analysed.
2. The *Context* area describes the intended area of usage of the quality approach.
3. The *Method* deals with the question "what is the scope of this quality approach?" On one hand the quality approach can focus on the result of a process or the process itself. On the other hand different methods of quality approaches are to be differentiated, such as Evaluation concepts, Benchmarking, management approaches etc (page 9-10 in [3])
4. The *Experience* section describes actual instantiations of the generic approach for a specific implementation. Here users of the quality approach can report their experience.

The intention with this model is to describe the scope of a quality approach using a structured classification. Question to be answered through this system are of the type: Should author guidelines be worked out? Should checklist be developed? How should for example national laws, learning habits and learning cultures been taking into account?

At the EQO-portal www.equ.info hundreds of different quality approaches for educational purposes are registered and can be browsed/searched using criteria as language, educational level, target group, service, method etc.

mENU: A model for a European Networked University

The elements – parameters of quality

Most significant parts and elements within the mENU quality assurance system

- Administration
- Study Programmes
- Courses
- Staff
- Students

The criteria

To assess and assure quality, mENU QAS defines 5 specific quality attributes as criteria of the quality level

The criteria applied to the a fore mentioned QAS elements are:

- availability
- usability
- performance
- security
- potential for change

MECA-ODL: Methodology for the Analysis of Quality in ODL through Internet

The Phases of the ODL

Seven phases are involved in the development, production, delivery and evaluation of ODL objects, modules or courses:

- Conception
- Analysis
- Design
- Content
- Production
- Delivery

To find a quality approach fitting our requirements in the **iQTool** project we can choose a best practice approach that we already have experience with. One suggestion is to use the Szamalk criteria based system written down in the document "Criteria System for evaluation of Quality Management of eLearning in VET

6. Suggestions for a quality assurance model to be used in iQTool

iQTool Quality Model

Process Model is a guide through the different processes when developing learning scenarios. The process model includes the relevant processes within the lifecycle of information and communication systems for learning, education, and training.

The process model is divided **core processes. Sub-processes** are included referencing to a classification of processes.

Core processes

I.INSTITUTIONAL SUPPORT

A.Decide the quality criteria

B.Resources

II.ANALYSIS

A.Justify the requirements

B.Organize and run the analysis

C.Define the educational tasks.

III.DESIGN

A.Design planning.

B.Outline the contents.

C.Outline the delivery system.

D.Outline the evaluation strategy.

IV.DEVELOPMENT

A.Organizational conditions.

B.Target group.

C.Select media and materials.

D.Develop the contents.

E.Production

F.Reproduce course materials.

V.DELIVERY (TEACHING/LEARNING PROCESS)

A.External conditions

B.Organisational Conditions

C.Students

D.Material

E.Teachers.

F.Communicate the course.

VI.STUDENTS SUPPORT

A.Teaching, (tutoring)

B.Guidance (mentoring)

C.Other support (Forums)

VII.EVALUATION, ASSESSMENT

A.Students achievement of goals.

B.Course completion.

C.Teaching results.

6.1 The iQTool training material

Quality Management in e-learning

Chapters

1) The concept of quality
2) Quality in VET
3) Classification
    i) QA models
    ii) QA approaches

4) Quality system requirements (criterias, indicators)

   i) Institutional support

   ii) Analysis

   iii) Design

   iv) Development

   v) Delivery

   vi) Student support

   vii) Evaluation

Text: 30-40 pages

+Multimedia, interactive elements

+ self evaluation tests

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