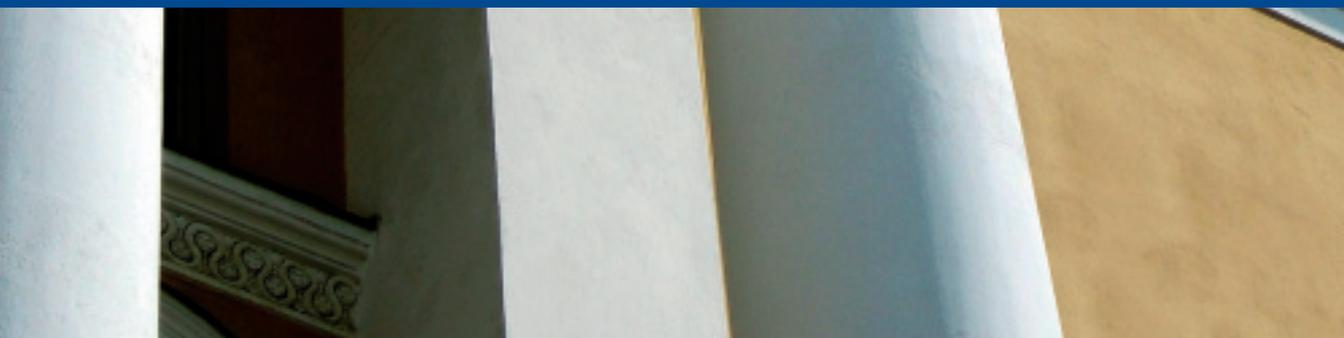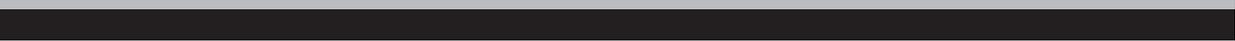Josep Grifoll, Esther Huertas, Anna Prades, Sebastián Rodríguez,
Yuri Rubin, Fred Mulder, Ebba Ossiannilsson

Quality Assurance of E-learning

ENQA

Josep Grifoll, Esther Huertas, Anna Prades, Sebastián Rodríguez,
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Quality Assurance of E-learning

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Foreword

E-learning in the European Higher Education Area has stampeded its way to the foreground of the Quality Assurance (QA) forum, and has become a key issue among quality assurance agencies and institutions in the European Higher Education Area (EHEA). Because internet-based learning is currently such a relevant topic, there is a dire need for the creation of a common language and guidelines amongst all QA agencies in order to proceed in a collectively positive direction in regards to developing a quality culture within the frame of E-learning further.

   This report gives a general overview of the matters discussed and challenges faced within the sector of quality assurance in E-learning. The workshop ENQA held in coordination with the National Agency for Higher Education, in Sigtuna, Sweden in October, 2009 created a dialogue between institutions, quality assurance agencies, students and other stakeholders who are directly affected by the quality of E-learning, and the need for continuous improvement in this field that will foster positive outcomes.

Achim Hopbach,
President
European Association for Quality Assurance in Higher Education (ENQA)

Introduction

Josep Grifoll, AQU Catalunya, Spain, and Michele Soinila, ENQA Secretariat

Over the past decade as technology coupled with the increasingly frequent use of the Internet becomes the forefront of business and academia, E-learning has emerged onto the global higher education stage as a leading means of gaining a respected education in the European Higher Education Area (EHEA). The question that remains is how do QA agencies monitor existing E-learning provision and develop future provision in a reliable and efficient manner?

The European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) have laid the foundation for web-based learning provisions and regulations. With the appropriate interpretation, quality assurance agencies could use the ESG as a backbone document and create additional material that would aide quality assurance agencies in monitoring the progress and development of E-learning.

This workshop provided a platform to discuss the underlying issues and internal challenges related to internet based learning, including the need for a "common language" and an integrated approach to E-learning – in which quality assurance agencies could collectively reference when creating provision related to E-learning. Many other topics were presented and touched upon, some of them are as follows: experiences in internal quality assurance in E-learning, web-based programmes offered at different institutions, implementation of efficient web-based tools, and the need for specific international accreditation and evaluation in E-learning.

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The following report includes five articles, submitted by the speakers and based on their presentations, which introduces the main topics for discussion and proposals for improved monitoring of Quality within the E-learning realm. Additionally, this report provides interesting perspectives from different institutions that have implemented E-learning provision, and discovered ways in which to effectively monitor web-based activity.

Chapter 1:
E-learning in the context of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)

Josep Grifoll, AQU Catalunya, Spain

1.1 Introduction

In my presentation, I suggest that the use of *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG1) is not contradictory to the generation of relevant opportunities for innovation and enhancement of the quality assurance process in Higher Education, and in e-learning in particular. In fact, the ESG can be seen as a catalyser for the definition of new concepts of quality in the coming future.

1.2 E-learning and the ESG

We can start by formulating the following question: are programmes based on e-learning methods requiring a reformulation of the ESG? If we understand the ESG as a frame for quality assurance, the answer to that question is, in my opinion, no. Let's say "no" for the moment. Reasonably, what will be needed, sooner or later within the e-learning realm, is a general reformulation of some current educational policies and practices. This happens in a world in which the information and communication technologies are making the costs of getting facts, data and, presumably, skills dramatically lower. The vast amount of information available is giving people far more opportunities to boost their knowledge, not only through enrolment in a programme as a student, but also through alternative paths. In the same way that we assume that strategies for training people are expected to be reformulated drastically in the future, the standards will likely be subject to adaptation as well.

My view is that the ESG are well defined. I suggest reading and using the standards to tackle the issue of quality assurance of e-learning programmes, keeping two ideas in mind:

   a. E-learning should not be an exclusive methodology for particular programmes. On the contrary, e-learning strategies are more and more essential in modern educational activities.
   We should also keep in mind that quality assurance should not forget the way in which information and communication technologies are creating alternative opportunities for both teaching and learning in universities, with the associated challenges for our higher education sector.

Thus, quality assurance policies need to formulate questions on how far e-learning methods are included in all study programmes, and on the adequacy between new technologies and the emerging new educational approaches, taking into consideration concepts such as efficiency in teaching, effectiveness in learning or equity in education.

At the moment, it is quite difficult to predict the evolution of new technologies that can be used in teaching and learning. They are changing so fast that even specialists find it difficult to make a general composition of what can be expected in the next 20 years. This introduces a big disadvantage to the planning task of our policymakers and university managers.

Take, for example, the evolution in the capacity of computers to work with data, or the innovations in artificial intelligence. How can these tools provoke changes in the way we process information, in the way we teach, in the way we learn, or even in the way we organise research activities?

As another example, let's think about the developments in translation technology. They could produce huge consequences, not only in education but also in research, and, undoubtedly, in the way our societies are organised. Gaining freedom and reducing communication barriers between individuals is not the only outcome, but also giving new opportunities for the smallest cultures to gain international visibility. Can we imagine students following study programmes delivered in multiple languages and translated automatically into their mother tongues? It doesn't exist today, but it could certainly happen in the future. Those technologies will undoubtedly make it easier to set up new and diversified learning communities, working with new parameters that can affect the way we perceive quality in teaching and learning.

Or, let's take the developments on virtual reality. Video game technology is fascinating, and it can be used for providing new educational applications, for example, in creating virtual laboratories for our study programmes.

Electronic ink is an expected and desired technology not only for reading purposes, but also for creating portable libraries for everybody. Have we agreed about the most relevant indicators of what is a good university library in that context?

Social networks based on Internet technology are already used in e-learning programmes demonstrating fruitful results. What is quality in those networks? Again, we need to think of introducing new concepts of quality. For example, those networks seem to become the future campus of our universities, and taking care of the « electronic arena » of those campuses can reward a lot of advantages at an institutional and individual level. If we wish to protect and promote the value of freedom, for instance, in our educational communities, we need to be aware of the potential vulnerability of those networks. We need to protect personal data and to introduce stronger ethical requirements for students.

'Googling' technologies, and the development of new, more advanced robots for searching and processing data and facts stored in computers, is another important point to be considered. Do we need new concepts to define learning and teaching? Traditional teaching scheme can be useful for freshmen, but perhaps more experienced students will be interested in universities that provide unique experiences not only to learn the current knowledge in a particular way, but also to contribute to the creation of new knowledge during their enrolment. Are future students expected to be rather explorers than learners?

There will be new technologies for data transmission with new networks, with cheaper access and stronger capacity. Can you imagine a future in which people can transmit data with no limits? In that world, universities should develop adequate infrastructures to become nexuses, or what we could call the *cyber agora*, where people interested in scientific developments meet in order to keep their central position in the knowledge society.

Or, what are the expected effects of using new interfaces between people and computers that make acquiring general knowledge easier? In that world, how will we value people's contribution to the progress of society?

1.3 E-learning in light of the basic principles of the ESG

A second relevant reflection on the consistency of the ESG for e-learning can be done by observing their basic principles. This second consideration leads us towards some interesting points, in which the examination of those principles raises new questions for the future.

Take, for example, those e-learning programmes that can be delivered online, and offered to those students who could be traditionally enrolled in distance education.

The first basic principle declares that providers of higher education have the primary responsibility for the quality of their provision and its assurance. This is a principle that should be developed and implemented in a deeper way. However, e-learning programmes are progressively enrolling students and hiring teachers situated in different countries. Facing this situation, how do we match the primary responsibility with the needed "secondary" responsibility of QA agencies and other stakeholders? How will international e-learning programmes be externally assessed?

The second basic principle of the ESG states that the interests of society in the quality and standards of higher education need to be safeguarded; the concept of society here, and taking into account again the possibilities of e-learning programmes to be delivered worldwide, needs also deep reflection. Who represents the society? That is important if we wish to include the voice of society in the quality of study programmes, and in the definition of new proposals.

The definition of society is also relevant when we have discussions on funding schemes for education. Who is investing in education in our societies, and who is getting the benefits of that education? Of course students invest their time and money to study, but governments are also investing resources on behalf of their national taxpayers. How does e-learning fit in a world of national policies for public goods, with low barriers to work at an international level?

Another interesting basic principle points out that the quality of academic programmes needs to be developed and improved for students and other beneficiaries of higher education across the EHEA. E-learning can offer interesting opportunities for students and other beneficiaries of Higher Education. See the potential benefits of the academic mobility in higher education. E-learning could be a very comfortable way to be enrolled in a foreign degree with other European students attending the same virtual classroom.

Current technology can be used and developed to set up international joint programmes based on e-learning. This is something that could be very interesting, not only in Europe, but all over the world, providing a sort of virtual mobility that is much more affordable for students and public funds.

Another expected outcome for e-learning programmes is better access to higher education for people with disabilities. See developments on text-to-speech technologies.

A remark concerning the forth principle, referring to the need of efficient and effective organisational structures within academic programmes, can be provided and supported. E-learning programmes can be organised in a very different way, if we take advantage of the use of new technologies. As technologies used in e-learning are rapidly changing, quality assurance strategies need to pay attention to that fact. I personally think that e-learning offers a chance to improve the way departments and institutions are organised. There are limitations, of course, but the constitution of virtual communities for teaching and learning with international and diverse expertise is easier with new technologies. Thus, quality assurance should take into account the possible deficits in the use of new technologies for efficiency and effectiveness in organisations.

Transparency and the use of external expertise in quality assurance processes are important; in all kinds of programmes, and in e-learning in particular, the question of transparency and the use of external expertise as a way to increase confidence on the quality are crucial. One should do the exercise of getting information on academic study programmes delivered in European universities, and he or she will come to the conclusion that there are enormous opportunities for improvement on that issue. Moreover, if a reader is interested in knowing who is externally granting the quality of those programmes, the situation is confusing. There is, therefore, a lot to do for our QA agencies.

The seventh principle states that accountability processes should be developed, through which higher education institutions can demonstrate their accountability, including accountability for the investment of public and private money; as e-learning makes it easier to deliver programmes at the European level, accountability for public and private investors should be carefully treated and connected with the expectations of different national and international stakeholders.

The ESG basic principles also state that institutions should be able to demonstrate their quality at the national and international level; this is a principle that should generally apply to all higher education, but specifically to e-learning programmes which are ready to admit students from different countries.

1.4 In conclusion

There are, however, other questions emerging from the ESG. We have seen how these standards and principles generate opportunities to reflect and to develop quality assurance methods with possible new parameters and indicators. Promoting opportunities for innovation in QA of e-learning is a priority. This is critical for knowledge acquisition in the future society in which the creation of new communities will set new demands for universities to provide not only better understanding of the reality, but also renewed chances and experiences to go far in the creation of new knowledge.

Chapter 2 :
How to assess an e-learning institution: Methodology, design and implementation

Esther Huertas, Anna Prades and Sebastián Rodríguez AQU Catalunya, Spain[1]

Abstract

There are certain features in the assessment of distance learning in higher education that need to be particularly taken into account. A methodology adapted for an e-learning institution (Catalan Open University, UOC) was designed by the Quality Assurance Agency of Catalunya (AQU Catalunya) with the institution's characteristics (student profile, teaching methodology, teaching staff, etc.) incorporated into the evaluation model. In addition to a distinction in the assessment methodology between institutional evaluation and programme evaluation, the specific aspects of e-learning also called for adaptations of the evaluation process to be made. Training for the external review panel and on-line access to the university's virtual campus were thus key aspects throughout the evaluation process. This paper looks at the methodology's potentialities and limitations following the two years of its use and the assessment of nine different degree programmes.

2.1. Introduction

Quality assurance in higher education is fully complied with the conventional universities, whereas quality assessment processes in e-learning programmes are only now becoming more widespread in Europe. The national agencies in Norway (NOKUT) and Sweden (NAHE) have developed small-scale projects on quality criteria for e-learning, and in the UK (QAA), guidelines have been drawn up on the quality assessment of distance learning. Nevertheless, e-learning quality is not included as a regular or integral part of national quality reviews in any country, nor is any emphasis placed on the standards and guidelines established by the European Association for Quality Assurance in Higher Education (ENQA) on the quality in e-learning. Other organisations, such as the National Association for Developmental Education (NADE, Norway), the Joint Information Systems Committee (JISC, UK), and the Higher Education Academy (HEA, UK) have focused on the methodological development of e-learning assessment (publication by Swedish National Agency for Higher Education, 2008).

Other experiences include the Australasian Council on Open, Distance and E-Learning (ACODE), which has published extensive benchmarks with the aim of influencing policy and practice at the institutional, national and international level. In the U.S., the Council for Higher Education Accreditation (CHEA) has drawn up

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guidelines for the accreditation and assurance of quality in distance learning, and the Distance Education and Training Council (DETC) has defined, maintained and promoted education excellence in distance education.

There has been practically no experience with the assessment of e-learning quality in Europe. The Open University (UK) has been assessed, but according to the same national quality criteria as other British institutions of higher education. In Catalonia (Spain), an e-learning evaluation project is already finished (AQU Catalunya) at the higher education level, the main objective of which is the formative assessment of the Catalan Open University (UOC).

This paper presents the methodological design implemented in the assessment of a fully virtual university, focusing on adaptation of the methodology, together with a discussion on the main potentialities and limitations of the process.

2.2. Design of the methodological model
2.2.1. CHARACTERISTICS OF E-LEARNING

The evaluation methodology designed by AQU Catalunya follows a system based on the European model adapted to the evaluation culture within the university and social context of Catalonia. Before setting up the methodology design applied to an e-learning institution, it was necessary to study the differences between e-learning and conventional higher education, and more particularly, the specific characteristics of the university being assessed (in this case, the UOC).

Various challenges exist when assessing a virtual university. Bearing in mind the structure of the CIPP (Context, Inputs, Process and Product Evaluations) model for evaluation (Stufflebeam, 2003), the main aspects that can be pointed out are as follows:

a. **Context**

Context evaluation is different from that of a conventional university, and it emphasises the specific characteristics of e-learning as to conventional higher education. On-line distance study has potentialities, on the one hand, but it also suffers from limitations, such as the type of degree that can be obtained.

In terms of organisation, the Catalan Open University is a private university that has a structure which is more like that of a company than the management and administration of a conventional university. Together with the fact that it has a small body of teaching staff, this makes it a highly centralised institution with regard to information and quality assurance mechanisms.

b. **Inputs**

The profile of students enrolled in an e-learning education is different from that of students attending a bricks-and-mortar university. E-learning students usually work full time (they are employed in the labour market), they have family responsibilities and they tend to be more mature. The teaching staff profile is also different from that of conventional universities, with the UOC having its own "resident" teaching staff (director of studies, programme director and course coordinator), as well as collaborating teaching staff (student counsellors and tutors). The UOC's own teaching staff propose courses, define the contents and aims, look for authors for the teaching materials, select and coordinate student counsellors, etc. Collaborating teaching staff consists of two posts: the student

counsellor and the tutor. The student counsellor gives incentive and impetus to learning activities from the very beginning through assessment (by proposing and monitoring the student's activity, moderating discussions and debates, resolving doubts regarding the subject, etc.). The tutor supports and advises the students on matters connected with the running of the virtual campus and course enrolment, and gives guidance regarding possible professional opportunities.

Lastly, technology infrastructure forms the core of a virtual university, as the university has to guarantee that the services for study and learning purposes are satisfactory.

c. **Process**

The main difference concerning the delivery process is the high degree of homogeneity. All classrooms used for the same subject have exactly the same learning documentation, tools (forum, guidance, etc.) and assessment process.

Distance learning education implies a high level of teaching process homogeneity: the same author for all materials in one particular subject, the same learning and assessment activities, the same student support system for all programmes, etc. This degree of homogenisation has advantages, such as the fact that the institution can make a cascade of changes quickly and effectively, although it also implies risk, such as the hegemony of a single culture to the detriment of plurality, as well as the possible devaluation of teachers as mere mediators of knowledge described by UNESCO (1998).

d. **Product evaluation**

Product evaluation identifies and assesses three kinds of outcomes: academic outcomes (progress rates, drop-outs, etc.), personal outcomes (skill development) and professional outcomes (employment rates and adequacy, etc.). It is important to state that the evaluation of e-learning programmes should be of the same quality as that of non-distance learning degrees (i.e. conventional degree programmes).

2.2.2. METHODOLOGY DEVELOPMENT

The aims of quality assessment of degree programmes are to promote quality, and to provide valid and objective information on university services to the society (in other words, accountability).

In the case at hand, methodology development started with the adaptation of the design of distance learning education and the structure of the Open University. The main aspects considered in the new model refer to the dividing of the assessment process into two units (an institutional level and a degree programme level); the establishing of dimensions or sections for each assessment level; and the setting of indicators, standards and evidence for each dimension.

Given the nature of the UOC as an institution (with high degree of homogeneity in the educational process and the institution's highly centralised nature), it was necessary to divide up the assessment of the institutional evaluation level, on the one hand, and of the degree programme evaluation level, on the other (see Figure 1). The institutional level is centralised, and includes all aspects that are common to all degree programmes

(mission, vision, delivery system, and infrastructure), with special emphasis on quality assurance policies and mechanisms, including the information systems that support these mechanisms. The other level, which is specific to each degree programme, specifies how the aspects, policies and general mechanisms work (the strategic position of the degree, study programme, instruction design, disciplinary (fields of knowledge) dimension, and outcomes). The relationship between the institutional evaluation and the degree programme evaluation is given in Table 1.
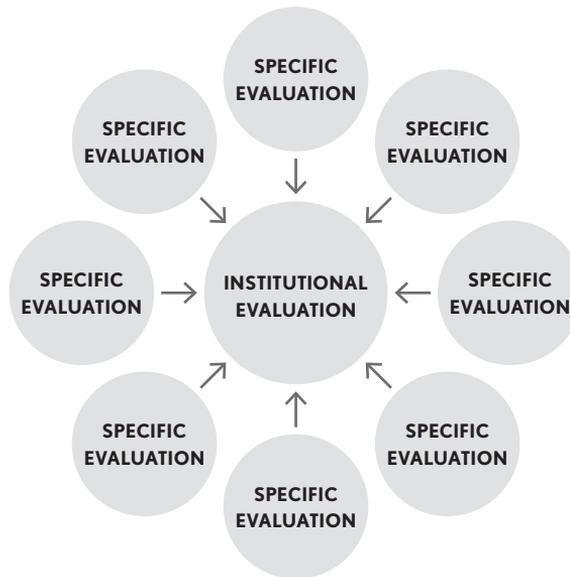

Figure 1. Evaluation units designed within the framework of the assessment of a fully virtual university (AQU, 2007a; AQU, 2007b)

Table 1. Relationship between the dimensions (institution/degree programme) within the framework of evaluation and distance learning

DIMENSION	
INSTITUTION	**DEGREE PROGRAMME**
1. INSTITUTIONAL MISSION AND VISION	
1.1. Institutional mission	• Appropriateness of the programme and student profile to the institutional mission and vision (Section on the strategic position of the degree).
1.2. Institutional vision	
2. QUALITY ASSURANCE MECHANISMS	
2.1. Institutional mission and vision	• N/A
2.2. System capacity: adequacy of policies regarding students, teaching staff, infrastructure and external relations	• Adequacy of students, teaching and professional staff profile (section on the strategic position of the degree). • Appropriateness of technical set-up for instruction section (instruction design section). • Comparison of the proposed programme with others, e.g. number and quality of students, type of teaching staff, etc. (section on the strategic position of the degree). • Adequacy of interpersonal communication systems (instruction design section)
2.3. Internal and external strategic position: adequacy of the information-gathering mechanisms, as well as the analysis and decision-taking circuit	• Adequacy of internal and external strategic position (section on the strategic position of the degree).
2.4. Learning outcomes and study programme: adequacy of planning mechanisms and learning outcomes' quality assurance mechanisms	• Adequacy of the definition of learning outcomes (study programme section). • Adequacy of the study programme (study programme section).
2.5. Instruction design: adequacy of planning mechanisms and programme specifications' quality assurance mechanisms	• Adequacy of the activities (instruction design section). • Adequacy of the degree organisation (instruction design section). • Adequacy of student orientation, tutoring and advisory system (instruction design section).
2.6. Learning assessment: adequacy of planning and quality assurance mechanism regarding student assessment	• Adequacy of the assessment system (learning assessment section).
2.7. Outcomes: academic, professional and personal	• Adequacy of academic, professional and personal outcomes section.

N/A: Not applicable

Indicators, standards and evidence are based on those specified for on-line education by the Council for Higher Education Accreditation (CHEA), the Institute for Higher Education Policy (IHEP) and the Western Cooperative for Educational Telecommunications (WCET). Account was also taken of the accreditation standards for the degree programmes participating in the European Higher Education Area (EHEA) pilot programme implemented by AQU Catalunya, and the standards for internal quality assurance in the EHEA adopted under the Bergen Declaration (2005).

2.2.3. EVALUATION PROCESS

The self-evaluation committee analyses all the dimensions described in the methodology guide, and draws up its self-evaluation report. The external panel reviews the completed report prior to the site visit to the institution where the external review panel interviews the various stakeholders. This process is supplemented with on-line interviews, thereby enabling all stakeholder groups to take part in the assessment process. The external experts receive training on the virtual campus prior to the site visit in order to be able to make best use of the on-line interviews. The process is shown in Figure 2.
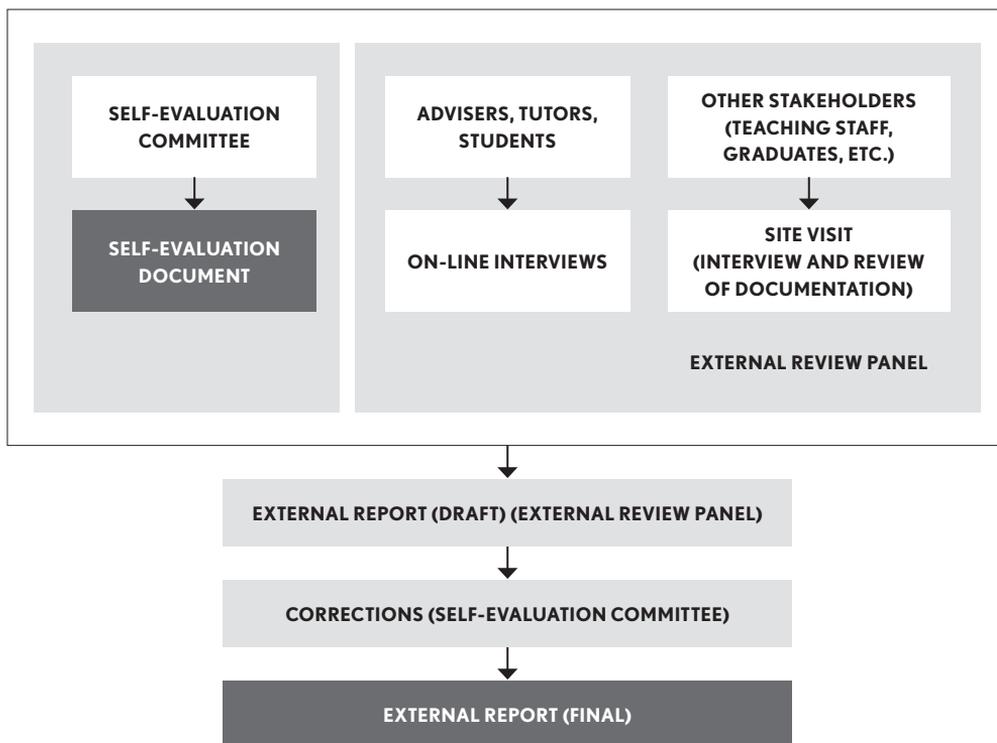
Figure 2. Process design for the evaluation of e-learning institutions and degree programmes.

2.3. Potentialities and limitations of the process

There are certain benefits in dividing the evaluation into two units (institutional evaluation and degree programme evaluation), as compared to a conventional assessment. The external report on the institutional evaluation (now complete) was used as an input for the degree programme evaluation, enabling the experts on the external panel to focus on the key aspects related to the degree programme evaluation.

The process shows the importance of the external review panel being trained in an e-learning education system, as well as the specific nature of the university that is being assessed. The UOC educational model, the classification of teaching staff (UOC's own teaching staff and collaborating student counsellors and tutors) and the importance of research are the foremost characteristics that, in this case, are different from conventional universities. Due to these differences, members of the external panel had access to all resources available to the students (e.g. library), and some classroom examples were included in order to show the organisation of forums and debates,

counsellors' comments, student assessment, etc. The availability of this resource and the fact that it is compulsory to use the university's virtual campus are aspects that the experts assess very highly.

The implementation of the process shows that on-line interviews are highly important for the external review panel. These interviews allow additional information not included in the self-evaluation document to be collated. It is worth mentioning that this stage in the process involves a lot of work by the experts, given the large number of interactions, especially during the student interviews. The external panel also works with the virtual campus and they can thereby check the soundness of the system.

One significant limitation of e-learning education assessment is the lack of benchmarks within the context of evaluation. The UOC is a fully virtual university and there is no other institution with a similar structure in Spain. Moreover, information on other renowned e-learning universities is not readily available.

Another minor weak point found during the institutional evaluation was the need to include economic information on the organisation. This information, which needs to be presented in the main sections, provides an understanding of the institution's current situation. In addition, an assessment of the strategic plan should complete the mission and vision evaluation in order for a broader assessment to be made of the university's situation in the near future.

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Chapter 3:
Modern E-learning: Qualitative education accessibility concept

Yuri Rubin, AKKORK, Russia

3.1. Quality and competitiveness

Quality in education is one of the main issues examined by modern scholars and practitioners who operate on the international education and resources market.

High quality is the main competitiveness indicator. In the fierce competitive environment, the management and staff of universities should efficiently manage the learning process, and take steps to improve their institutions' competitiveness level, all of which is impossible if no steps are taken to enhance *quality* in education[2]. This is the reason why accreditation agencies involved in quality assurance and in quality evaluation in the field of education were rapidly expanding their presence on the market in the majority of the market-oriented economies during the last few decades.

The quality of education reflects the relationship between learning (seen as a result, a process or as an education system) and the demands, goals, standards (regulations) and requirements set by individuals, businesses, organisations, local community members and the state at large. If we use the above approach, the term 'quality of education' should be broken up into the following terms that require a separate definition each:

- Quality of teaching (learning process design, teaching methodology);
- Quality of academic staff;
- Quality of study programmes ;
- Quality of equipment, maintenance and support rendered; quality characteristics of the learning environment;
- Characteristics of students, school students, university entrants;
- Quality of university management;
- Quality of research.

3.2. E-access and I-access to quality

Meanwhile, modern E-learning is one of the typical results of the competition between universities. Its embedding as an element of the structured system makes it necessary to prevent extremes in approaches to quality evaluation and quality assurance: from the recognition of E-learning as the only mainstream of modern education to the unconditional allocation of E-learning to the educational underground, or its interpretation as a purely technological environment in which traditional content is realised. Today's reality is integrated learning (I-learning) that combines the elements of traditional face-to-face learning and E-learning: integrated contents, the ways of content presentation, communication between students and professors, study methods,

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2   For more information, please see: Rubin Y. (2006) Конкуренция: упорядоченное взаимодействие в профессиональном бизнесе [Competition: structured interrelation in professional business], Moscow: Market DS; Rubin Y. (2008) Курс профессионального предпринимательства [The course of professional entrepreneurship], 10th edition, Moscow: Market DS

means of organisation and management of the educational process in universities. Therefore, the importance of the Sigtuna workshop theme is that quality assurance agencies have to be more sensitive to innovations associated with E-learning, and to find "E-learning segments" during the evaluation process of the educational programmes and universities.

Modern I-learning could get appropriate recognition in the framework of the *qualitative education accessibility concept*.

Integrated learning, where face-to-face and correspondence learning characteristics are integrated, finely combines all the best practices elaborated in the field of learning content, technology, HR management, university administration and management, including the best practices shown in E-learning, M-learning, on-line and off-line courses.

Consistent introduction of E-learning into the learning process fosters the modern ICT introduction process, and creates a good environment for the integration of learning content, learning technology, various learning process designs and professional competence. That is why modern E-learning should be considered as a precursor and a part included into the integrated learning.

I-learning elements have always been present in the learning modes used in Russia (both in the face-to-face and in the distant mode, and, of course, in the mode where these two are combined). Due to E-learning, I-learning now has a new function that enables resource integration and participants' interaction in the learning process. Here the distant mode potential is integrated into the face-to-face mode potential. By using the distant mode, the remotely located learners make use of the principle of having an easy access to education. As a result, the overall quality of provision is improved.

Such integration opens new horizons for any national education system in terms of improving and developing the learning content and technology, and using the professional competence of teaching staff in combination with high technologies, inter-university and international cooperation to ensure a good mobility of content, technology, teaching personnel and various learning modes. As Tim Priestman reasonably says, integrated learning ensures that the knowledge will be transferred to any point in any part of the world[3].

As a product of modern telecommunication technology-based systems, E-learning turns out to be an efficient tool for bridging the distance gap on the Internet. In fact, E-learning is not a remote learning tool; it is a tool for overcoming the distance gap as such. That is why distance learning and E-learning are not to be included into one category. The distance gap is completely bridged for the parties involved in an E-learning session within the framework of instructors-to-students and students-to-students interactions. If a rationalised approach to E-learning is used, reasonable managers of 'state-of-the-art' universities do not use a traditional break-up scheme in their descriptions of learning modes (face-to-face and correspondence courses). They speak about various forms of integrated learning. This mode includes the face-to-face mode used in combination with modern ICT, and this is what transfers the learning process into the virtual reality.

When integrated learning is examined, E-learning is seen as a system that can be used by traditional universities, not as a tool to be used exclusively by those universities

3   Tim Priestman (2007), *Blended Learning in International MBA Programme: Partner Initiatives and Future Challenger in Global Environment",* Proceedings of the ONLINE EDUCA MOSCOW. 1st International Conference on Technology Supported Learning and Training; 29 September–1 October 2007; Book of Abstracts, Moscow, Russia: Market DS pp.272–277.

that offer all of their programmes on-line. It is not accidental that the ideas voiced by the leading universities of the Bologna process and the e-Bologna concepts are spreading throughout the Western European countries. The goal of the process is to reach an understanding and recognition on a global scale based upon the consistent use of E-learning tools.

3.3. Appropriate competitiveness level and access to quality

E-learning tools are used by the universities in accordance with the pragmatic principle of reaching an appropriate level of competitiveness. This is often understood as the necessity of providing easy access to education and creating a means for bridging the distance gap. If we look at such a large country as Russia, for example, we shall see that the only way for those citizens living in the remote regions to get access to high-quality education is to take an online (E-learning) course.

When we speak about the easy access to education and training opportunities, we should mention, of course, transborder or transnational higher education. These include all types of study programmes, courses, and educational services, including the distance learning programmes offered for those learners who study from a different country. The study programmes can be part of an education system of a foreign country, or can be offered regardless of the characteristics available in a certain national education system.

Some documents related to the mobile education development plans were elaborated in accordance with the Lisbon European Council resolutions of 14 December 2000[4],[5]. The plan includes 42 stages that are divided into the following four groups:

- Steps to improve student and teaching staff mobility (including the steps to improve the foreign and native language skills in order to gain better access to reliable and helpful information);
- Steps to ensure financial mobility by concentrating the necessary resources on all levels, and steps to ensure easy access to mobile learning for all community groups;
- Steps to diversify and improve the quality of mobile education by introducing new forms of provision; by improving the quality of study programmes and data resources; by streamlining the structure of the programmes, and by determining the status of an associate professor or instructor;
- Steps to harmonise mobile education programme results by setting a standard for periods of study and practical training.

As the elaboration of transborder education scheme is a direct consequence of the internationalisation of the education system, it is closely connected with the new ICT use. This is a manifestation of the fact that the education market is becoming increasingly global, and this development stage is characterised by the full-fledged struggle for market space. There is a lot to fight for. The demand on the world's higher education market grows by 6 % each year, and the growth in demand is much higher than the growth in transborder education market. In total, there were slightly more than 2 million international students studying around the world in 2003. It is estimated

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4   Presidency Conclusions (2000) Proceedings of the Lisbon European Council; 23 and 24 March 2000; Lisbon, Portugal.
5   The role of the Universities in the Europe of knowledge (2003), Proceedings of the Commission of the European Communities; 05.02.2003; Brussels, Belgium.

that the international student number will be 7.2 to 7.3 million in 2025. The majority of the students will be taking transborder courses.

Education is becoming increasingly transnational because universities in developed countries are promoting their traditional study programmes through various means. First of all, they found representative offices, branches and even campuses. At least 75% of all the programmes in transnational education are exported on the franchise agreement basis to the overseas branches of universities, and to the representative offices of the institutions that offer distance learning courses. In general, transnational education programmes are either traditional courses, online courses or integrated learning courses.

The majority of European countries do not have appropriate legal base or by-laws to support the exports and imports in the field of transnational education. Only Great Britain and Sweden stand out in this respect. They have their own *bona fide* behavior codes and quality assurance standards used to foster the transnational education development and to improve its standards. Sweden is the only European country to have a clear-cut national policy that describes the transnational education programme award recognition rules. There are variants to choose from when it comes to the development of national and transnational education providers' codes of *bona fide* conduct. They can be modeled along the lines offered by Great Britain or Australia[6].

Despite the problems, transnational education programmes are being offered and are a success. There are a few reasons why it happens. Firstly, the transnational education programmes provide additional opportunities for people to have better access to education and training programmes with a rather wide range of options. Secondly, if transnational programmes are offered on a national market, the traditional universities that are present on the market become motivated to compete more for a place on the education market with their colleagues, and this helps to improve the learning environment. Let's note that the country exporting the transnational education contributes to the improvement of the competitiveness level of the country's education providers, and this is a prerequisite for getting more revenue from the new exports.

3.4. Integrated access to quality as an indicator of competitiveness

To ensure access to high quality education is still quite a challenge in Russia, and this affects the market situation.

The challenge is called the digital divide. The term refers to the gap between those people who do have, and those who do not have access to ICT (that includes, first of all, the Internet access) due to financial restrictions, remote geographic location, lack of basic ICT knowledge, etc. This is a problem that many European countries face. Each of the OECD countries, for instance, has quite different characteristics as far as the IT use is concerned. The characteristics include: the number of students per each PC (which range from 5 to 20 in the European countries), the number of students who have a PC at home (90% of the total number of students in the Scandinavian countries and up to 50% in the countries of Central and Eastern Europe), the costs, quality of service and access opportunities as far as the Internet use in the universities is concerned. There are also various characteristics demonstrated by different educational institutions within one country.

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6   The Recognition, Treatment, Experience and Implications of Transnational Education in Central Europe 2002–2003 (2003), report undertaken by Stephen Adam for the Hogskoleveket, Swedish National Agency for Higher Education; UK.

Thus, in practice, the introduction of ICT into the learning process can both contribute to the improvement of access to education, and sometimes help broaden the digital and economic divide. That is why some OECD countries and Russia are currently implementing a number of projects in order to provide wider public access to ICT use (especially the poor) in universities, libraries and educational centers, and in order to offer courses on ICT skills to the teaching staff, and to create incentives to businesses to invest into the ICT-supported study programmes for their staff.

Fortunately, nobody today is trying to see E-learning as a means of providing education to the geographically remote entities only and is claiming that E-learning is only good as long as it is catering to their needs.

An interesting approach to quality issues in E-learning is described in *Towards a Greater Quality Literacy in a E-Learning Europe* article by Ulf-Daniel Ehlers[7], coordinator of the European Quality Observatory of the University of Duisburg-Essen. He says that "quality is more than just an evaluation at the end of a course. It is a comprehensive concept which concerns all areas of E-learning." He describes three concepts that can be combined into a new single concept of quality improvement: education-oriented quality development; consideration of all the E-learning process stakeholders' needs; use of a special decision cycle that could help a provider find a unique approach towards quality issues. It is necessary to have certain competence to do this, not just tools for doing the work. He adds that "because of its open nature and of involving stakeholders into the process of quality development the approach can be called participatory approach to E-learning quality."

3.5. Integrated access: From chaos to quality

E-learning course efficiency is seen best if a higher education institution offers not only face-to-face or distance learning courses but a combination of the two.

Such a model can be used in the most efficient way, if a university offers a concept of integrated learning where the university management can find an optimised combination of face-to-face learning, virtual campus online and courses offline, and integrate the multidiscipline learning content and place it on a single data carrier. In this case, the main E-learning tools cannot be regarded as makeweights that are added merely to make the traditional study programmes seem acceptable. They become a robust tool that helps to acquire important competence, skills and knowledge that can be used in practice.

It is becoming evident that Internet connection in an educational institution is more than merely a means of transferring learning material from one point to another, which serves the students and the teaching staff. Being a tool supporting an E-learning programme, the Internet is most efficiently used when it is used as a learning environment and not only as a means of byte traffic transferring. The E-learning system is pragmatic, not because E-learning courses are sold and bought with e-money, but because the opportunities that the Internet provides are used as a means to support the use of teaching methodology.

The management of the most innovative universities is now asking a question, for example, of whether an E-learning course could be a substitute for a live contact course with an instructor. In theory, any student who takes a course for an external degree

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7   Ehlers U.D. (2006) 'О повышении грамотности в вопросах качества в сфере E-learning в Европе' [Towards a Greater Quality Literacy in E-Learning in Europe], Vyisshee Obrazovanie v Rossii 12: p.43–53.

does not have a live contact with an instructor, but examines the various information sources available. An E-learning course, even if devoid of any human contact, undoubtedly turns a classical external degree course into an integrated learning course. However, the absence of human contact in practice has given reasons to believe that E-learning is *extreme learning* (refers to not structured learning, the positive sides of which are not visible). Elliot Masie, a pioneer of American E-learning, was the first one to coin the witty expression[8]. Is it reasonable to use *extreme learning* in an E-form?

The best solution would be not the substitution of a live contact course, but the use of a combination of an experienced live instructor skills and high-tech tools. The tools can be used by the E-learning tutors who should stimulate the students' activity. If such a combination is used, a systemic role shift occurs and the learners turn into E-learning partners[9].

However, a different answer to the question is also possible if two things occur. Firstly, E-learning instruments could undoubtedly become a good alternative tool for not-quite-competent instructors who are in the habit of relying on the obsolete data taken from the old sources. E-learning is efficient as long as the learning content is updated regularly and the teaching methodology helps to master the learning material and to acquire knowledge. Competition between the content providers in an open learning environment is fierce, unlike the competition between the instructors who teach in the university classrooms behind closed doors.

Secondly, in some cases the full or temporary absence of contact with a live instructor, and studying in a virtual environment is important for forming such competences as the ability to process large volumes of data and extract the essential information, the ability to put knowledge into practice, the ability to participate in teamwork and the eagerness to learn more. This is observed, for example, when students do the on-the-job training, or participate in business games in simulated virtual business environments where there could be no instructor even in theory. Typically, the attention of employers is drawn to such competences in the applicants who are one of the categories of the stakeholders who are present on the market. The other three categories of stakeholders interested in education quality are: State, academic community (universities, including this university) and students.

3.6. Quality of access

The evolution of our vision of the role of E-learning as a system that is being introduced, and the place it occupies as a tool that helps to foster the introduction of innovations in the field of education, runs in parallel with the evolution of our vision of the place it occupies in the relevant quality management system. The global education market trend is moving from quality evaluation towards quality management, and further, to quality assurance offers. This is the field where the interests of the international accreditation agencies are focused[10].

European quality evaluation systems used in the field of education differ from one another in terms of goals, objectives, procedures and criteria, and in terms of the way the state executive bodies, community organisations and professional communities are

8   Masie E. (2001) 'TeachLearn TRENDS: E-Learning, Training and E-Collaboration Updates', Newsletter Nr. 197, 26 February.
9   Fetterman D., Wandersman A. (2005) Empowerment Evaluation, Principles in Practice. N.Y. – London
10   Hämäläinen K., Hämäläinen K., Dørge Jessen A., Kaartinen-Koutaniemi M., Kristoffersen D. (2003) Benchmarking in the Improvement of Higher Education, Materials of the European Network for Quality Assurance Workshop 2; Helsinki, Finland. Retrieved from http://enqa.eu/files/benchmarking.pdf

involved in the process. Therefore, in the environment where "the universities` dual role – convergence as much as divergence from a national consensus – does not indeed make easy the relations with the powers"[11], European countries try to foster harmony between different evaluation systems available, and put the internal quality assurance systems of universities in a position where they will be fully in charge of the quality assurance measures taken. Besides, the national education systems are being reformed, and the general reform trend is to decentralise the power structure of state executive bodies, broaden the scope of university authority, and give more executive powers to universities, the community and public organisations.

In Russia, the state education authorities support the development of the external quality evaluation system in order to make the education system change faster and improve the quality of the provision of education as soon as possible. That is why the external quality assurance mechanisms have begun to take new shape recently. The employers' associations have started elaborating the professional standards, various market sector representatives have started elaborating the qualification requirements for the graduates to meet, the rating agencies monitor the market where higher education institutions offer their services and examine the study programmes, and the Russian expert associations offer audit and accreditation services to universities.

The support of the state education authorities, rendered to the development of the education quality evaluation system, inevitably brings about the interaction between the state evaluation system and a system supported by non-governmental agencies. Such interactions are based on the procedures and criteria elaborated by, and the findings shown by the accreditation agencies in the course of the state education authorities' preparation of a final accreditation statement[12].

3.7. Quality of integrated access

As E-learning is to a large extent a product of the evolution of technology, the phenomena that can be called 'technological determinism' are observed in Western European countries and in the USA where the relevant stakeholders are trying to create a platform for setting the common standards in the field. Such data exchange standards as IMS, SCORM, LOM/LRM or the IEEE LTSC standards are sometimes treated as the E-learning standards. In Russia, on the contrary, the state's educational standards deal with the study programme content only. They do not prescribe the basic technology or the methodology for the teaching process. The EFQM and ISO 9001 standards have recently been regarded by some as an alternative to the state's educational standards. However, as Leopold Kause and Christian Strake reasonably state, these standards describe the administrative processes that are typical for any company and do not include provisions where the learning process specifics, and, E-learning process specifics, in particular, are described[13]. The ISO 19796-1 standards that are being elaborated on the basis of the above standards would probably become an E-learning standardisation tool.

The European Foundation for Quality in E-learning (EFQUEL) focuses on the quality evaluation, quality management and quality assurance in the field of E-learning. Today, the Foundation, established in 2005, sees the development of the quality assurance

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11 Academic Freedom and University Autonomy Parliamentary Assembly of the Council of Europe, 2nd June 2006 Recommendation (2006), The Politics of European University Identity: Bologna University Press, p.60.

12 For more information, please see: 'Общественная оценка качества образования' (2009) [External education quality evaluation] Materials of the round table discussions, Vyisschee Obrazovanie v Rossii 2, p.3–37.

13 Kause L., Strake Cb. (2005) Quality Standards in E-learning: Benefits and Implementations in Practice Book of Abstracts ONLINE EDUCA BERLIN 2005. 11th International Conference on Technology Supported Learning & Training: Berlin.

system and the implementation of quality standards in E-learning as its main goal. The European Commission Directorate General for Education and Culture supported the EFQUEL foundation. Currently, the Foundation brings together some of the most significant European actors in the field of E-learning. The Russian Agency for Higher Education Quality Assurance and Career Development (AKKORK) has been one of the Foundation's full members since the date it was founded. The audit programmes offered by AKKORK are aimed at ensuring the competitiveness of the study programmes and other services offered by the universities. When conducting the audit, AKKORK examines the graduate knowledge level at the end of the study period, using an internationally recognised competence-based approach toward auditing in its work. AKKORK is an associate of the European Association for Quality Assurance in Higher Education (ENQA)[14], and a full member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), and the Asia-Pacific Quality Network (APQN). AKKORK, together with the EFQUEL, takes part in the European University Quality in E-learning (UNIQUe)[15] project in Russia. The goal of the UNIQUe project is to establish a pan-European accreditation system for traditional universities where E-learning tools are used. The most prominent participants in the UNIQUe project are granted the EQuality Award for being the best providers of ICT-supported learning.

The idea behind the UNIQUe project is to recognise the rise of integrated learning as a historical fact in the world's education system. A university is expected to use the integrated learning system if E-learning courses occupy at least 20% of the total time dedicated for the provision of study programmes.

The UNIQUe project has become a proving ground where various approaches are being tested towards the quality assurance system evaluation schemes used by the I-learning and E-learning users. In the EFQUEL Forum (Helsinki, Finland) on 24 September 2009, six traditional Western European universities and one Eastern European university – Moscow University of Industry and Finance – were awarded the UNIQUe 'E-learning quality label' for 2009–2012.

The main area where the EFQUEL is going to play the role of a consolidator is the improvement of the quality of provision. New data use, stimulation of new data use and the principle formation for new I-learning partner relations can help improve the quality. The learning content and technology used in E-learning help offer the high quality of provision, as the teaching process is not devoid of the influence of the human factor.

The fact that such goals are declared, cannot be disrespectfully ignored, as until recently, there have been no internationally accepted theories or concepts that would go in line with the practical requirements, and that could help improve the quality of provision with the help of the use of E-learning. Similarly, there is no comprehensive E-learning quality evaluation system that would really work and take into consideration all the main functional aspects and introduction characteristics of the system.

In the final analysis, the EFQUEL, in cooperation with the academic community members and all the education market players, is trying to establish a solid quality assurance system in Europe for E-learning providers that would integrate quality and

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14 European Association for Quality Assurance in Higher Education (2005), Helsinki.
15 Bijnens H., Nascimbeni F. UNIQUe – EUROPEAN UNIVERSITY QUALITY in E-Learning. Retrieved from http://www.efmd.org.

accessibility and help the traditional universities, that predominantly offer face-to-face learning programmes, make the necessary internal transformations.

3.8. Monitoring access to quality and conclusion

The key point here is the understanding of the fact that the distance learning programmes of universities worldwide are provided by the distributed networks of campuses. The potential positive development of E-learning is clearly visible if used by the distributed network providers. Such networks are the best place for I-learning to be developed, as they provide access to high-quality education at an affordable cost.

As for modern Russian universities, for example, the only legally supported operational base for them is the branch network. Such branches offer officially recognised distant E-learning programmes only.

Meanwhile, European universities that use E-learning to provide programmes of any type have no such restrictions. They have the right to offer online courses and consider their students' home and office computers as access points. In fact, they use the Internet as their supporting network, not as a separate learning environment. Such remote training centers can be called 'branches', or something else, and can be located in any country in the world. It is crucial here that the quality standards of the branch for provision of education be in line with the quality standards for integrated learning, set by the head office.

If appropriate Russian state education management bodies give their consent to the setting of access points, they reserve the right to monitor the use of the operational technology, access and transferred content characteristics of these points. The points enable remote operations for universities and help them to interact with distant E-learning students while ensuring appropriate quality of course provision.

The main goal of the state education authorities is to check whether university graduates have the necessary professional competences when they leave the university. In this case, distant course providers should take efforts to improve the quality of their courses with comparable professional competences and knowledge as face-to-face course providers do. E-learning is undoubtedly an efficient tool that can be used to reach this goal. By using this tool, distance learning students have access to the high-quality education that they need, and that the state education authorities approve of. The university head office should be in charge of the E-learning course provision. The fierce competition on the regional markets will undoubtedly create an environment where universities would improve their competitiveness level to enter the world market.

In European countries as well as in Russia, the external evaluation of the quality of course provision in the field of education should be provided by accreditation agencies. Such evaluations are necessary in order to protect the legitimate interests of the market actors and the interests of the local community[16]. That's why the issue of independence is regarded as being critically important and deserving of special attention, since it forms, among others, the basis for professionalism, and thus, the basis for trust.[17] The quality evaluation of E-learning programmes and the evaluation system for university practices of should be based on the fair principles of transparency in accreditation and external quality evaluation, and in the self-evaluation of the university.

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16   Eaton J.S. (2001) Distance Learning: Academic and Political Challenges for Higher Education. CHEA: Washington D.C.

17   Quality Costes N., Crozier F., Cullen P., Grifoll J., Harris N., Helle E., Hopbach A., Kekäläinen H., Knezevic B., Sits T., Sohm K. (2008) Quality Procedures in the European Higher Education Area and Beyond, European Association for Quality Assurance in Higher Education Second ENQA Survey: Helsinki.

It is therefore necessary to take the E-learning phenomenon into consideration when a correlative scheme with achievement descriptions for various educational institutions is being created. It is clear that the quality assurance efforts that are not in line with the general notion of E-learning, and that do not include the university evaluations based on the evaluations of the university's E-learning prospects, cannot guarantee the stakeholders that the institution provides E-learning programmes in accordance with a code of good practice. The fact of using the innovative potential of E-learning should be regarded separately as one of the criteria to be utilised when learning environment characteristics are assessed. In this way, the efforts of the abovementioned universities would not be ineffective. The comprehensive evaluation of the quality of course provision, and the quality assurance systems that can be used to assess E-learning programmes have their clear advantages too. They can be used on an international scale as well.

Chapter 4:
Challenges for quality assurance organisations: The case of NVAO

Fred Mulder, NVAO, the Netherlands

4.1. Summary

After briefly introducing the Accreditation Organisation of the Netherlands and Flanders (NVAO), this article presents NVAO's position on the four policy issues for Quality Assurance agencies discussed in the Swedish National Agency for Higher Education's (NAHE) report *E-learning quality: Aspects and criteria for evaluation of e-learning in higher education*[18].

4.2. NVAO

NVAO (in Dutch: Nederlands-Vlaamse Accreditatieorganisatie) is the Accreditation Organisation of the Netherlands and Flanders, which is part of Belgium. The organisation was established by an international treaty. NVAO is based in The Hague, in the Netherlands. NVAO is a full member of ENQA, and is listed on the European Quality Assurance Register (EQAR).

NVAO's mission is to independently ensure the quality of higher education in the Netherlands and Flanders by assessing and accrediting programmes, and to contribute to enhancing this quality. Thus far, this accreditation system has operated at the level of programmes, not institutions.

In addition, NVAO contributes to raising quality awareness within higher education and advancing the position of higher education in the Netherlands and Flanders in the national and international context.

Its core business is accrediting all existing Bachelor's and Master's degree programmes in these two countries. Also, NVAO assesses proposals for new degree programmes that universities intend to launch. The actual assessment is done by expert panels. On the basis of their assessment report, NVAO takes a *yes* or *no* decision.

4.3. Policy Issue 1: Integration of e-learning criteria in the national quality assurance system

NVAO is not concerned with the quality of e-learning as such; the NVAO accreditation framework does not feature any explicit reference to it. What we are concerned with is the quality of Bachelor's and Master's degree programmes, which may or may not involve elements of e-learning.

In its discussion about the integration of e-learning criteria in the national quality assurance system, the NAHE report formulates this conclusion: "*In order for quality assessment of e-learning to become an integral part of national quality reviews, aspects and criteria need to be incorporated into the general basis for assessment.*"

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18   Swedish National Agency for Higher Education. (2008). E-learning quality: Aspects and criteria for evaluation of e-learning in higher education. Report 2008:11 R.

NVAO agrees with this statement, although our interpretation of "incorporated" may not conform completely to the one intended by the NAHE report. We are convinced that incorporating e-learning specific aspects and criteria does not necessarily have to entail a revision of our assessment framework. NVAO's assessment framework is an "open" one, and is very well capable of accommodating input on e-learning. For example, if teachers have been trained to become versed in the art of on-line tutoring, it is possible – and relevant - to elaborate on this under the assessment frameworks' "Quality of Staff" standard. This is just an example. As for a more systematic and comprehensive approach, we do not prescribe or impose anything. If interested parties consult us on how to feed evidence and considerations on e-learning into the accreditation process, we refer them to the benchmarking statements that have been developed by the E-xcellence project[19]. Launched in 2005 by the European Association of Distance Teaching Universities (EADTU), E-xcellence has evolved into an attempt to work within existing national QA frameworks rather than re-inventing them. NVAO has participated from the start and has also been involved in the E-xcellence+ follow-up project (2008–2009).

How about the correspondence between the E-xcellence statements and the component parts of the NVAO accreditation framework? At first glance, they appear to be totally unrelated. But scrutinised more closely, the 33 E-xcellence statements and the 21 NVAO quality standards yield an underlying commonality enabling one to interpret almost all of the statements as matching one or several NVAO standards.

For instance, let us consider the E-xcellence statement number 19, the first one in the section on course delivery, which reads as follows:

> *"The technical infrastructure maintaining the e-learning system should be fit for purpose and support both academic and administrative functions. Technical specification should be based on a survey of stakeholder requirements and involve realistic estimates of system usage and development."*

In our view, this statement can be interpreted to match the following two NVAO standards:
- "The accommodation and material facilities are sufficient to implement the programme." [Theme: Facilities and Provisions; standard: Material facilities]
- "Staff, students, alumni and the relevant professional field will be actively involved in the internal quality assurance system."
- [Theme: Internal Quality Assurance; standard: Involvement of staff, students, alumni and the professional field]

The first part of the E-xcellence statement is about the quality of the technical infrastructure maintaining the e-learning system, while the first NVAO standard is about material facilities in general. The second part of the E-xcellence statement can be interpreted as an expression of need for technical infrastructure when consulting relevant parties in the context of internal quality assurance, which, again, features in the NVAO framework in a general fashion.

The above is just one example of the correspondence between the E-xcellence benchmarking statements and the NVAO assessment framework's standards.

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19   www.eadtu.nl/e-xcellence

Admittedly, the two are somewhat loosely coupled, and it therefore takes a certain effort to interpret the one in terms of the other. In our view, however, it can be done – albeit with a few exceptions – and it is worth it. NVAO is currently in the process of further exploring this correspondence.

4.4. Policy Issue 2: Intelligence and competence within the organisation

The NAHE report states that incorporating e-learning specific aspects and criteria into the general basis for assessment requires intelligence and competence within the organisation: "*A special function for e-learning needs to be set up within the quality assurance agency, i.e. a function with the task of monitoring, on a continuous basis and under special regulations, national and international developments within e e-learning. To keep pace with international developments, we recommend the adoption of a strategy for extended representation in international organisations, projects and networks. The establishment of an e-learning advisory board is also recommended.*"

As with the previous policy issue, NVAO agrees, but what we consider crucial is that e-learning specific intelligence and competence is present among panels of experts.

In the case of reaccreditation of existing degree programmes, external assessment is done by a panel of experts composed by and run by an Assessment Agency. Their report is the material that NVAO has to base its accreditation decision on, by validating the expert panel's assessment. In cases where e-learning does not feature properly in an assessment report, NVAO is entitled to request additional information or a revised report. But this is not an ideal situation. In the near future, our protocol for Assessment Agencies will be renewed, and we will definitely include the obligation of having an e-learning expert in a panel where this is required by the character of the programme to be assessed.

In the case of initial accreditation of new degree programmes, NVAO itself composes and runs the panel of experts. That way, we are in a position to actively ensure the presence of e-learning expertise in a panel.

It is obvious that the above requires a measure of e-learning specific intelligence and competence within NVAO. Two of our staff is reasonably up to date with e-learning developments and we do our best to keep pace with international developments.

4.5. Policy Issue 3: Cross-boundary education changes the conditions for quality assurance

"*Knowledge exchange and cooperation between quality assessment agencies and organisations across national borders are necessary in order to harmonise and safeguard quality assurance strategies and policies*", according to the NAHE report in its conclusion regarding cross-boundary education from an e-learning perspective.

The ENQA/NAHE workshop "Quality Assurance of E-learning" (Sigtuna, Sweden, 7-8 October 2009) was a fine example of knowledge exchange and will hopefully serve as a starting point for cooperation.

NVAO's preferred approach of cross-boundary education, whether or not of an e-learning nature, is through recognition of the accreditation decision made by the national accreditation organisation of the country or countries involved.

We do not recognise just anybody's accreditation decisions. Rather, we do recognise the accreditation decisions made by our partners in the European Consortium on Accreditation in higher education (ECA)[20].

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20 www.ecaconsortium.net

NVAO is fully aware that this arrangement is not up to the task of assessing the quality of the education involved when students combine courses provided by, say, five universities on three continents. Thus, admittedly, we still have a long way to go.

4.6. Policy Issue 4: Methodological development

The NAHE report's fourth policy issue is about methodological development. The conclusion reads: "*Extensive methodological development will be necessary to adapt the general methods for assessment of quality in higher education to the assessment of quality in e-learning.*"

It could be argued that methodological development shows substantial overlap with policy issues 1 and 2. However, the NAHE reports' discussion of this final issue contains at least one important element that has not been touched upon earlier: "*While the assessment of digital applications implies difficulties for the assessors, they also offer novel opportunities for them to reach the heart of teaching and learning, as many of the educational environments are more easily accessible.*"

In NVAO's view, a true e-learning expert is someone who is fully aware of the novel opportunity of having access to the record of learning interaction and engagement.

Thus, we say yes to methodological development, and, again, as with policy issue number 2, it is the external experts who have to do the job. They must embody sound methodology and represent methodological development. It is NVAO's duty to ensure that panels are adequately composed in this respect.

Chapter 5:
Benchmarking eLearning in higher education

Findings from EADTU's E-xcellence+ project and ESMU's benchmarking exercise in eLearning

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5.1. Introduction

The ENQA workshop in Sigtuna, Sweden, in October 2009, focused, among other issues, on the *eLearning Quality Model (ELQ)* (NAHE, 2008) by the Swedish National Agency for Higher Education (NAHE), and on their survey on quality assurance of eLearning in higher education on a European level in nine selected countries. One conclusion from their survey was that quality in eLearning is a non issue for many, especially for quality assurance agencies. There are promising projects managed by organisations such as the European Association of Distance Teaching Universities (EADTU), the *E-xcellence* initiative, the European Foundation for Quality in E-learning (EFQUEL), the UNIQUe initiative, the Joint Information Systems Committee (JISC), the Higher Education Academy (HEA), and the *Pick&Mix* benchmarking methodology. However, all these projects deal with eLearning as a separate issue. In the ELQ-model, it was suggested that the same criteria for quality should be applicable to eLearning as it is to traditional campus-based education (ENQA, 2009). The aims of the workshop were to discuss new aspects and criteria for eLearning to be considered and to discuss on how to integrate eLearning criteria in national evaluation programmes.

Below briefly follows the meaning of the concepts 'benchmarking' and 'eLearning,' as this article aims to focus on experience in benchmarking eLearning in higher education. In addition, the above-mentioned aims of the ENQA workshop will be reflected and discussed.

Benchmarking is a common method in quality assurance and enhancement, and frequently used in different sectors. It has gradually become a common method even in higher education. Of course, benchmarking and quality aspects are seen differently due to the interpretations and understandings of the concept. However, it is not yet common to benchmark eLearning in higher education (Ossiannilsson, 2010a). Moriarty (2008) defines benchmarking as "*an exemplar-driven teleological process operating within an organisation with the objectives of intentionally changing an existing state of affairs into a superior state of affairs (p. 30).*" Moriarty & Smallman (2009) further express it as follows: "*The locus of benchmarking lies between the current and desirable states of affairs and contributes to the transformation process that realises these improvements*" (p. 484). The European Centre for Strategic Management

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(ESMU) defines is as "*an internal organisational process which aims to improve the organisation´s performance by learning about possible improvements of its primary and/or support processes by looking at these processes in other, better-performing organisations*" (van Vught, et al., 2008a, p. 16). According to the above-mentioned definitions, benchmarking is about change.

The concept of eLearning is not very easy to interpret or define (COM, 2001), and is often seen as a concept covering the *delivery of learning, training or education programme by electronic means*. While **blended learning** is eLearning combined with other, more traditional training methods, eLearning might be used as a prequel or sequel to face-to-face events (Clinch, 2005). In this article, eLearning and blended learning are discussed as more or less synonymous concepts.

The background and theoretical perspectives of this article are based on findings from Lund University's participation in and implementation of the benchmarking initiatives by EADTU's *E-xcellence+*[22] (Ossiannilsson & Landgren 2010a, b, c; Ubachs, 2009) and the *eLearning benchmarking exercise (ELBE)* by ESMU in 2009[23] (Ossiannilsson & Landgren 2010a,b,c; Willimas & Rotheram, 2010). These perspectives and findings include national, regional, European and international networks and perspectives, discourse in the area of eLearning, current research results in benchmarking eLearning in Higher Education Institutions and its implications, values and impacts (Ossiannilsson, 2010a, b).

5.2. Reasons and benefits for Lund University to participate in European benchmarking exercises

During 2008-2009, Lund University took part in two European benchmarking initiatives, *E-xcellence+* by EADTU (Ossiannilsson & Landgren 2010a, b, c; Ubachs,2009), and ESMU's *eLearning benchmarking exercise ELBE* (Ossiannilsson & Landgren 2010a, b, c; Williams & Rotheram, 2010). *E-xcellence+* was carried through by an initiative from NAHE, former NSHU (Swedish Agency for Network and Co-operation), as an attempt to try the tool not only in further initiatives, but also in a traditional university for the identification of challenges and benefits.

EADTU's *E-xcellence+* operates largely on an individual basis. The methodology was to conduct an online QuickScan, a full assessment and site-visits with experts, and to work out road maps. The benchmarks were grouped in six areas: *strategic management, curriculum design, course design, course delivery, staff support and student support*, covering in total 33 benchmarks with indicators and excellence level. They can also be clustered in three main headings: *management (strategic management), content (curriculum design, course design, course delivery)* and *services (staff support and student support)*. A full online manual was available. When *E-xcellence+* was carried out at Lund University, the focus was mainly on two of the International Master programmes: LUMA-GIS, a master course on geographical information systems (Pilesjö, 2010), and IIIEE, a Master programme on Environmental Science (IIIEE, 2010). The exercise was also carried out at Lund University's central administration levels with eLearning and e-resourcing responsibilities.

Fortunately, the two programmes at Lund University, LUMA–GIS and IIIEE, which were involved and examined, got the EADTU's *E-xcellence Associates label* (Figure 1).[24]

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22   E-xcellence, http://www.eadtu.nl/e-xcellenceplus/, available 100721
23   Benchmarking eLearning in European universities, http://www.esmu.be/benchmarkingelearning.html, available 100721
24   E-xcxellence Associates, http://www.eadtu.nl/e-xcellencelabel/, available 100803

The E-xcellence Associates focus on the improvement of four primary elements of progressive higher education: *accessibility, flexibility, interactiveness* and *personalisation* (Figure 2), (EADTU, 2008). All these fundamental success factors were reached to a high extent in the benchmarking. The label led to recognition, not only locally at the university, but also regionally, nationally and internationally with several benefits for students, such as reception of grants, international co-operation and networking. Responsible staff for the LUMA-GIS was awarded the Lund University pedagogical prize of 2009 for their innovative and good quality work, and contribution to internationalisation within the LUMA-GIS programme, as shown below.

Figure 1. The EADTU E-xcellence Associates' label to LUMA-GIS and IIIEE at Lund University, Sweden.
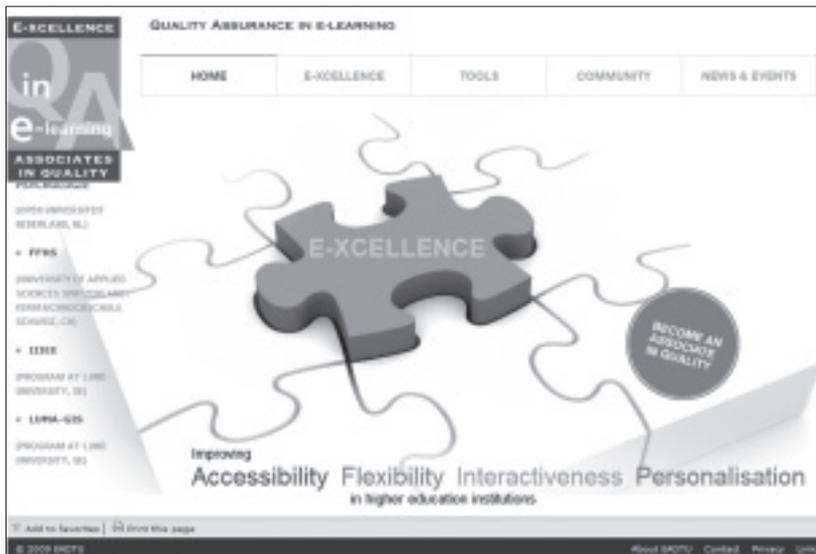
Figure. 2. Universities and University Programmes that were awarded the E-xcellence Associates label belong to the EADTU Associates in Quality.

Unlike EADTU's *E-xcellence+*, the *ELBE* benchmarking operates more on a collaborative basis. It has co-operated, however, with the former, and EADTU's Quick Scan was used as a starting point for the ESMU exercise with the participation of nine European universities. The benchmarking criteria were based on the six areas

of EADTU's E-xcellence+, as mentioned above, and updated according to EADTU's evaluation to suit the partnership. The ESMU benchmarking was carried out only at a central administration level at Lund University (the same as mentioned above). In addition to the Quick Scan, the a assessment was done and two workshops were carried through. The establishment of roadmaps was the final step in this benchmarking process (Ossiannilsson & Landgren, 2010a, b, c; Williams & Rotheram, 2010).

During 2009–2010, Lund University participated in *the first dual-mode distance learning benchmarking club*, based on the *Pick&Mix* methodology (Bacsich, 2009a, b, c; Ossiannilsson & Landgren, 2010a, b, c). One task was to look for concordances within *Pick&Mix*, EADTU´s E-xcellence+ and ESMU´s *ELBE*, and to use the results to suggest new or redefine the existing *Pick&Mix* benchmarks. Interesting remarks and suggestions for further development of the method have been given, such as creating new benchmarks, updating the terminology, making it more student-centered, and including blended mode perspectives (Ossiannilsson & Landgren, 2010a, b, c). Additionally, a study on different benchmarking models reveals an emerging contextual framework with a holistic approach.

In summary, Lund University's participation in the European benchmarking initiatives show that there are at least ten good reasons to participate in benchmarking exercises: *self-assessment of the institution; better understanding of processes; measuring and comparing; discovering new ideas; obtaining data to support decision-making; setting targets for improvement; strengthening institutional identity; strategy formulation and implementation; enhancing reputation; responding to national performance indicators and benchmarks; and setting new standards in the contexts of higher education reforms* (van Vught *et.al.*, 2008a, b). The benefits were: participation in internal processes; involvement of faculty or department staff; and transparency of courses, the entire educational process and basic issues (i.e. documents, Web-pages, policies, and other such issues). The benchmarking exercise was process orientated, and served as a learning exercise in working with critical colleagues during site visits and formulating roadmaps for the implementation of desired changes according to the universities' benchmarking process results. Through the benchmarking process, the strengths and weaknesses of each institution and/or programme became obvious.

5.3. The Swedish context and Lund University

Below follows a short description of the Swedish context, and some current initiatives from Lund University.

The Swedish Net University Agency, launched in 2001, was a Swedish government agency coordinating, promoting, supporting, developing and marketing IT supported distance learning courses in higher education. 35 universities and university colleges in Sweden offered distance learning courses through a national and international portal, the *Swedish Net University*. The Swedish Net University Agency was not a university in itself, and thus, did not offer distance courses or programmes of its own. The agency offered a database of courses and programmes from the universities. Most of the courses were, however, taught in Swedish, although some courses were available also in English. Like all publicly funded higher education in Sweden, there was no tuition fee. The agency also supported the development of distance learning courses, and promoted the exchange of experience in the field. When the Net University was closed down in 2006, the Agency for Networks and Co-operation in Higher Education (NSHU) took

over the role as a co-ordinating national body.[25] NSHU's overarching goal was that more people would have access to higher education, not only undergraduate students at universities or university colleges, but also those who had completed their studies and were either working or continued on to graduate studies. NSHU was closed down in 2008, and more responsibilities were dedicated to single universities in the country.

Lund University was among the first to adopt eLearning in Sweden in the early 90's, and well known internationally for its innovative and early approach. Lund University was one of the largest and most active partners of the Swedish Net University during its operating years (LU, E-xcellence, 2007–2008; LU, ESMU, 2009).

The Strategic Plan for 2007–2011 (LU, Strategic Plan of Lund University, 2006) emphasises four areas: quality assurance, cross-disciplinary collaboration, internationalisation, and leader, teacher and employee excellence. All areas are related to eLearning, mirroring how technology can be used and developed to facilitate learning, teaching and research. Four prioritised areas are dedicated in the context of the strategic plan: 1) attractive study and learning environments [including Virtual learning environments, eLearning, Learning Management Systems (LMS) and Personal Learning Environments (PLE)]; 2) strong research and innovation environments; 3) increased transparency and 4) more prominent infrastructure. Again, all four areas are related to eLearning or blended mode strategies. A self evaluation project on education, the EQ11, was launched at Lund University in 2010 (LU, Education Quality, 2011), and is expected to complement the new national quality assurance by the Swedish National Agency (NAHE, 2010a) in the coming years. The EQ11 focuses on attractive learning environments in education, both physical and virtual, and concerns outcomes, alignment, leadership and management, scholarship, internationalisation, cross-boundary activities and innovation.

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1. attractive study and learning environments (including Virtual learning environments, eLearning, Learning Management Systems (LMS) and Personal Learning Environments (PLE);
2. strong research and innovation environments;
3. increased transparency and
4. more prominent infrastructure.

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25   NSHU former homepage, main areas, http://www.nshu.se/english/page/4683/mainareas.htm, available 100730

eLearning and blended learning are among prioritised areas to be developed at Lund University under the umbrella of one of the strategic areas, the *attractive study environment* The infrastructure for eLearning and blended learning emphasises transparency, accessibility and independence from geographical time zones and location. The objective is to meet students in different geographical locations and share their contributions to their learning environment and education in the 21st century (i.e. the "new millennium learners," or the "net generation"). All policies and plans are based on goals with student involvement, students' rights, democracy, transparency and accessibility. Some 4000 online students are enrolled each semester, and some 100 courses are available at Lund University in 20101.[26]

The action plan for the *ELBE* project (LU, ESMU, 2009) stated that Lund University should meet the following goals:

1. The *strategic management* goal to meet students from any location, use and work with their knowledge and skills, and prepare them for the professional and the academic arena in order to contribute to a democratic and sustainable global development within the society in the 21st century. Further objectives are to encourage widening recruitment and lifelong learning, to facilitate attractive study and learning environments both on Campus and virtually, and to increase and encourage strong development of leader, teacher and employee excellence.

2. The *Curriculum design, Course design and Course delivery* goal, of which the actions include programmes and courses that are continuously quality assured through validation processes, and planned according to students' demands, scientific developments and community needs.

3. The *Staff support* goal according to which all Lund University teachers should be able to participate in Compulsory Higher Education Teacher Training (CHETT), which is a national standard (with 10 weeks at a minimum) since 2005, and should be until 2015 (Lindberg-Sand & Sonesson, 2008). In addition, a greater focus was brought on scholarships for teaching and learning (Kreber, 2002a, b; Trigwell & Shale, 2004), constructive alignment (Biggs, 2003) and encouragement of pedagogical qualification and recognition.

4. The *Student support* goal was aimed to encourage students to get involved in, and to have access to e-infrastructure, (i.e. e-resources and the e-Library that are independent of place, time and languages). In addition, stronger enhancement of carrier development in the area of innovative pedagogy, (i.e. the use of new technology) was expressed as an important objective.

At Lund University, several initiatives have recently been, and are currently being carried out, among them six international interdisciplinary eLearning master programmes that were developed during 2007–2008 (Nilsson & Ossiannilsson, 2008). The Framework of these courses take into account concepts of student learning experiences and how they are related to different methods and media according to the models of Laurillard (2002) and Clinch (2005). Laurillard identifies five media forms: *narrative, interactive, communicative, adaptive and productive.* She argues that different media forms have different affordances, (i.e. they provide a different level of support for various kinds of learning experiences). According to Conole and Fill (2005), *narrative media tell or show the learner something (e.g. text, images). Interactive media respond in*

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26 Net-based courses and programmes at LU2010, http://www.lu.se/o.o.i.s?id=320&func=distance, available 100730

limited way to what the learner does (e.g. search, engines, multiple choice tests, simple models. Communicative media facilitate exchanges between people (e.g. email, discussion forum). Adaptive media change by what the learner does (e.g. some simulations, virtual worlds). Productive media allow the learner to produce something (e.g. word processor, spreadsheet)[27] (see Table 1).

Table 1. Table on learning experiences, methods and media forms by Peter Clinch (2005),[28] based on Laurillard (2002).

LEARNING EXPERIENCE	METHOD/TECHNOLOGIES	MEDIA FORMS
attending, apprehending	print, TV, video, DVD	narrative
investigating, exploring	library, CD, DVD, Web resources	interactive
discussing, debating	seminar, online conference	communicative
experimenting, practising	laboratory, field trip, simulation	adaptive
articulating, expressing	essay, product, animation, model	productive

Furthermore, at the Faculty of Law of Lund University, courses have been developed with eLearning since the mid-90´s with large success, and since then, they have often been ranked among the most popular courses. Another initiative to support widening recruitment and lifelong learning at the Faculty of Law (spring 2010) is that all students who apply to the introductory course and meet basic requirements for higher education are accepted. Then, depending on their study results throughout the course, students can continue and enter the full law programme. Lund University Libraries Head Office got the Directory of Open Access Journals (DOAJ) SPARC Europe Award for Outstanding Achievements in Scholarly Communications, in 2009[29]. Lund University library has a considerable amount of e-resources with self instructions, open content, learning objects and Open Educational Resources (OER) (Ossiannilsson & Sponberg, 2010; Wheeler, 2010). During 2010, a national initiative on OER, where Lund University participates, is ongoing in the Swedish Royal Libraries regime,[30] aiming to disseminate information and valorise the use of OER. The Department of Communication has initiated seminars, workshops and electronic handbooks about the use of new technology and social media; a special project on a renewed IT strategy and a new web are among the prioritised areas according to the Lund University strategy plan of 2007–2011. An initiative on Personal Learning/Web Environment (PLE/PWE) called live@lund.se will be implemented in autumn 2010 at the School of Economics, and other faculties will follow.

As mentioned above, teacher training (CHETT) in Sweden is built on scholarships for teaching, learning and constructive alignment. One of the courses in this programme at Lund University, Learning and Teaching in Higher Education (LATHE),

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27   HEA. The Centre for Legal Education Supporting law teaching: training and teaching. Presentation at UKCLE seminar on teaching and learning for legal skills trainers, 16 February 2005, http://www.ukcle.ac.uk/resources/biall/clinch.html, available100730

28   G. Salmon, Beyond distance research alliances, University of Leicester, available101023
      http://www2.le.ac.uk/departments/beyond-distance-research-alliance/About%20Us/staff/gilly, available101023

29   SPARC Europe Award, http://www.sparceurope.org/news/the-directory-of-open-access-journals-receives- sparc-europe-award-for-outstanding- achievements-in-scholarly-communications-2009, available100730

30   The national OER project on open resources, http://www.ithu.se/?page_id=9, available100730

is available on the web. This will hopefully have a positive outcome, as teachers' e-maturity is a prerequisite for the development of eLearning.

eLearning has to be embedded in all levels of education, and although it probably sometimes is, it is not emphasised enough, and remains less integrated into the holistic approach of higher education. Still, eLearning at Lund University is built on individual drives, rather than on mainstream teaching. However, for all activities at Lund University, the use of new technology and social media are strongly promoted. Lund University has already its own YouTube channel[31] and ITunes channel.[32] Furthermore, there is a need for reward systems and dedicated teachers in order to promote innovation in teaching, learning, and the use of new social media and collaborative approaches. At Lund University, already three times in a row in a two year period, educational awards for excellence in education have been dedicated to teachers working with eLearning in their courses. In 2009, teachers working and responsible for LUMA-GIS (Pilesjö, 2010) got the EADTU award of the E-xcellence Associates label, among other things for their innovative eLearning approach, built on personalisation, interactiveness, flexibility and accessibility. The other two were for innovative teaching and learning approaches with new media in physiotherapy in 2009, and in Chinese language in 2010.

Several aspects, criteria and dimensions that are considered and implemented at Lund University will be discussed below.

5.4. New eLearning specific aspects and criteria

Several international authorities, United Nations (2010),[33] UNESCO (2010),[34] the Bologna process and Bologna beyond 2010 [35] and Bologna 2020[36], emphasise that eLearning will play an important role in reaching some of the global goals of the 21st century, not only from the perspective of lifelong learning, internationalisation, globalisation and e-governance, but of sustainable development in several sectors. They all convey the needs of individuals in the 21st century, and the coming policies which lead to advantages for learners, institutions, innovations (3rd mission) and societies. Aceto, Dondi & Nascimbeni (2010) share their visions about learning in Europe in 2025, emphasising the challenges of higher education as commitment to lifelong learning and the implementation of student-centred learning. Increased attention should be paid to virtual mobility in order to build intercultural dialogue, and to support the internationalisation of the curricula. Quality assurance guidelines in higher education (cf. ENQA, 2007, 2009) will play an important role for further development in the future. At the same time, considerations have to be made for the existing diversity of approaches to eLearning standards in Europe.

Critical success factors for students are beyond the course itself, which, naturally, has to be on the highest level of excellence. For students, logistic excellence throughout the studies is fundamental. Students in eLearning courses require logistics during the course itself with adequate feedback, dialogue and interaction with tutors, peers and international top lecturers. Top-level e-resources and accessible library resources

31 LU YouTube channel, http://www.youtube.com/lunduniversity, available 101023
32 About LU and ITunesU, http://nywebb.blogg.lu.se/overgripande-projektstatus/, available 101023
33 United Nation, The Millenium Goals, http://www.un.org/millenniumgoals/, available 101023
34 UNESCO, Education for all, http://www.unesco.org/en/efa/, available 101023
35 Bolognabeyond 2010, http://www.ond.vlaanderen.be/hogeronderwijs/bologna/actionlines/Beyond2010.htm
36 Bologna2020, http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/leuven_louvain-la-neuve_ communiqu%C3%A9_april_2009.pdf, available 101023

with flexibility in time, space and languages are also vital, as is to a high extent and as expected, academic professionalism (Jaldemark, 2010; Östlund, 2008).

Personalisation is the leading concept in eLearning in the 21st century. Many students study at several universities around the world at the same time, and in addition, they have their private social communities. For those reasons, it is important for students to remain members of a virtual environment, for example

Personal Learning Environment (PLE), where all logins can be visible at the same time. Those core critical success criteria are almost met through the *E-xcellence Associates label*,[37] with its success factors *flexibility, interactiveness, personalisation and accessibility*. The movement on OER and its use will change educational structures in many ways (Atkins et.al., 2007; Hylen, 2007; Wheeler, 2010). When the students are their own PLE as Wheeler (2010) discusses, this will dramatically change higher education in the future. However, the future is already here.

Participation, production and personalisation, or the three P:s pedagogy for the networked society by Mc Loghlin and Lee (2008), will surely be the new path for education in the 21st century. The three P:s are crucial within the concept of collaborative learning and networking. Students and teachers, or rather, mentors work together, participate in, and produce collaborative processes. Jaldemark (2010) emphasises personalisation, taking the concept a bit further. He stresses that the students' learning environment is about her/his entire life-situation, comprising his/her living, study and learning context, as well as his/her social, economic, demographic, and cultural context. Jaldemark discusses it as boundless education and learning, and that learning environments have to meet those demands. In this context, accessibility, personalisation, interaction and flexibility demand an even wider and deeper interpretation.

New aspects on eLearning for universities in the 21st century will surely include embedded eLearning in overall strategies; action plans and processes, and integration in ordinary quality assurance processes as in the aims of the ELQ (NAHE, 2008). Bonk's (2009) paradigm "We all learn"[38] gives additional new perspectives on eLearning. Furthermore, increased interest and research on learning, teaching and education cultures, attractive and flexible learning and teaching environments both on campus and virtually, blended mode, educational development, award systems for teachers, and recognition will be challenges for the future.

Information, interaction and communication issues are within the first generation of eLearning; beyond this are the three P-paradigm discussed above; personalisation, participation and production (McLoughlin & Lee, 2008), added with portable learning according to Bonk (2009). In a European perspective, learning through technology and learning to work with technology in a knowledge-based society in the 21st century demand a diversity of approaches to eLearning standards. e-skills and e-working skills should be more formally appreciated and recognised as learning outcomes in courses and assignments, as these are skills for the future society. The concept of flexibility needs to be extended, not only in terms of geographical location and learning modes, but also in terms of language and accessibility (Bonk, 2009; Salmon, 2004, 2005). Open Educational Resourses (OER) (Hylen, 2007; Ossiannilsson & Sponberg, 2010; Wheeler, 2010), open content (Johnson et al, 2010), micro-training and informal

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37 EADTU E-xcellence Associates label, http://www.eadtu.nl/e-xcellencelabel/, available 100730
38 web-searching in the world of e-books, eLearning and blended learning, availability of open source and free software, leveraged resources and open courseware, learning object repositories and portals, learner participation in open information communities, electronic collaboration, alternate reality learning, real-time mobility and portability and finally networks of personalised learning.

or formal learning are powerful concepts in the paradigm of lifelong learning and innovation. They allow the individual to control the learning process and her/his learning environment (Ossiannilsson, 2010 & Sponberg, 2010). In a global world, both localisation and globalisation have to be present at the same time. In fact, we can talk about 'glocalisation'. Boundless higher education needs to be extended towards this direction. In the 90's, Moore (1997) describes quality in online courses in respect of structure, dialogue and autonomy. alance Between structure and dialogue is crucial and determines how large and rich the transaction can become. The interaction in online based learning environments can focus either on social dimensions (Wegerif, 1998), subject or task related dimensions (Du, Havard, & Li, 2005) or dimensions with combinations. Already in 1989, Moore (1989) stated that learning interaction is threefold: the learner and the content (learner-content), the learner and the instructor or mentor (learner-instructor) and the learner and other learners (learner-learner). Due to its aims and interactive level, the delivery and assessment of a course demands different kinds of enhanced technology, e-resources and e-skills according to the discourse and debate in the area.

Different courseware may be used depending on the type and level of interaction:
- Primary courseware provides documents, films, links etc. for a thorough presentation of a subject.
- Secondary courseware provides environments and tools to perform learning activities such as forums, portfolios, and questionnaires.
- Tertiary courseware includes the material produced by learners themselves, e.g. forum contributions, portfolios, project reports and documents etc.

The development of independent learners in the 21st century requires going beyond capacities; new abilities are demanded as e-investigators, e-writers and e-communicators and collaborators (Bonk, 2009; MacDonald, 2008; Salmon, 2004, 2005). Flexibility is more than time and space when it comes to learning in a digital world. Qualifications and admission, framing, implementation and resources (Collis & Moonen, 2002) are important concepts. Constructive alignment (Biggs, 2003), aligning learning outcomes, learning and teaching activities, assessments and scholarships in teaching and learning are other crucial concepts in eLearning.

5.5. How to integrate eLearning criteria in the national evaluation programme

Although several initiatives in Europe have recently been conducted on benchmarking and quality in eLearning, there is a lack of research in this area (Ossiannilsson, 2010a, b). However, conclusions can be drawn from the integration of critical eLearning success factors in ordinary quality assurance in national and international institutions. One example is the *ELQ*-model (NAHE, 2008), which can and may be used. NAHE emphasises the importance of a holistic approach and that eLearning needs to be integrated in overall quality assurance processes. Ten criteria are formulated and all ten need to be taken into consideration in a holistic perspective (NAHE, 2008). The ten criteria are:
- material and content
- structure and virtual environment
- communication

- cooperation and interactivity
- student assessment, flexibility and adaptability
- support (student and staff)
- staff qualifications and experience
- vision and institutional leadership
- resource allocation
- holistic and process aspect.

These aspects correspond with both *E-xcellence+* and *ELBE*. According to NAHE, methods that are normally used on quality assurance need to be updated and adapted for different forms of eLearning. Further quality aspects on eLearning need to be embedded in quality assurance systems. Even internal competence and information provision on eLearning need to be assured. Additionally, NAHE stresses that internal working methods need to be adapted according to special conditions that boundless education implies and demands (2008, p. 8).

Another strong approach would naturally be the integration of eLearning in the ENQA guidelines for quality assurance.[39] Research on educational cultures both virtual and blended mode approaches are under development and of large interest around the world. Experiences and lessons learned from European and international eLearning benchmarking initiatives should be considered as 'good examples' for quality enhancement with regard to educational management, content and services at universities (Bacsich, 2009c; Comba & Ossiannilsson **et.al**., 2010; Ossiannilsson, 2010a,b; Ossiannilsson & Landgren, 2010a, b, c; Ubachs, 2009; van Vught, 2008a, b; Williams & Rotheram, 2010;). Trucano (2010) argues that development and success in the use of new technology and eLearning demand support and responsibilities by national agencies (compare the former role of the Swedish Net University and NSHU). The ReViCa initiative and its content, dissemination and valorisation (Schreurs, 2009) needs to be taken into consideration as well as ongoing discourse and debate in the area by such scholars as Andersen,[40] Bates,[41] Bonk,[42] Flate Paulsson,[43] Salmon,[44] Wheeler,[45] just to mention some. Furthermore, the work of European and International networks in the field (e.g. EADTU, EDEN,[46] EFQUEL,[47] NMC[48] and ICDE[49]) has to be considered and implemented in quality assurance strategies, policies and plans of higher education institutions. Additionally, experience and roadmaps from partners involved in the recent initiatives by EADTU and ESMU provide good examples on how quality eLearning indicators and critical success factors can be integrated in ordinary quality assurance (Williams & Rotheram, 2010). According to statements by the president of ENQA, the speakers and the participants (unpublished communication) during the workshop in Sigtuna in 2009 (ENQA, 2009), it is, and has to be established that the "e" is here to stay for learning and teaching in the 21st century, and the challenges for higher education just has to be taken on board.

39 ENQA (the European Association for Quality Assurance in Higher Education) disseminates information, experiences and good practices in the field of quality assurance (QA) in higher education to European QA agencies, public authorities and higher education institutions.
40 T. Andersens homepage, Athabasca University, Us, http://cde.athabascau.ca/faculty/terrya.php, available101023
41 E-learning and distance education resources. Blog by T. Bates, http://www.tonybates.ca/, available101023
42 C. Bonks eLearnig world, Professor, http://php.indiana.edu/~cjbonk/, available101023
43 M. Flate Paulsson, NKI, Professor of online education, and President of EDEN, http://home.nki.no/morten/
44 G. Salmon, Beyond distance research alliances, University of Leicester, available101023 http://www2.le.ac.uk/departments/beyond-distance-research-alliance/About%20Us/staff/gilly, available101023
45 S. Wheeler, the complete works, http://www2.plymouth.ac.uk/distancelearning/steve.html, available101023
46 EDEN, http://www.eden-online.org/eden.php, available101023
47 EFQUEL , http://www.qualityfoundation.org/, available101023
48 New Media Consortium, http://www.nmc.org/, available101023
49 International Consortium of Distance Education, http://www.icde.org/

Results from the benchmarking initiatives conducted by Lund University showed that advantages and benefits with eLearning and e-courses can and probably also have to be transmitted to Campus courses and to be integrated in all areas, as a natural part of education in the 21st century. The goals and working methods of quality assurance processes involve a sustainable development, internationalisation, boundless education, constructive alignment and scholarships for teaching and learning, critical colleagues and peer reviews, and continuous benchmarking at national and international levels. The discourse and debate in the field explicitly shows the need for innovation within teaching and learning in higher education and reconstruction of universities concerning how courses are designed and offered (Bates,a, b, c; Batson, 2010; Nygren & Larsson, 2010; Ossiannilsson & Landgren, 2010a, b, c; Robinson, 2010).

5.6. Conclusion

Through the findings from participating in benchmarking processes and the ongoing discourse and debate in the area, it seems that higher education will need to meet challenges at different levels. First, to meet the new multitasking generation of learners in the 21st century with new skills, especially e-and mobile skills. Second, living in a global world demands boundless and mobile education within the lifelong learning context and sustainable development perspectives. Third, universities need to function within new innovative structures to meet collaborative learning processes. Education, teaching and learning methods need to be reconstructed, and teachers' e-maturity developed. Research also shows strong connections between successfully implemented eLearning and strong conscious management and leadership at all levels (Ossiannilsson, 2010a, Ossiannilsson & Landgren a, b, c).

Taking part in benchmarking has proved valuable in several ways, as expressed both by ESMU (van Vaught, 2008a, b) and Moritary (2008). It has had implications for internal changes. Through active participation in benchmarking exercises, Lund University has established a reputation for sharing experience both at the internal and the international level. The final conclusion is the value of continuous benchmarking exercises in different areas for the purpose of quality assurance and enhancement in higher education, and, in this respect, of meeting the demands of individuals for boundless education.

The Sigtuna workshop concluded and agreed that the accreditation, audit and assurance processes of e-learning should be integrated in national framework and not be evaluated separately. This was also suggested by NAHE (2008). There is a need, however, for methodological development within quality assurance agencies. At the same time, there are demands for increased cooperation between national, European agencies and international agencies, as eLearning enhances the development of boundless education. Hopbach (ENQA, 2009) concluded the Sigtuna workshop 2009 with three statements:

1. *It is important to meet and discuss quality assurance at the European level and between different stakeholders in the educational sector*
2. *There is a need for a "common" definition of eLearning, to so to say know what we are speaking about, and have a common language.*
3. *And finally, eLearning must be an integrated part in higher education and quality assurance has to cover all aspects of eLearning. Furthermore, there are demands of expertise by the evaluators.*

Additionally, it is important to mention that the challenges of eLearning have to be embedded beyond and boundless, but with an innovative and creative approach. However, the most important challenges are to consider the conditions that will facilitate optimal and powerful learning processes for students, including the entire process from interest in university studies to application, studies, exams and credits, and all the way to alumni. Professionalism in all aspects of learning, eLearning and mobile learning is a key condition for the achievement of boundless and academic global learning environments in the 21st century. NAHE (2010b) has recently conducted a survey on distance education in Sweden, probably bringing back results in relation to the *ELQ* model for the consideration of national agencies.

References

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Conclusion

As the integration of information and communication technologies (ICT) in modern educational activities is creating alternative study paths, eLearning has become one of the most prominent concepts within the higher education institutions of today.

eLearning has become a particularly attractive educational method, as the use of web-based tools reduces the costs of sharing vast amounts of data, reduces communication barriers and geographical distance gaps between individuals, increases academic mobility in higher education, provides people with disabilities to have better access to higher education, and allows smaller institutions to gain international visibility through study programmes online.

eLearning faces, however, certain challenges. As eLearning is dependent on the ICT as the primary teaching and learning tool, the prerequisite for an effective eLearning process is that learners have sufficient ICT skills, and programme providers have sufficient professional competence and adequate educational strategies to manage distance programmes with the help web-based tools. Thus, it should be emphasised that eLearning is efficient only as long as it the learning content is updated regularly and the teaching methodology used in the distance programmes helps the learners to master the learning material and to acquire knowledge. In short, eLearning must respond to its stakeholders' needs. This involves quality assurance agencies.

The articles in this publication show that there is only very little experience in the assessment of eLearning in Europe. In fact, eLearning quality is rarely included as a regular or integral part of national quality reviews, nor is any emphasis placed on the ESG. In short, quality assurance of eLearning remains yet to be developed. Thus, quality assurance agencies should adapt to the alternative learning and teaching methods and to the associated challenges that the ICT create, and develop assessment standards and benchmarks that would help the traditional universities make the necessary internal transformations and enable methodical evaluation and improvement of eLearning.

It is therefore vital to establish a solid quality assurance system in Europe for greater accessibility to and quality of eLearning. eLearning should not be evaluated separately, but as an integrated part in higher education. Moreover, quality assurance has to cover all aspects of eLearning. There is a need for a common definition and understanding of the concept of eLearning, a need for a "common language" that would help higher education institutions and quality assurance agencies strive for the same goal. To meet this goal, it is important to meet and discuss quality assurance at the European level and between different stakeholders in the educational sector and to provide adequate training for academic professionals, higher education providers and quality evaluation experts.

ANNEX 1
– Programme of the workshop

ENQA Workshop
QUALITY ASSURANCE OF E-LEARNING
7-8 October, 2009

Hosted by the Swedish National Agency for Higher Education (NAHE)

Venue:
Kristina Konferens & Hotell
Rektor Cullbergs väg 1
193 23 Sigtuna
Sweden

WORKSHOP PROGRAMME

DAY 1
Wednesday
7 October, 2009

12:00   Lunch

13:00   **Welcome addresses**
        Lena Adamson, Secretary General, NAHE
        Achim Hopbach, President, ENQA

        Introduction to the workshop and the ELQ-report – aspects and criteria,
        Per Westman, NAHE

13:45   **The UNIQUe (EFQUEL) approach to quality in E-learning,**
        Annemie Boonen, European Foundation for Quality in E-learning (EFQUEL)

        The E-xcellence (EADTU) approach to quality in E-learning,
        George Ubachs, European Association of Distance Teaching Universities
        (EADTU)

15:15   Coffee break

15:45   **Discussion theme 1 – Quality assurance specific for E-learning**

        What are the new aspects and criteria specific for E-learning that need to be
        considered?

        Panel discussion with higher education institution and open university

representatives.

Panelists:
Göran Karlsson, KTH Royal Institute of Technology, Sweden
Denise Kirkpatrick, The Open University, UK
Josep Lladós, The Open University of Catalonia, Spain
Ebba Ossiannilsson, Lund University, Sweden

Chaired by *Per Westman*

-17:15

17:30   Pick-up from the hotel for a guided walk in the medieval town of Sigtuna

19:30   Dinner at the workshop venue

DAY 2
Thursday
8 October, 2009

**9:00   The UK approaches to quality in e-learning, as seen from the
HE Academy/ JISC benchmarking programmes**
Paul Bacsich, Matic Media Ltd, UK

9:45   ELQ report, Policy issues for quality assurance agencies
Per Westman, NAHE, Sweden

10:00   Coffee break

**10:30   E-learning in the context of the Standards and Guidelines for the Quality
Assurance in the European Higher Education Area (ESG)**,
Josep Grifoll, ENQA Board member, AQU Catalonia, Spain

11:00   Discussion theme 2 –Challenges for quality assurance organisations

How can the e-learning criteria be implemented in national evaluation
programmes?

In the "ELQ" report, the following issues are emphasised when integrating the
assessment of E-learning into the general assessment framework:
•   The integration of the quality assessment of E-learning to national
         reviews requires specific competence within the assessing
         organisation.
•   Cross-boundary education requires cooperation and exchange of
         knowledge between quality assurance agencies in order to harmonise
         and safeguard strategies and policies for the quality assurance of
         E-learning.

- Extensive methodological development is necessary in order to adapt common methods for the assessment of the quality of E-learning in higher education.

Panel discussion with representatives from quality assurance agencies.

Panelists:
Esther Huertas Hidalgo, AQU Catalonia, Spain
Fred Mulder, NVAO, the Netherlands
Yuri Rubin, AQA, Russia

Chaired by *Josep Grifoll*

12:15   Lunch

13:15   Discussion Theme 3 – Future cooperation

How can European level cooperation and continuous knowledge exchange be built between quality assurance agencies, organisations with experience in the quality of E-learning and with other stakeholders?

Panelists:
Love Hansson, European Students' Union (ESU)
Carl Holmberg, International Council for Open and Distance Education (ICDE)
George Ubachs, EADTU

Chaired by Achim Hopbach

14:30   Conclusions

14:45   End of Workshop and coffee

ENQA held a workshop in coordination with the National Agency for Higher Education, in Sigtuna, Sweden in October, 2009. The workshop created a dialogue between institutions, quality assurance agencies, students and other stakeholders who are directly affected by the quality of E-learning. This report gives a general overview of the matters discussed and challenges faced within the sector of quality assurance in E-learning.

ENQA