Analysis of Existing Practices for Quality Assurance in Distance Learning

(Report 1.1)
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Vladan Devedžić, University of Belgrade, Serbia
Božo Krstajić, University of Montenegro, Montenegro
Aleksandra Radulović, University of Montenegro, Montenegro
Ivan Kraljevski, FON University, FYRM

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Analysis of Existing Practices for Quality Assurance in Distance Learning

This document surveys and analyzes current practices for Quality Assurance (QA) in Distance Learning (DL). The analysis provides the necessary basis for introducing a QA framework and guidelines for establishing, assessing, accrediting, and running DL study programs in higher education (HE), conducting DL projects, and providing firm and stable infrastructure for DL.

The analysis focuses primarily on QA practices in DL in Europe, but also provides insight in such practices elsewhere in the world. It explores:

- the principles for QA in DL presented in initiatives and projects of important European-level associations;
- developing strategies, processes of assessment and accreditation of DL, experiences and good practices adopted by relevant national-level bodies and institutions.

1. What is Quality Assurance in Distance Learning?

E-learning signify all forms of technology-supported learning, such as distance learning, online learning, online education, distance education, technology-enhanced education, flexible learning, flexible education and IT-supported education. The concept of e-learning is relevant both in distance education and campus-based learning [HSV, 2008].

The issue of whether e-learning offers higher, equal or lower quality in comparison to other types of high education has not been dealt with in this report. Instead, the report focuses on the more open question of what quality in distance learning actually comprises. How can quality be defined in this context in order to be assessed?

Quality is described as a concept rather than a technique, so its implementation is very much dependent on the type of organization or process at hand. There are many different approaches to quality, most of which are applied at the organizational level rather than that of individual modules or projects. Quality assurance is one approach, defined as “the assembly of all functions and activities that bear upon the quality of a product or service so that all are treated equally, planned, controlled and implemented in a systematic manner”. More specifically, a Quality Assurance (QA) system documents procedures with the aim of ensuring that the overall process meets specified objectives and to demonstrate that quality is a managed outcome [Nichols, 2002].

QA is needed in e-learning (and DL like part of eLearning):

- To improve student access to course presentations and processes.
- To improve education efficiency by: providing increased opportunities for collaborative and problem-based learning; encouraging e-learning practices that can be used to ‘free up’ class contact time for more productive pedagogical approaches than didactic lecturing; reducing the necessity of excess time teaching areas that can be more clearly illustrated using e-learning tools and storing class resources in a Web-based repository for all hour access.
- To improve education effectiveness by: enhancing delivery in areas that students typically find conceptually difficult; enabling and encouraging student interaction and structured discussion; facilitating increased levels of tutor involvement with students as a group and as individuals; providing opportunity for preview / review of resources online; providing an overall education context that ensures the sound application of e-learning tools within a course; working with subject matter experts to ensure that technology is applied in a way that identifies their unique needs, and that sets innovative approaches in ways relevant to the subject matter.

QA in DL is of growing interest and should be analyzed in context of QA in traditional high education. However, the QA arrangements of DL should be different from campus delivery. The main arguments supporting the revision of the QA arrangements are based on the differences that it is possible to identify between DL and traditional HE learning. Among the variety of elements that are suggested
which are distinctive to DL, there are four main aspects that seem relevant for the present analysis regarding QA [Jara and Mellor, 2007]:

- **disaggregated processes** - DL courses are no longer in the charge of only one person who takes care of the whole process;
- **organisation of the teams** - academic staff no longer work in isolation; DL courses require teams to work collaboratively, and academic staff need to interact with many other professionals who are involved in the different phases of course design and delivery;
- **visibility or openness to review** - monitoring activities can be more in depth, continuous and unobtrusive than in face to face delivery; and
- **limited access of staff to students.**

The original Bologna Declaration of 1999 identified the “promotion of European cooperation in quality assurance, with a view to developing comparable criteria and methodologies” as one of the core areas [Bologna Declaration, 1999]. In the 2003 Berlin communiqué the Ministers of Education committed themselves to supporting further development of quality assurance at institutional, national and European level [Berlin Communiqué, 2003]. The Berlin Communiqué requested the ENQA<sup>1</sup>, a European forum for exchange of practice in quality assurance, EUA<sup>2</sup>, EURASHE<sup>3</sup> and ESIB<sup>4</sup>, to agree on a set of standards, procedures and guidelines on internal and external quality assurance and a peer review system for quality assurance bodies. ENQA’s report on “Standards and Guidelines for Quality Assurance in the European Higher Education Area” was published 2009 [UNIQUEe, 2007].

One of the recommendations for further development of the Bologna Process was “to extend quality assurance, accreditation and qualifications frameworks to e-learning and other non-classical modes of delivery in an integrated approach encompassing the full range of higher education” [Berlin to Bergen, 2005].

Regarding the facts above we will explore general QA in high education and some additional for QA in elearning.

**QA in general**

Quality Assurance is an ongoing, continuous process of evaluating the quality of a higher education system, institutions, or programmes. Many systems make a distinction between internal quality assurance

(i.e. intrainstitutional practices in view of monitoring and improving the quality of higher education) and external quality assurance (i.e. inter or supra-institutional schemes assuring the quality of higher education institutions and programmes). The scope of quality assurance is determined by the shape and size of the higher education system. Quality assurance is often considered as a part of the quality management of higher education [CEPES GLOSSARY, 2007].

Quality assurance in higher education is by no means only a European concern. All over the world there is an increasing interest in quality and standards, reflecting both the rapid growth of higher education and its cost to the public and the private purse.

Detailed list on standards and guidelines for internal and external quality assurance arrangements for higher education institutions is provided in ENQA’s report “Standards and Guidelines for Quality Assurance in the European Higher Education Area” which was published in 2009 (Helsinki, 3rd edition) [ENQA, 2009]. Here is the list of standards:

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<sup>1</sup> European Association for Quality Assurance in Higher Education (ENQA). Website. URL: [http://www.enqa.eu/](http://www.enqa.eu/)

<sup>2</sup> European University Association (EUA). Website. URL: [http://www.eua.be/](http://www.eua.be/)


<sup>4</sup> National Unions of Students in Europe (ESIB). Website. URL: [http://www.esib.org/](http://www.esib.org/)
European standards for internal quality assurance within higher education institutions

1. **Policy and procedures for quality assurance**: Institutions should have a policy and associated procedures for the assurance of the quality and standards of their programmes and awards. They should also commit themselves explicitly to the development of a culture which recognizes the importance of quality, and quality assurance, in their work. To achieve this, institutions should develop and implement a strategy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for students and other stakeholders.

2. **Approval, monitoring and periodic review of programmes and awards**: Institutions should have formal mechanisms for the approval, periodic review and monitoring of their programmes and awards.

3. **Assessment of students**: Students should be assessed using published criteria, regulations and procedures which are applied consistently.

4. **Quality assurance of teaching staff**: Institutions should have ways of satisfying themselves that staff involved with the teaching of students are qualified and competent to do so. They should be available to those undertaking external reviews, and commented upon in reports.

5. **Learning resources and student support**: Institutions should ensure that the resources available for the support of student learning are adequate and appropriate for each programme offered.

6. **Information systems**: Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes of study and other activities.

7. **Public information**: Institutions should regularly publish up to date, impartial and objective information, both quantitative and qualitative, about the programmes and awards they are offering.

**European standards for the external quality assurance of higher education**

1. **Use of internal quality assurance procedures**: External quality assurance procedures should take into account the effectiveness of the internal quality assurance processes described in Part 1 of the European Standards and Guidelines.

2. **Development of external quality assurance processes**: The aims and objectives of quality assurance processes should be determined before the processes themselves are developed, by all those responsible (including higher education institutions) and should be published with a description of the procedures to be used.

3. **Criteria for decisions**: Any formal decisions made as a result of an external quality assurance activity should be based on explicit published criteria that are applied consistently.

4. **Processes fit for purpose**: All external quality assurance processes should be designed specifically to ensure their fitness to achieve the aims and objectives set for them.

5. **Reporting**: Reports should be published and should be written in a style, which is clear and readily accessible to its intended readership. Any decisions, commendations or recommendations contained in reports should be easy for a reader to find.

6. **Follow-up procedures**: Quality assurance processes which contain recommendations for action which require a subsequent action plan, should have a predetermined follow-up procedure which is implemented consistently.

7. **Periodic reviews**: External quality assurance of institutions and/or programmes should be undertaken on a cyclical basis. The length of the cycle and the review procedures to be used should be clearly defined and published in advance.

8. **System-wide analyses**: Quality assurance agencies should produce from time to time summary reports describing and analysing the general findings of their reviews, evaluations, assessments etc.
QA in DL

Despite a long and generally successful track record DL is still required to prove that the quality of student learning is at least equivalent to face-to-face teaching. A comprehensive quality assurance (QA) system can help accomplish this [COL, 2005].

Development of the DL QA system required firstly a firm set of responsibilities and activities performed by the higher educational institution. Once these were identified, quality assurance processes were created to make sure that various quality outcomes were met during development. Foundation to these processes is a set of aims, objectives and core values.

There are different “visions” of e-learning at most of European universities, and the culture of quality in e-learning at universities is frequently weak.

Likewise, there is no unified approach to QA in DL adopted from relevant European institutions. Still, there have been several initiatives in the past to address quality in ICT-based or e-learning.

For example, the Quality Assurance Agency for Higher Education (QAA)\(^5\) from UK has set off to develop a comprehensive QA process for higher education. As a part of this development, QAA has produced a Code of Practice for Quality Assurance in Higher Education in the form of a series of self-contained sections covering the management of quality and standards in all teaching and learning activities. One of these sections covers certain distinguishable aspects that are commonly found under varying labels as components within systems of DL [HSV, 2008]:

- Materials-based learning. This dimension of a distance-learning system refers to all the learning resource materials made available by the programme provider to students studying at a distance.
- Programme components delivered by travelling teachers. This dimension refers to the staff of the providing institution who travel on a periodic basis to the student’s location to deliver components of the programme.
- Learning supported locally.
- Learning supported from the providing institution that is remotely located from the student.

The terms set out above refer to dimensions that are common components within systems of DL, but for which there are no uniform labels.

In addition, QAA Code of Practice covers the following four areas in terms of QA in DL:

1) **System design - the development of an integrated approach**

- Higher education by distance learning should be underpinned by principles that are generally relevant to higher education. An institution that aims to offer distance learning programmes of study should design and manage its operations in a manner that applies those principles and, at the same time, takes full account of considerations that are specific to teaching its students at a distance.
- The provision of programmes of study by distance learning should form part of an explicit strategy for achieving an institution’s stated aims, and the distance learning system or systems should be designed and developed in ways that reinforce the strategy.
- Prior to offering programmes of study by distance learning, an institution should explicitly design and test its system for administering and teaching students at a distance and plan for contingencies in order to meet its stated aims in terms of academic quality and standards.
- An institution should safeguard its position in respect of the legislation in any country in which its programmes of study are proposed to be made available by distance learning.
- A providing institution's plans for offering programmes of study by distance learning should be financially underwritten for the full period during which students will be studying the programmes, and at a level that safeguards the quality and standards to which the institution is committed.

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\(^5\) The Quality Assurance Agency for Higher Education. URL: [http://www.qaa.ac.uk/](http://www.qaa.ac.uk/)
2) The establishment of academic standards and quality in programme design, approval and review procedures

- The providing institution is responsible for ensuring that programmes to be offered at a distance are designed so that the academic standards of the awards will be demonstrably comparable with those of awards delivered by the institution in other ways and consistent with any relevant benchmark information recognised within the UK. In designing distance learning programmes of study, and any component modules, a providing institution should ensure explicit and reasoned coherence between the aims and intended learning outcomes on one hand, and the strategies for teaching at a distance, the scope of the learning materials and the modes and criteria of assessment on the other.
- A providing institution is responsible for ensuring that the design of distance learning programmes of study provides learning opportunities which offer students a fair and reasonable chance of achieving the academic standards required for successful completion.
- A providing institution should have processes for approving distance learning programmes of study which, while underpinned by principles relevant to all educational programmes, take specific account of the requirements of the system of distance learning that have been adopted as well as of the opportunities provided for scrutiny.
- A providing institution's processes for approving programmes of study, and any component modules, should include an element of scrutiny external to the institution.
- Once designed and in use, an institution should ensure that programmes of study and component modules are monitored, reviewed and subject to reapproval regularly. Institutions should particularly ensure that the content of all learning materials remains current and relevant and that learning materials, teaching strategies and forms of assessment are improved in the light of feedback results.

3) The assurance of quality and standards in the management of programme delivery

- The providing institution is responsible for managing the delivery of each distance learning programme of study in a manner that safeguards the academic standards of the award.
- The providing institution is responsible for ensuring that each distance learning programme of study is delivered in a manner that provides, in practice, a learning opportunity which gives students a fair and reasonable chance of achieving the academic standards required for successful completion.
- Learning, although at a distance, should be treated as an activity that involves all participants in the system, and as an activity in which monitoring, review and feedback are regularly used to enhance all components of teaching, learning and the system of delivery.

4) Student development and support

- In respect of students taught at a distance, a providing institution should give explicit attention to its responsibility for supporting and promoting autonomous learning and enabling learners to take personal control over their own development. An institution should set realistic aims, devise practical methods for achieving them, and monitor its practice.
- A providing institution should meet the needs of its students who are studying at a distance by providing information that is particularly thorough and clear as regards the nature and expectations of their programme of study including the relationship between achievement and assessment, academic progress and accumulation of credit as well as the characteristics of the distance learning system and how students interact with it. The provided information should be conveyed in a manner that enables students to make informed decisions about their own education, and to monitor their progress against clear expectations of achievement.
- A providing institution should monitor the effectiveness of information provided to students and, in light of its findings, take steps to improve its provision.
- An institution should determine what means of student representation are appropriate and realistic for students on distance learning programmes of study as well as provide these students with accurate information about representation.
2. Relevant Organizations and Institutions

International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC)

*Chapter from [Micić et al., 2011]*

Since year 2004, e-learning has been intensively standardized by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) - ISO/IEC [ISO/IEC, 2011]. This standardization was preceded by development and research results from other institutions, such as: AICC (Aviation industry computer based training committee), IMS (Instructional Management Systems), DCMI (Dublin Core Metadata Initiative), ADL-SCORM (Advanced distributed learning), ALIC (Advanced learning infrastructure consortium), IEEE LTSC (Institute of electrical and electronics engineers - Learning technology standard committee), ADRIADNE, CEN/ISSS WS-LT, CEN/ISSS CDFS, CEN/ISSS WS on Privacy, W3C, etc. (Figure 1).

![Diagram](image)

*Figure 1. Phase development of e-learning standards JTC 1 / SC 36*

International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) develop international standards in information technologies within the First unified technical committee (JTC1 ISO / IEC), which now encompasses 37 sub-committees (SC). Decision about education JTC 1 from 36th Subcommittee "Information technology in learning, education, habilitation and training" was made in 1999. In the opinion of JTC 1 and SC 36 management, the number of countries - members of this subcommittee soon will rise up to 50, which is caused by increasing of interest in e-learning and the emergence of the first international standards in this area.

Within SC 36 several work groups were formed: seven work groups (WG), special work group (SWG), reporting group for marketing (RG1) and group for human rights protection (Ad Hoc). Work groups function from different aspect and different countries, [3]: WG1 – (USA, formed in the 2001.), for terminology area; WG2 – (Japan, formed in 2001.), technologies for collaborative work; WG3 – (France, formed in 2001.), information support for professors; WG4 – (Canada, formed in 2002), management and delivery of content, metadata (MD); WG5 - (Germany, formed in 2002.), e-learning quality assurance; WG6 - (China, formed in 2004), technologies and specifications for integration; WG7 – (Norway, formed in 2004), culture/language/ humanitarian activities. On the other hand, the application of ISO/IEC standards requires an appropriate level of e-society, e-education institutions, etc.

With cross-section on the January the 1st 2011., 18 international standards in the area of e-learning were introduced to use (19th standard, ISO / IEC 19788-1:2011, was then at the stage of publication,
and in the first half of January 2011, it was published). All standards mentioned above were previously developed by subcommittee SC 36 "IT in education and preparation", Figure 2.

Development of new projects (marked as NP in Table 1) in area of e-learning, was presented through eight proposed standards.

Also, SC 36 is developing three new standards, in fact, three parts of the standard 20006, in the areas of information model for e-learning competency, which are under the working draft (WD - Table 1).

Subcommittee SC 36 is working on development and corrections to the total of six current standards in this area, which are currently in draft stages (CD and DTR - Table 1).

The most of developing international standards (13 of them - Table 1) are in the phase of completed “filled” reports on the draft, and they adoption by ISO (FCD or DIS) is in process

![Figure 2. Structure of ISO/IEC JTC 1/SC 36 and 19 published standards (15. 01. 2011)](image)

Table 1. ISO/IEC JTC 1/SC 36 standards in plans and development phases: NP, WD, CD or DTR, and also FCD or DIS

<table>
<thead>
<tr>
<th>WG</th>
<th>Standards from work program SC 36/ Work Programme for JTC 1/SC 36</th>
<th>Limit date, [3]</th>
<th>+ time (year)</th>
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<td>WG1</td>
<td>NP 2382-36 --- Vocabulary</td>
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<td>ISO/IEC 2382-36:2008/CD Cor 1</td>
<td>2011.12.01.</td>
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<td>/</td>
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<tr>
<td></td>
<td>...DTR 29140-2 --- Part 2: Learner information for mobile learning</td>
<td>/</td>
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<tr>
<td></td>
<td>...DIS TR 24763 Conceptual reference model for competencies and related objects</td>
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<td>2010.10.01.</td>
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<td>...CD 19788-5 Metadata for learning resources --- Part 5: Educational elements</td>
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<td>...DTR 19796-4 --- Part 4: Best practice and implementation guide</td>
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<td>...DIS TR 19796-5 --- Part 5: How to use ISO/IEC 19796-1</td>
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<td>2009.08.12.</td>
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</table>
Important European-level associations

- **European Association for Quality Assurance in Higher Education (ENQA)**

  ENQA was established in 2000 to promote European co-operation in the field of quality assurance. In November 2004 the General Assembly transformed the Network into the European Association for Quality Assurance in Higher Education (ENQA). The mission of ENQA is to contribute significantly to the maintenance and enhancement of the quality of European higher education at a high level, and to act as a major driving force for the development of quality assurance across all the Bologna signatory countries. ENQA initiates and coordinates transnational quality assurance projects, which aim to disseminate information at the European level and promote the establishment of the quality assurance framework of the European Higher Education Area.

- **European Association of Distance Teaching Universities – EADTU**

  EADTU was established in January 1987 by the principals of Europe’s major distance teaching institutions to foster cooperation between European organisations dedicated to higher education through distance teaching methodology. EADTU is the representative organisation of both the European open and distance learning universities and of the national consortia of higher education institutions active in the field of distance education and e-learning. EADTU is comprised of 21 national members from 19 countries collectively providing distance education programmes to over 2,000,000 students. All members of the association are non-profit institutions.

- **European association of distance learning (EADL)**

  The EADL is the European association of schools, institutions and individuals working in correspondence and distance education. Nearly all member states of the European Community are represented in the EADL. But the EADL has also members in Norway, Russia, Switzerland and Turkey. Every year in May the EADL organises a Conference where members meet and where views and new developments are discussed and exchanged. EADL has developed quality guidelines in order to safeguard standards and maintain and improve the quality of courses and services to ensure the credibility of distance learning. This project was supported by EU funding.

- **The European Distance and E-Learning Network (EDEN)**

  EDEN - the European Distance and E-Learning Network, established in 1991, is an international educational association open to institutions and individuals dealing with e-learning, open and distance education. In a proactive way, EDEN has been instrumental in developing European policy in distance and e-learning, in the promotion of networking and co-operation, in the support of East-West collaboration and professional development in the open, distance, flexible and e-

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7 European Association of Distance Teaching Universities – EADTU. URL: [http://www.eadtu.nl/](http://www.eadtu.nl/)


9 The European Distance and E-Learning Network (EDEN). URL: [http://www.eden-online.org](http://www.eden-online.org)
learning sector. EDEN holds annual conferences and has launched the European Journal of Open, Distance and E-Learning (EURODL).

- **The European Foundation for Quality in E-Learning (EFQUEL)**
  The European Foundation for Quality in e-learning (EFQUEL) is a membership organisation which is based in Brussels, Belgium. It is a network with over 80 member organisations from Europe and beyond. EFQUEL’s aim is to involve actors into a European community of users and experts in order to share experiences on how e-learning can be used to strengthen individual, organisational, local and regional development, digital and learning literacy, and promote social cohesion and personal development. EFQUEL is running an annual [Innovation forum on quality assurance and open educational resources](http://www.qualityfoundation.org/) at Oeiras, Portugal, since 2008., whose website is well worth exploring.

### Relevant national-level bodies and institutions:

- **The Joint Information Systems Committee (JISC)**
  JISC is committed to enabling the UK education and research communities to engage in national and global collaborations. JISC inspires UK colleges and universities in the innovative use of digital technologies, helping to maintain the UK’s position as a global leader in education. JISC provides: a world-class network – JANET; access to electronic resources; new environments for learning, teaching and research; guidance on institutional change; advisory and consultancy services; regional support - JISC RSCs.

- **Swedish National Agency for Higher Education**
  Swedish National Agency for Higher Education was established in 1995. The tasks of Swedish National Agency for Higher Education are: reviewing the quality of higher education; Ensuring HEIs comply with relevant legislation and regulations; monitoring trends and developments in higher education; providing information about higher education; recognising qualifications from abroad.

- **Canadian Association for Communicators in Education – CACE**
  The Canadian Association of Communicators in Education (CACE) was established in Winnipeg, Manitoba in 1984. CACE is a national association of professionals committed to encouraging and enhancing excellence in communications in education. CACE establishes and maintains standards and promotes a code of ethics to contribute to improved communication policies and practices in education.

- **The Distance Education and Training Council (DETC)**
  The Distance Education and Training Council is a non-profit educational association located in Washington, D.C. The independent nine-member Accrediting Commission of the DETC was established in 1955; The DETC Accrediting Commission defines, maintains, and promotes educational excellence in distance education institutions. The DETC aspires to be the preeminent accrediting association for distance education and training institutions worldwide. It aims to be a resource for distance learning institutions, encouraging them to strive for excellence in fulfilling their missions.

- **Open & Distance Learning Quality Council (ODL QC)**
  ODL QC was founded in 1969 as the Council for the Accreditation of Correspondence Colleges, becoming the Open and Distance Learning Quality Council in 1995. The Standards set out the Council's definition of quality. Open and distance learning providers who meet those standards are

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11 The Joint Information Systems Committee (JISC). URL: [http://www.jisc.ac.uk/](http://www.jisc.ac.uk/)
12 Swedish National Agency for Higher Education. URL: [http://www.hsv.se/](http://www.hsv.se/)
14 The Distance Education and Training Council (DETC). URL: [http://www.detc.org/about.html](http://www.detc.org/about.html)
15 Open & Distance Learning Quality Council (ODL QC). URL: [http://www.odlqc.org.uk/](http://www.odlqc.org.uk/)
eligible to apply for accreditation by the Council. Accreditation follows a rigorous assessment of a provider's administrative and tutorial methods, educational materials and publicity, to ensure that all standards are met. Once accredited, providers are monitored to ensure that students continue to receive good service, and are re-assessed at least once every three years.

- **Norwegian Association for Distance Education (NADE)**\(^\text{16}\)

  Norwegian Association for Distance Education (NADE) is a national membership organisation for institutions involved in distance education. The members of the organisation are independent distance education institutions, public universities and colleges, private institutions and training centres for business and industry. NADE's objectives are to spread knowledge about distance education, to heighten its professional and pedagogical standards and to strengthen the position of distance education within the Norwegian educational system.

- **The Quality Assurance Agency for Higher Education (QAA)**\(^\text{17}\)

  The primary responsibility for academic standards and quality in UK higher education rests with individual universities and colleges, each of which is independent and self-governing. QAA meets its responsibilities by: conducting reviews of universities and colleges; publishing reports on the confidence that can be placed; in an institution's management of standards and quality; providing guidance to universities and colleges on maintaining academic standards and improving quality, in line with the Academic Infrastructure; investigating causes for concern about academic standards and quality; advising governments on applications for degree awarding powers and university title; engaging with European and wider international developments.

- **Australasian Council on Open, Distance and E-learning (ACODE)**\(^\text{18}\)

  The Australasian Council on Open, Distance and E-learning (ACODE) is an Australasian organisation for universities that are engaged or interested in open, distance, flexible and e-learning. Its mission is to enhance policy and practice in these areas.

- **Accreditation Organisation of the Netherlands and Flanders (NVAO)**\(^\text{19}\)

  The Accreditation Organisation of the Netherlands and Flanders (NVAO) ensures the quality of higher education in the Netherlands and Flanders by assessing and accrediting programmes, and it contributes to enhancing their quality. NVAO has been involved in the EADTU project E-xcellence, but is in general not concerned with quality in e-learning. The organisation states that its accreditation framework is capable of accommodating e-learning.

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\(^\text{16}\) Norwegian Association for Distance Education (NADE). URL: [http://www.nade-nff.no](http://www.nade-nff.no)

\(^\text{17}\) The Quality Assurance Agency for Higher Education (QAA). URL: [http://www.qaa.ac.uk/](http://www.qaa.ac.uk/)

\(^\text{18}\) Australasian Council on Open, Distance and E-learning (ACODE). URL: [www.acode.edu.au](http://www.acode.edu.au)

\(^\text{19}\) Accreditation Organisation of the Netherlands and Flanders (NVAO). URL: [http://www.nvao.net/](http://www.nvao.net/)
3. Frameworks and Models of QA in DL

All QA strategies, procedures, and standards in DL are based on a certain framework or on a certain model\(^2\). A framework is a basic conceptual structure outlining closely related key points and issues of QA in DL, which form an independent and reusable basis for development, implementation, and promotion of QA policies, guidelines, and practices. A model of QA in DL is a set of aspects and criteria for quality assessment of DL.

Each such framework/model is typically rooted in wider educational guidelines and policies at a national or international level, and constitutes the basis for development and application of a set of related QA processes and benchmarks.

There is no single framework/model, accepted everywhere, by all relevant national and international bodies and agencies that promote QA in DL. It is rather a multitude of different (although largely overlapping) frameworks/models, each specifying a certain view of what constitutes quality in DL, and how such quality may be assessed in the context of a national QA system.

Since the year of 2000, a number of projects in Europe and in other parts of the world have been conducted with objectives to define frameworks/models of QA in DLA. Two surveys from 2008 ([HSV 2008] and [SW-VIRCAMP, 2008]) list these projects, as well as various national and international agencies and organizations involved.

General

To develop and establish a framework/model, an analysis of various DL policy documents, networks, and development projects is necessary. When a framework/model is published, it is up to national and international organizations and agencies to adopt it and promote it in their QA procedures and practices.

If a national agency or other organization is to assess DL practices in a higher-education system, it is not enough simply to adopt a framework/model or to draw up quality aspects from scratch. The assessing body also needs to develop and adapt its own working methods and guarantee its internal competence [HSV 2008]. Moreover, different national assessment organizations and agencies charged with promoting DL at the national level typically deal with the question of QA in DL differently. However, all of them need to take into account the following:

- existing frameworks/models and methods of QA need to be adapted,
- quality aspects for DL need to be integrated into existing QA systems, bearing in mind that QA in DL and QA in face-to-face (campus-based) learning are not exactly the same,
- internal competence and the provision of information in the DL area need to be guaranteed,
- internal working methods need to be adapted to the special conditions which apply for QA in DL.

Although the same fundamental quality requirements should apply to DL as to campus-based higher education, there are significant differences between the two, simply because of new aspects of higher education that are introduced by DL. This implies adjustments and revisions in the methods of evaluating campus-based higher education in order to apply them to and DL-based education, and this is what each framework/model of QA in DL must state explicitly.

The main arguments supporting the revision of the QA arrangements are based on the differences that it is possible to identify between DL and campus-based learning. Among the variety of elements that it is suggested are distinctive to DL, there are four main aspects that are relevant for QA frameworks/models in DL [Jara and Mellar, 2007]:

- disaggregated processes – DL courses are no longer in charge of only one person who takes care of the whole process,
- organization of the teams – academic staff no longer work in isolation; DL courses require teams to work collaboratively, and academic staff need to interact with many other professionals who are involved in the different phases of course design and delivery.

\(^{2}\) The words "model" and "framework" in this section are used to denote a "QA model/framework for DL".
• visibility or openness to review – monitoring activities can be more in depth, continuous and unobtrusive than in face-to-face delivery,
• limited access of staff to students.

Each framework/model should be supportive to a stronger definition of coordination, communication and planning strategies, as well as a clearly defined leadership in DL courses than in face-to-face courses. The absence or limited clarity of any of these elements affects the effectiveness and enhancement roles of several of the DL procedures, in particular team meetings and students surveys [Jara and Mellar, 2007].

Frameworks/Models need to accommodate the need of DL institutions and course-delivery teams to consider with particular care the strategies to improve the amount and quality of student feedback. Online courses are particularly affected by a restricted access to students, which has a direct effect on the quantity of the feedback gathered and the appropriate representation of student views. Frameworks/Models should support establishing stronger relationship between students and tutors for improving student representation.

Each framework/model relies on a set of quality aspects and criteria. It is important in quality assessment practice of DL to understand that the quality of the DL is determined by all of the aspects from a certain model taken together, and by their interrelationships [HSV 2008].

Example frameworks and models

Several agencies and organizations from Europe, North America and Australia have published their frameworks and/or models. This section briefly overviews some of them, emphasizing their major points, similarities and differences.

NADE framework/model

Norwegian Association for Distance Education (NADE)\(^{21}\) is an organization for institutions involved in DL. Its framework/model criteria are divided into four distinct phases: prerequisites, implementation, results and follow-up [NADE, 2002]. These phases are monitored in the context of four broad aspects: information and counseling, course development, education, and organization. They all form a 2-dimensional framework/model known as NADE quality matrix, Table 2.

Table 2 – NADE quality matrix

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Implementation</th>
<th>Results</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information and guidance counselling</strong></td>
<td><strong>Content Channels</strong></td>
<td><strong>Recruitment</strong> Non recruited Society</td>
<td><strong>Evaluation</strong> Customer reaction</td>
</tr>
<tr>
<td>External prerequisites Organisation partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Course development</strong></td>
<td><strong>Control Cooperation</strong> Evaluation, Guidance of authors Choice of media Evaluation of product</td>
<td><strong>Curriculum</strong> Demand for material (educational, language and professional) Support material</td>
<td><strong>Evaluation</strong> Customer reaction Revision and updates</td>
</tr>
<tr>
<td>External prerequisites Organisation Target group Staff Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaching and learning</strong></td>
<td><strong>Communication</strong> Teaching and learning Study counselling Assessment documentation</td>
<td><strong>Learning outcomes</strong> Retention Target Achievement</td>
<td><strong>Evaluation</strong> Customer reaction</td>
</tr>
<tr>
<td>External prerequisites Organisation Participants Material Teachers Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organisation</strong></td>
<td><strong>Management</strong> Communication Future orientation</td>
<td><strong>Target achievement</strong> Economy Reputation</td>
<td><strong>Evaluation report</strong></td>
</tr>
<tr>
<td>External prerequisites Organisation Quality system Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{21}\) URL: [http://www.nade-nff.no/default.pl?showPage=189](http://www.nade-nff.no/default.pl?showPage=189)
SEEQUEL framework

The SEEQUEL core quality Framework is a result from the SEEQUEL project. It is an integrated set of quality criteria categorized along the following 2-level set of aspects:

- learning sources
  - supporting staff
  - teaching staff
  - learning materials
  - learning infrastructure
- core learning processes
  - guidance/training needs analysis
  - recruitment
  - learning design
  - learning delivery
  - evaluation of the course
  - assessment of the learners
- learning context
  - institutional setting
  - cultural setting (national, organisational, professional, general)
  - learning environment
  - legislation
  - financial setting
  - value systems

The framework comes as a long table, fully available online [SEEQUEL, 2004].

ELQ

ELQ stands for E-Learning Quality. It is the model developed the Swedish National Agency for Higher Education [HSV 2008]. ELQ includes ten aspects of quality assessment in DL, and for each quality aspect several quality criteria have been developed. These criteria are recommendations for concrete measures for dealing with the problems and issues identified at an institutional level. Table 3 shows the ELQ model in a concise form.

Table 3 – The quality aspects and criteria included in the ELQ model (after [HSV 2008])

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Explanation</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| Material/content                | Both printed and digital material. Produced by publishers, individual teachers, a group of course developers, and, in some cases, learners themselves (they may become the producers of their own learning material. The different production processes raise questions not only about the quality of the course material, but also about copyright. | a) Policy and guidelines for selection and production of digital material, including explicit pedagogical and technical criteria  
b) Policy and guidelines for copyright issues  
c) Known and implemented a) and b)  
d) Internal evaluation and subsequent improvement of a), b) and c) |
| Structure/virtual environment   | The choice of virtual environment should be based on pedagogical considerations and the institution’s technical environment. Systematic improvement and updating of virtual environment are needed on a continuous basis.  | a) A virtual environment that is:  
  • selected on pedagogical needs  
  • reliable and robust  
  • aligned with the institution’s technical infrastructure  
b) Internal evaluation, updating and improvement of a) |

URL: [http://thor.lrf.gr/seequel/index](http://thor.lrf.gr/seequel/index)
| Communication, cooperation and interactivity | The new digital learning environments and their content support communication, cooperation and interactivity in new and different ways. More planning is often needed to facilitate communication. The openness of these systems requires clear information on how they are intended to be used in the particular course/educational programme. | a) Explicit strategy for communication, cooperation and interactivity according to pedagogical needs, available technology and human resources  
b) Implementation of a)  
c) Evaluation and improvement of a) and b) |
| Student assessment | The assessment methods should encourage creativity, critical thinking and in-depth knowledge of the subject matter. In DL, flexibility in terms of time and location offer the possibility of enhancing these aspects, but also entails problems of security and authentication. Procedures and regulations have to be in place to certify accessibility, student identity and the authenticity of each individual student’s knowledge contribution. | a) Strategy for fair, flexible and pedagogically justified assessment  
b) Implemented policy for dealing with plagiarism, legal security and identification of students  
c) Implementation of a) and b)  
d) Evaluation and improvement of a) and b) |
| Flexibility and adaptability | Flexible features of course design include: where to study (location), when to study (time), study period (duration), study pace (full time/part time), language(s) of instruction and content, adaptation of methods to disabled people, number of people admitted (scope), individual studies and/or group-based studies. Increasing the flexibility of one feature may decrease that of another. Adaptation to target groups is necessary. | a) Strategy for increasing the flexible features of education based on pedagogical considerations and students’ needs and demands  
b) Implementation of a)  
c) Evaluation and improvement of a) and b) |
| Support to students and staff | In DL, social support is often regarded as equally, if not more, important than technical issues. Teachers need support from librarians and guidance counsellors as well as from ICT consultants and administrators. | a) Strategy for student support including technical, administrative and social support on demand  
b) Strategy for faculty support including technical, ICT and information competence support on demand  
c) Implementation of a) and b)  
d) Evaluation and improvement of a) and b) |
| Staff qualifications and experience | Not just teachers but all staff involved in DL need to acquire the necessary skills, and systematically update their knowledge and strategies. | a) Strategy for staff competence development  
b) Implementation of a)  
c) Evaluation and improvement of a) and b) |
| Vision and institutional leadership | A long-term vision for DL must guide current practice and establish a common goal for the institution. This vision needs to be regularly updated and revised. Promoting research, QA, and development at the institutional level, as well as national and international cooperation and strategic alliances are increasingly important. | a) A strategy plan for e-learning with a visionary perspective, including research, quality assurance and development activities, and strategic local, national and international alliances related to short, medium and long term objectives  
b) Implementation and evaluation of a) and b)  
c) Feedback, follow-up and monitoring of national as well as international trends, and strategic management from the institutional administration |
In DL, resources often have to be reallocated from physical locations (lecture halls, libraries, administration offices) to technical infrastructures, support organisations and staff development. Workloads and a shift in working hours for staff also have to be taken into account. The development of interactive content and online lectures require special financial resources as well as copyright regulations. A new financial strategy will be needed for marketing DL in order to reach new target groups.

| Resource allocation | a) A strategy for the reallocation of existing resources and the generation of new resources based on the specific needs of DL  
|---------------------|---------------------------------------------------------|
|                     | b) A strategy and plan for dealing with changes in workload and working hours as well as with ownership of and financial rights to virtual lectures and other digital material  
|                     | c) Implementation of a) and b)  

| The holistic and process aspect | a) A functional and systematic approach for DL implementation encompassing all of the other quality aspects:  
|---------------------------------|--------------------------------------------------------------------------------------------------|
|                                 | b) Internal evaluation, updating and improvement of a) using a holistic approach               

### North-American frameworks/models

The Distance Education and Training Council (DETC)\(^{23}\) is a non-profit educational association located in Washington, D.C. It has gained the approval of the U.S. Department of Education as the "nationally recognized accrediting agency" under terms of Public Law. The Council for Higher Education Accreditation (CHEA)\(^{24}\) also recognizes the DETC Accrediting Commission, which defines, maintains, and promotes educational excellence in DL institutions.

The DETC model includes 12 aspects:

- institution mission, goals and objectives,
- educational programme objectives, curricula and materials,
- educational services,
- student services,
- student achievement and satisfaction,
- qualification of institution, owners, governing board members, administrators, instructors/faculty and staff,
- admission practices and enrolment agreements,
- advertising, promotional literature and recruitment,
- financial responsibility,
- tuition policies, collection procedures and refunds,
- plant equipment and record protection,
- research and self-improvement.

Each of these aspects is covered by criteria similar to those of ELQ.

In Canada, there is a convenient and learner-centered implementation of the framework called Canadian Recommended E-learning Guidelines (CanREGs) [Barker, 2002]. It comes in the form of online questionnaire called Consumer’s Guide to E-learning\(^{25}\). The questionnaire guides the potential learner through a series of simple questions. The answers provide a valuable feedback to the institutions that conduct DL.

\(^{23}\) URL: [http://www.detc.org/](http://www.detc.org/)

\(^{24}\) URL: [http://www.chea.org/](http://www.chea.org/)

4. QA Guidelines, Procedures, Policies, and Service Standards in DL

QA guidelines in DL are sets of recommended approaches and practices intended to help those who want to design, delivery, evaluate, and purchase quality DL products and services for students and their sponsors or advocates.

QA procedures in DL are organized sets of well-planned steps that confirm if the DL quality tests are being implemented correctly, if the results are satisfactory and if any errors detected are corrected on time to avoid unfavorable outcomes. These procedures ensure that the results generated by various DL quality tests are as reliable and as accurate as possible.

QA policies in DL refer to sets of principles intended to govern actions in DL systems. Such QA policies must be prudent and tactically advantageous, in order to support commitment to a broad requirement of all parties involved in a DL process (students, teachers, administrative personnel, and facilitators) to reach a required educational outcome.

QA related to standards in DL provide a basis for comparison, i.e., reference points against which the quality of DL services to students can be evaluated. They set precise criteria in terms of which an institution's entire DL offer to students can be judged.

QA Guidelines in DL

A number of organizations and agencies have published guidelines on QA in DL. The already mentioned work of QAA is but one example. Another set of well-developed guidelines, published by European Centre for the Development of Vocational training (CEDEFOP)\(^{26}\), includes ten precisely formulated and elaborated guidelines [CEDEFOP, 2005] that can be briefly stated as:

- learners must play a key role in determining the quality of e-learning services,
- Europe must develop a culture of quality in education and training,
- quality must play a central role in education and training policy,
- quality must not be the preserve of large organizations,
- support structures must be established to provide competent, service-oriented assistance for organizations’ quality development,
- open quality standards must be further developed and widely implemented,
- interdisciplinary quality research must become established in the future as an independent academic discipline,
- research and practice must develop new methods for interchange,
- quality development must be designed jointly by all those involved,
- appropriate business models must be developed for the services in the field of quality.

Yet another great example of well-organized guidelines comes from the already mentioned Canadian Recommended E-learning Guidelines (CanREGs) [Barker, 2002]. These guidelines are too lengthy to be covered here in detail, but they are related to the following issues of DL:

- quality outcomes from DL products and services
  - the content skills and knowledge that the student will acquire
  - the learning skills and knowledge that the student will acquire
  - the course credits or credentials that the student is awarded when finished
  - the evidence of the learner experiences an adequate return on investment
- quality processes and practices in DL products and services
  - the management of students

the delivery and management of learning
- appropriate use of technologies (computers and other ICT)
- communications facilities, processes and practices

- quality inputs and resources for DL products and services
  - intended learning outcomes
  - curriculum content
  - teaching/learning materials
  - product/service information for potential students
  - appropriateness of of learning technologies
  - sound technical design of learning materials and delivery
  - appropriate and necessary personnel
  - learning resources other than teaching materials
  - the issue of the complete learning package
  - the issue of the comprehensive course package (all materials and technologies)
  - evidence of program success through routine review and evaluation
  - program plans and budget
  - advertising, recruiting and admissions information

QA Procedures in DL

There are several generic QA procedures to be practiced regularly in assuring quality of DL systems, processes, and institutions (adapted from [TQAS, 2010]):

1. Understanding strengths and weaknesses – identifying the strengths of the DL process, DL course delivery, interaction between students and teachers, etc., as well as any areas that demand additional review and any severe issues that may seriously affect the students, DL providers, learning outcomes and learning process effectiveness.

2. Pre-planning – development of the mission, purpose, value and vision statements of the QA teams and communicating these statements to students and DL providers and facilitators for suggestions towards improvement, as well as formulating strategies and action plans to determine how to implement a quality program.

3. Financing – careful development of a financing plan to ensure the student interest and retention, attractive programmes of study, competitiveness of DL providers, and sustainable and durable activity of the DL institution.

4. Continuous improvement of the supporting technology – maximizing the use of appropriate and available technology, and keeping pace with the changing needs as DL continues to embrace more and more sophisticated technology.

5. Making the most of human resources – having competitive and skilled teachers, DL facilitators, and supporting teams is one of the most important prerequisites to a successful implementation of DL programmes of study, hence monitoring and proper management of human resources is a must.

6. Marketing strategy – ensuring that the DL provider creates and markets DL study programmes and environments that satisfy the needs of the current and prospective students, collects the right information and feedback from the students, and establishes effective communication between the students and the teachers.

In practice, these generic procedures are implemented in different ways. Examples include the following procedures [Nichols, 2002], [Staffordshire, 2010]:

- the training process – QA of learning materials repository, communication between the teachers and the students, and online exercises,
- the consultancy and training process for using innovative technology,
• the full project process – used in the development of major learning resources and development of courses into a DL resource-based learning mode,
• the minor/single task project process – a "catchall" process that ensures quality in additional activities such as resource digitization,
• preparation for validation/award review
  o prepare a minimum amount of e-learning or distance/distributed learning material in order to provide evidence about their likely capacity to develop and implement an award successfully and to deliver award material on schedule
  o prepare explanation of how the intended e-learning approach(es) meet(s) the needs of the target learner population
  o prepare course/module handbook that for each course/module provides rationale for educational approach, pre-requisites, statement of unit aims, introduction /statement of aims of the whole course/module, objectives/learning outcomes of the whole course/module, content (brief details of all units), learning, teaching and assessment strategies, learning and teaching activities, bibliography, and glossary/list of abbreviations
  o address explicitly staff development issues for award teams in validation support documentation
  o include a detailed calendar of activities that outlines the pattern of delivery for the award curriculum in validation support documentation
• action plan for the design and implementation of all elements of the curriculum,
• support for validation and review panels
  o prepare briefing documentation that includes the University's QA procedures for DL
  o put validation materials online and in advance of the validation
  o organize briefing sessions for validation panel chairs and internal members of validation panels
• devising and implementing continuous review processes within the arrangements for course management and QA for these awards,
• providing guidance on current service standards and likely developments.

DL policy development

DL policy development refers to creating appropriate conditions for the development of content, services and learning environments which are sufficiently advanced and relevant to education. The importance of establishing such conditions conducive to change and to adaptation of the ways in which education and training systems are organized is emphasized in all institutions and in all countries that practice DL [HSV 2008].

Four areas for defining lines of action (policies) have been identified as of particular importance for the successful implementation of DL systems and programmes of study:
• infrastructure and equipment,
• training,
• services and content,
• cooperation and dialogue.

Likewise, there are six DL policy development priorities interwoven with the above four areas of action, as described in the findings of the Horizontal E-learning Integrated Observation System (HELIOS) project27:
• access to learning,
• employability,
• personal development/citizenship,

27 URL: http://ec.europa.eu/education/archive/elearning/projects/
• internationalization of education and training,
• organizational change,
• innovation of education and training.

From the survey of various DL policy documents prepared by the Swedish National Agency for Higher Education [HSV 2008], as well as from the EC eLearning Action Plan [ECeLAP, 2002], it follows that European educational institutions and national agencies interested in developing their DL policies should consult the following sources of information:
• policy documents from the respective national agencies,
• policy documents concerning e-learning in higher education within the European Union,
• relevant publications from selected DL projects and organizations at the EU level,
• approaches adopted by national agencies in other countries, especially in Canada, Australia, and USA,
• quality aspects of e-learning in higher education discussed in current research.

Note that policy documents usually cover both DL and life-long learning (LLL). In order to do this, consulting relevant EU LLL documents such as The European Commission’s Lifelong learning programme 2007–2013 is also recommended.

Once an educational institution adopts a set of DL policies, these institutional policies are published as formal, general statements of intent, goals and objectives that guide the activities, behavior and attitudes of the institution and its staff. They need to reflect the mission and values of the institution and must be consistent with governing regional or national legislation. Note, however, that most institutional policies are not, at the start, specific to a mode of study (DL or campus-based).

DL programmes must be guided by institutional policy that specifically addresses its needs [Bottomley and Calvert, 2003]. After assessing the wider national or state policy context for guidance on establishing institutional DL policy, the next step is to review whether, and to what extent, existing institutional policy is appropriate for DL. A review should:
• consider how the institution’s mission fosters or inhibits DL,
• determine the values that should govern the DE component,
• identify areas where policies need to be revised or where policies specific to DL need to be developed.

A set of policy-development-related recommendations for QA agencies, coming also from the Swedish National Agency for Higher Education, are as follows:
• In order for QA in DL to become an integral part of national quality reviews, aspects and criteria need to be incorporated into the general basis for assessment. This requires intelligence and competence within the organization.
• A special function for DL needs to be set up within the QA agency, i.e. a function with the task of monitoring, on a continuous basis and under special regulations, national and international developments within DL.
• To keep pace with international developments, it is recommended to adopt a strategy for extended representation in international organizations, projects and networks.
• The establishment of a DL advisory board is also recommended.
• Knowledge exchange and cooperation between QA agencies and organizations across national borders are necessary in order to harmonize and safeguard QA strategies and policies.
• Extensive methodological development is necessary to adapt the general methods for assessment of quality in higher education to the assessment of quality in e-learning.

URL: http://ec.europa.eu/education/programmes/newprog/index
Establishing service standards

DL students need efficient academic and administrative service. To ensure that students receive the attention needed to succeed academically, DL providers have to ensure high-level standards of the educational services they offer.

In practice, it is up to the academic institutions offering DL study programmes to take care of providing such service standards. It is also important from the students’ perspective to have these standards published and easily available. In certain cases, these standards come in the form of tables showing upper-bound response times that the provider guarantees to the students in terms of providing various services on request (such as electronic communication, library service, administrative services, and the like). Alternatively, there are published documents with descriptions of the standards supported.

A good example of table-based service standards can be found at Athabasca University, Canada, that has developed a comprehensive set of standards covering the following areas [AU, 2010]:

- general information,
- administrative service,
- library services,
- learning resources service,
- academic support,
- counseling, advising, and ombuds services,
- electronic communication,
- service,
- access for students with disabilities services.

For instance, Table 4 shows the AU learning resources service standards. The AU site provides a complete set of tables for all of the above areas covered by their service standards.

Table 4 – Learning resources service standards from Athabasca university, Canada [AU, 2010]

<table>
<thead>
<tr>
<th>Service</th>
<th>Standard</th>
<th>Contact (If Standard Not Met)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response to voice mail</td>
<td>1 business day</td>
<td><a href="mailto:services@athabascau.ca">services@athabascau.ca</a></td>
</tr>
<tr>
<td>Response to e-mail</td>
<td>1 business day</td>
<td><a href="mailto:services@athabascau.ca">services@athabascau.ca</a></td>
</tr>
<tr>
<td>Learning resources inquiry</td>
<td>1 business day</td>
<td><a href="mailto:cmat@athabascau.ca">cmat@athabascau.ca</a></td>
</tr>
<tr>
<td>Learning Resources*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>3 weeks</td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>Up to 2 months</td>
<td></td>
</tr>
<tr>
<td>Learning resources replacement</td>
<td>Up to 2 months</td>
<td></td>
</tr>
<tr>
<td>Process return</td>
<td>1 month</td>
<td></td>
</tr>
<tr>
<td>Student queued for lack of materials</td>
<td>Maximum of 1 month</td>
<td></td>
</tr>
<tr>
<td>Comments on the content or quality of learning resources</td>
<td>2 business days</td>
<td>Vice-President, Academic 780.675.6286 <a href="mailto:services@athabascau.ca">services@athabascau.ca</a></td>
</tr>
</tbody>
</table>

* Assumes normal postal delivery time.

Description-based service standards, from Wisconsin University, USA29, cover the following areas:

- curriculum and instruction,
- evaluation and assessment,
- library and learning resources,
- student services,
- facilities and finances.

For example, one of their student services standards reads:
"The institution provides timely and complete information for students on the equipment and knowledge required to use the technology employed in the program."

The other service standards from Wisconsin University have similar forms.

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29 URL: [http://www.uwsa.edu/acss/planning/destandfullboard.htm#destandards](http://www.uwsa.edu/acss/planning/destandfullboard.htm#destandards)
5. Benchmarking and Tools

Benchmarking is a management tool that has been applied in many areas of business but it is only in 2005-06 that there has been immense growth in its application specifically to university use of educational technology, initially in New Zealand, then in Europe including the UK under the auspices of the Higher Education Academy and most recently spreading to the US.

There are many projects and initiatives developed under EU project, like:

- BENVIC 1999-2004\(^{30}\),
- CHIRON\(^{31}\),
- ELTI\(^{32}\),
- ACODE\(^{33}\),
- IQAT\(^{34}\),
- MASSIVE\(^{35}\),
- MIT90s\(^{36}\),
- Pick&Mix\(^{37}\),
- OBHE\(^{38}\),
- Open ECBCheck\(^{39}\).

More details are given for the E-xcellence, E-xcellence+ and eMM benchmarking methodologies.

E-xcellence

E-xcellence is a web-based instrument focusing on e-learning in higher education; it is a quality benchmarking assessment tool that covers the pedagogical, organisational and technical frameworks with special attention on accessibility, flexibility and interactivity.

E-xcellence is a product of a two-year project, undertaken under the auspices of EADTU and involving a pool of experts from 12 European institutions with a stake in e-learning developments. The objective of the E-xcellence project was to provide a supplementary instrument which may be used with these QA processes to allow the consideration of e-learning developments as a specific feature. In a first stage (2005-2007), the E-xcellence instrument has been developed. In the second stage (2008-2009), E-xcellence was updated with the involvement of some 50 universities and 10 assessment and accreditation agencies in intensive local seminars (national level).

E-xcellence was not envisaged as a benchmarking methodology but as a quality monitoring tool, but at about a year into the project there was a shift in emphasis and benchmarking is now one of the aims envisaged for E-xcellence. In fact there are three orientations of the methodology:

- Assessment tool (at both institutional and programme level) (i.e. benchmarking)

\(^{30}\) URL: [http://www.benvic.odl.org/](http://www.benvic.odl.org/)
\(^{31}\) URL: [http://semioweb.msh-paris.fr/chiron/](http://semioweb.msh-paris.fr/chiron/)
\(^{32}\) URL: [http://elearning.heacademy.ac.uk/wiki/index.php](http://elearning.heacademy.ac.uk/wiki/index.php)
\(^{33}\) URL: [http://www.acode.edu.au](http://www.acode.edu.au)
\(^{34}\) URL: [http://www.iqat.org](http://www.iqat.org)
\(^{35}\) URL: [http://cevug.ugr.es/massive/](http://cevug.ugr.es/massive/)
\(^{36}\) URL: [http://business.heacademy.ac.uk/assets/York/documents/ourwork/tla/MIT90s.pdf](http://business.heacademy.ac.uk/assets/York/documents/ourwork/tla/MIT90s.pdf)
\(^{37}\) URL: [http://www.matic-media.co.uk/benchmarking.htm](http://www.matic-media.co.uk/benchmarking.htm)
\(^{38}\) URL: [www.obhe.ac.uk](http://www.obhe.ac.uk)
\(^{39}\) URL: [http://www.qualityfoundation.org/openecccheck/](http://www.qualityfoundation.org/openecccheck/)
● Quality improvement tool (internal quality care system)
● Accreditation tool for accreditation

An important aspect of E-xcellence is that it offers a European-wide set of benchmarks, independent of particular institutional or national systems, and with guidance to educational improvement. The basis of the E-xcellence benchmarking process is to use an instrument that is built on dialogue and by stimulating dialogue in a collaborative process to create an environment of learning from numerous best practices that can differ from country to country and give valuable input for dialogue. The instrument is based on the E-xcellence manual which contains the benchmark statements, along with the criteria and indicators:

- Strategic Management
- Curriculum design
- Course Design
- Course delivery
- Staff Support
- Student Support

The instrument is supplemented by a full on-line manual. This is all available under the "creative commons license" at www.eadtu.nl/e-xcellenceqs.

E-xcellence+

The E-xcellence+ project under the E-learning Programme 2004, leads to recommendations on opportunities of improved e-learning performance and therefore helps to improve the quality, attractiveness and accessibility of the opportunities for lifelong learning available within member-states.

The goal of the E-xcellence+ project was to valorise this instrument at the local, national and European level for the higher education and adult education sectors, and to broaden the implementation and receive feedback for enhancing the instrument.

With E-xcellence+, EADTU started in 2008 on valorising the developed QA tools. E-xcellence+ promotes the use of E-xcellence European wide and envisages increased performance and innovation in e-learning by promoting e-learning specific benchmarking. The project supports processes of improving e-learning performance by self-assessment, on-site assessment and accreditation by integration of the instrument in the institutional and national policy frameworks. The sustainability of the instrument is further to be guaranteed by:

- Regular updating of the instrument and manual and yearly publication of revised version.
- Adding good practice exemplars to the manual from the partner organisations and connected European organisations in the field of e-learning.
- Expanding a European network of experts.
- Connection with other European organisations in the field of e-learning.

The E-XCELLENCE+ consortium consists of expert representatives from open universities, traditional universities and assessment and accreditation bodies in higher education and adult education already covering 13 countries and reaching out to the rest of Europe:

- EADTU (The Netherlands)
- Open Universiteit Nederland (The Netherlands)
- Open University (United Kingdom)
- OULU-University (Finland)
- International Telematic University UNINETTUNO (Italy)
● NVAO (Belgium/The Netherlands)
● Estonian Information Technology Foundation (Estonia)
● Högskoleverket / NSHU (Sweden)
● UNED, (Spain)
● KU Leuven (Belgium)
● Czech Association of Distance Teaching Universities (Czech Republic)
● University of Hradec Králové (Czech Republic)
● Slovak University of Technology in Bratislava (Slovakia)
● MESI, (Russia)
● Fernstudien Schweiz (Switzerland)
● Hungarian e-University Network (Hungary)

E-xcellence Tools
The E-Xcellence instrument consists of a manual and assessors notes to assess the institution on its e-learning performance. The manual is based on 32 benchmarks directly related to e-learning specific quality criteria. These form the basis for self assessment exercise. Quickscan is a web based tool which enables easier guidance and decision making which chapters (benchmarks) are of interest for the institution, which can be applied in three ways:

● The quick scan as a quick orientation (basic option)
● The quick scan with a review at a distance (extended option)
● The quick scan with an on-site assessment - Full assessment (most comprehensive option)

The quick scan as a quick orientation (Basic option)
The quick scan is developed to give a first orientation on the strengths of e-learning performance and fields of improvement in one institution. These fields of improvement need further attention and will be the basis for working with the manual and assessors notes.

The on-line questionnaire needs to be filled out by different disciplines in an organisation coming from management, course designers, tutors and students. It is recommended to build a small team of people that correspond with these disciplines. The team also has the task to find out which benchmarks are relevant or less important for their institution. The result of doing the Quick Scan must be an agreed overview of benchmarks that fit the institution as well as a number of benchmarks that ask for an action line in the roadmap of improvement. Each statement has to be considered and judged how this aspect of e-learning is realised in the course or programme of the particular institution or faculty. The instrument offers the opportunity to make comments on the specific issues by indicating: Not Adequate, Partially Adequate, Largely Adequate or Fully Adequate.

The quick scan with a review at a distance (extended option)
The starting point is the using of basic quick scan. To prove the answers that were filled out in the scan are based on solid facts, reference material and a roadmap of improvement are required. All documents can be uploaded. The reviewers look into the evidence at a distance and deliver a report on overall performance and recommendations for improvement.

This assessment will enable to determine the performance of the evaluated e-learning programmes and to pinpoint the requirements for further enhancement. With the instrument, the institution can map the e-learning efforts on the different sections.
For receiving the E-xcellence Associations Label the institution are required to integrate the relevant benchmarks in its internal QA-system. This to guarantee a continuous and repeated use of the E-xcellence benchmarks.

The quick scan with an on-site assessment (most comprehensive option - Full assessment)

This option is similar like the previous one except that E-learning experts (reviewers) will visit the university and do an on-site assessment. Officials from the institution will meet up with the reviewers, and in face-to-face communication they will receive recommendations and advice for improvement.

This on-site assessment will enable to determine the performance of the e-learning programmes and to pinpoint the requirements for further enhancement in real contact with the officials of the organisation.

Outstanding expertise

The E-xcellence instrument works with e-learning experts in a review team. The reviewers are experienced core group members of the E-xcellence team, all representing outstanding expertise in the field of e-learning and quality control as well as many years of work at universities in e-learning development.

E-Learning Maturity Model (eMM) benchmarking

E-learning Maturity Model (eMM)\(^{40}\) is a quality improvement framework based on the ideas of the Capability Maturity Model (CMM)\(^{41}\) and ISO/IEC 15504 - SPICE (Software Process Improvement and Capability dEtermination) methodologies\(^{42}\). The underlying idea that guides the development of the eMM is that the ability of an institution to be effective in any particular area of work is dependent on their capability to engage in high quality processes that are reproducible and able to be extended and sustained as demand grows.

A key aspect of the eMM is that it does not rank institutions, but rather acknowledges the reality that all institutions will have aspects of strength and weakness that can be learnt from and improved. Any benchmarking approach that presumes particular e-learning technologies or pedagogies is unlikely to meaningfully assess a range of institutions within a single country, let alone allow for useful international collaboration and comparison, particularly over an extended period of time.

The eMM provides a set of thirty-five processes, divided into five process areas, that define a key aspect of the overall ability of institutions to perform well in the delivery of e-learning. Each process is selected on the basis of its necessity in the development and maintenance of capability in e-learning. All of the processes have been created after a rigorous and extensive programme of research, testing and feedback conducted internationally. Capability in each process is described by a set of practices organised by dimension.

Application of the eMM to New Zealand and the UK

The substantial revision in the eMM that has generated version two has resulted in a substantially improved methodology and process set that should enable useful international comparison between New Zealand tertiary organisations and institutions based in many other countries. The current version

\(^{40}\) URL: http://www.utdc.vuw.ac.nz/research/emm/index.shtml
\(^{41}\) URL: http://www.sei.cmu.edu/cmmi/start/
\(^{42}\) URL: http://csqa.info/iso_15504_also_known_as_spice
of the eMM was applied to eleven New Zealand institutions and one, much larger, UK institution (Marshall, S.J., Mitchell, G., 2007)\textsuperscript{43}.

References


