# Online Tutoring e-Book

Editor Carol Higgison


# Chapter 9
# Quality Assurance

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# Preface

Quality emerged as an key factor in assuring the success of online learning initiatives. This chapter reviews the role of quality assurance in online tutoring and explores what issues an agenda regarding quality and online learning might address.

Christa Ehmann, Ian Heywood and Carol Higgison participated in an online chat to consider these issues and this chapter is a result of that real time discussion. Christa Ehmann is Vice President of Smarthinking, a commercial learner support organisation in the USA, Ian Heywood was director of the Centre for Open and Distance Learning at the Robert Gordon University and Carol Higgison was the OTiS project manager.

The success of the e-workshop was due to the interest and enthusiasm of the participants and their generosity and willingness to share their experiences and expertise. We hope that the participants in the e-workshop agree that they became part of an active and supportive online learning community.

My sincere thanks to all the participants and, in particular, the authors whose commitment extended long beyond the end of the e-workshop.

Carol Higgison
(editor)

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# 9 Quality Assurance

**Christa Ehmann, Ian Heywood and Carol Higgison**

## 1 Quality Assurance

> "An institution's decision to develop, promote and offer online courses means they are questioning traditional practice. They are indicating that current methods of teaching and learning are not meeting their perceived needs. Obviously, this will cause some reaction for advocates of the current system. It would appear to be crucial that those who promote online activities are able to validate their positions. This is where quality assurance plays an important role." (Clayton-D, 2000)

"Quality assurance has real merit because it forces institutions to evaluate their practices to see if they match their beliefs" (Muirhead-D, 2000). However, as Roberts (2000) notes, "too often online teaching is the province of the enthusiastic amateur". "Quality assurance cannot and should not be the responsibility of the individual tutor alone. Those institutions that wish to embrace online learning need to do so at an institutional level if they are to get the quality issues right. The theme needs to be integrated into the institution's code for QA [quality assurance] and also its strategy for teaching and learning" (Heywood-D, 2000). This "requires having an administrative leadership that places a high priority on insuring quality in the teaching and learning process" (Muirhead-D, 2000).

Quality Assurance also plays an important role in satisfying the demands of external scrutiny, for example by professional accrediting bodies, or demonstrating adherence to external quality standards, such as the UK Quality Assurance Agency codes of practice.

However, formal institutional quality assurance requirements and procedures are often associated with policing by senior management. QA is often perceived as an additional burden to an already heavy workload, which does not offer any direct benefit to tutors or learners. This may be why very few participants at the OTiS e-workshop took up the challenge to join the quality debate. Yet despite this, quality emerged as an integral issue and concern in the other discussions topics, particularly those relating to the student learning experience and the benefits of online learning. This apparent conflict can be reconciled when we accept "that it is always better for quality to be built in rather than inspected, QA … resides with the tutorial team supported by the QA procedures" (Pickering and Duggleby, 2000).

In other words a "quality system must be integrated and draw together information from a number of sources and present them in a complete way" (Higgison-C). The online tutor is central to this process.

References designated by the letter 'D' and with dates are references to OTiS e-Workshop discussion group contributions. References designated by the letter 'C' without dates are references to real-time online chats. Details for both of these are collated in Appendix A.

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# 2 Quality Assurance Requirements

The current vision and strategic direction of many organisations has raised the importance of using technology to create flexibility in the teaching process (McKenzie, 2000a). Several key questions of concern in relation to 'quality' with respect to online learning were identified during the OTiS e-workshop, for example:

- Does going online enhance the learning experience?
- Do students benefit from the online experience?
- Can tutors better monitor and evaluate their performance?
- Do online learning environments cater better for different learning styles?
- Do online learning programmes allow senior manager to better evaluate the quality of their institutions educational provision?

The OTiS discussions emphasised the role of quality in ensuring the student satisfaction with the learning experience and promoting what is valuable about online learning. Typically, online modules and courses are subject to "precisely the same quality assurance processes as every other module" (Ballantyne, 2000). "All students evaluate the experience of the module, and the outcomes are scrutinised by external examiners. On an annual basis tutors review such feedback and make alterations to improve the materials, or the logistics of delivery, where this is felt to be appropriate" (*ibid*). Therefore, we need to modify and adapt our institutional policies, processes and procedures (Chapter 7: *Institutional Support*) to take account of these new methods of learning, teaching and assessment.

In most quality assurance systems the main quality control mechanisms are student feedback and the tutor's own assessments (Rotherham, 2000). In addition to assessment and evaluation, quality can be supported through appropriate support of teaching activities, including staff appraisal and monitoring procedures, course accreditation procedures and the dissemination and adoption of good practice throughout the institution. We consider these aspects and the benefits online methods can offer to improve the quality of learning below.

## 2.1 Quality and online learning

The OTiS e-workshop 'Quality' debate identified eight areas where the participants felt that supporting learners online contributed to the overall 'quality' of the learning experience. These were:

- recording of the learning process,
- the ability to support different learner styles,
- access to multiple modes of delivery,
- flexibility in attendance,
- a transparent record of 'tutor input',
- a transparent record of 'student input',
- collaborative team teaching,
- an improved ability to research the educational process.

## Recording of the learning process

> "…technology allows us as educators to see how student interaction is evolving and measure whether we are performing our role as facilitators of the learning process." (Heywood-C)

Many of the new online learning tools available to tutors allow automatic logging of interactions. In some cases statistical analysis of the interactions between tutor and students can be carried out (Chapter 5: *Evaluation*), for example, an evolving debate in a chat or discussion forum. The ability of much of this to be done automatically means that both the learner and the tutor always have a record of their interactions to hand without having to manually log information at the expense of participating in an educational exchange.

## The ability to support different learner styles

> "…I think that with online learning - we have to reach a diverse population of students -- the strength of online learning - is that we can manipulate technology to accommodate various types of learners." (Ehmann-C)

Online the opportunity exists to customise the learning experience to fit each individual's needs (Chapter 1: *Learning Styles*), simultaneously catering for a range of diverse learning styles (Whittington and Dewar, 2000). In traditional face-to-face learning we can often only offer one learning style at any particular time and there will always be members of the group for whom the style is inappropriate and which limits their learning. As Ehmann noted (2000) "the combination of web-based and hard-copy materials, phone calls, and 'hands-on' exercises appealed to tutors with a variety of learning styles and strategies".

## Access to multiple modes of delivery

> "… from a QA (quality assurance) perspective -- perhaps we're saying that in the learning process - there needs to be multiple modes of communication - and multiple avenues of support." (Ehmann-C)

Matched with the ability for online learning environments to mirror the learning styles of the individual is the ability of the environment to allow for the distribution of the learning experience across the range of differing media. For example, animation and video techniques can be used to provide additional variations on the learning experience. White and Moussou (2000) provided their learners with "three different chat room environments (to provide examples of types of software), email and telephone conference calls. The online conferencing element included both text and visuals to create a varied environment and to demonstrate different approaches for participants with different learning styles."

## Flexibility in attendance

> "... flexibility is particularly important - given the changing population of students in higher education." (Ehmann-C)

Online learning offers students the option of learning when they want rather than when an institution specifies. Online education makes it easier for institutions to provide education to a wider audience. Face-to-face events can be problematic with regard to individual student learning needs, such as prior experience, learning styles and the pace of learning.

From the learner's perspective, online learning provides a competitive environment in which to seek out learning opportunities that better match individual life styles.

## A transparent record of the 'tutor' input

> "... as I see it the great strength of online learning in terms of quality is that we do have these records of interaction and communication." (Ehmann-C)

In online courses "the materials used and the nature of the discussions are much more transparent and accessible than much of what goes on within a lecture theatre of tutorial room. In a sense, we are more accountable to our students for the quality of out input, which they can save, print, and/or return to us with annotated comments" (Ballantyne, 2000). This is a useful record in terms of the quality of the learning materials and the tutoring experience. Senior staff can 'visit' online conferences to review what is taking place (Morrison, 2000) and "all dialogue exchanged between the tutors and participants" can be recorded "to provide the external examiner with an accurate picture of these communications" (Littlejohn, 2000). Online conferences can also provide a space where the "members of the team communicate and support each other" (Pickering and Duggleby, 2000).

## A transparent record of the 'student' input

> "If people are not contributing in the online setting - then the record would show this and we can act on this - in F2F [face-to-face] it may not be so visible." (Heywood-C)

Online interactions provide a permanent record of learner input, the development of ideas and knowledge, and the negotiation of understanding and meaning. This provides a resource for the learners to refer to for revision, to check their understanding, and to see how ideas and agreements have evolved and changed over time. It also provides a more transparent record of participation than face-to-face interactions. Creanor (2000) describes how the online environment has made quality processes accessible to distance students:

> "The joint staff/student committee, also conducted online through a separate First Class conference, provides further feedback. Although we have student representatives on the programme board who do manage to attend face-to-face meetings, the online conference provides a further means for distant students to air their views and for staff to respond directly. An additional private conference area for students has been set up to which staff have no access, and here students have the opportunity to discuss issues among themselves before raising them with tutors."

## Enhanced collaborative team teaching across boundaries

> "... there is more opportunity for community and understanding across courses and programs… the ability to bring colleagues as well as students across the globe together is indeed a strength". (Ehmann-C)

Traditional teaching methods can result in tutors being isolated from each other. The benefits of working collaboratively and being part of a community are not always available (Chapter 3: *Building an Online Learning Community*). The online environment can remove the physical barriers of location and time and allow collaboration across roles, subjects and geographical boundaries.

> "Having a subject development team involved in the creation of the subject was vital for enabling on-going peer review, this also involved people outside of the team reviewing material. Two staff as well as the participating students reviewed the on-line discussion and support." Gilbert-Hunt and McLaine (2000)

However, as Creanor (2000) notes, collaboration between institutions can raise additional difficulties and administrative issues that may need to be resolved.

### Improved ability to research the educational process itself

> "... so much of what occurs in the field of education is done on 'hunches' or what individuals think makes sense … but, I think we can deepen our understanding of 'what works' and 'why' if we would spend more time investigating our practice from an empirical research standpoint." (Ehmann-C)

"We should be able to articulate and explain what we do, and often cannot" (Higgison-C). "Learning online makes it easier for us to research the educational process itself - as we have a history of what has happened" (Heywood-C). However, it is important that we are not "blinded by…statistics about online use. Actual implementation needs to be analysed to determine if pedagogically effective use is being made of online educational environments" (Salter, 2000). Daele (2000), for example, reports on an action research project where different strategies have been developed to analyse the learning of students and tutors and the costs of such systems, and Tammelin (2000) reports on her research into the roles of the teacher and learner in a networked learning environment.

These eight examples identified by the OTiS e-workshop participants illustrate some of the ways online learning can contribute to the quality of the overall learning experience. Next we examine some specific traditional quality indicators and consider how these can be applied to ensure the quality of online learning.

## 2.2 Quality and assessment

"The analysis of tutor evaluated assignments" is, for many, "the main indicator of quality" (Eger and Vacek, 2000). Assessment strategies and methods have a major influence on what students learn and how effectively they learn (Chapter 4: *New Assessment Strategies*) and, consequently, on the quality of their learning experience.

"The formal structures of the institution such as assessment board meetings and external examiners' deadlines for receiving assignments" (Creanor, 2000) will apply equally to online and traditional courses. Online assessment methods can make the process more transparent and accessible to external scrutiny by external examiners (Creanor,2000) and senior staff. Morrison (2000) describes the UK Open University process whereby "senior regional academic staff received a summary of double marked assignments for each tutor in their region" which can provide a measure of the quality of the marking criteria and the consistency with which they are being applied. Assignments in this process are submitted, marked, collated and returned electronically.

Pickering and Duggleby (2000) assessed their participants via online portfolios, which could then be marked and moderated online. This enabled the External Verifier to sample the portfolios and 'meet' with the participants online via a questionnaire. Where participants, tutors and course team members are working at a distance, online mechanisms for implementing, storing, distributing, marking and moderating assignments can reduce timescales and increase the transparency of the assessment process.

Where marking guidelines are provided for each tutor marked assignment (Higgison, 2000; Janes, 2000; Macdonald, 2000 and Morrison, 2000) online conferencing provides an opportunity for tutors to discuss and clarify their interpretation of the marking scheme with members of the course team and other tutors (Macdonald, 2000). Some authors recommend meetings "to moderate marks and provide consistency in returns to students" (Finkelstein, 2000). Online conferencing can facilitate moderation (Macdonald, 2000; Morrison, 2000 and Pickering and Duggleby, 2000) and provide a permanent record of the deliberations.

We can also provide a crude measure of success or 'quality' by comparing assessment results across course or module cohorts where online methods have been introduced, providing we ensure that we are measuring like with like.

> "… a team of nine tutors support students in their undertaking of the summative assessment task (research undertaking). They have indicated that the quality of the students' work is at least as good as it was under the earlier, conventional approach to teaching the research course."
> (Ewing, 2000)

However, introducing online learning can significantly change the aims, objectives and methods of a module such that comparison with earlier deliveries is meaningless.

In summary, online assessment methods can contribute to a quality learning environment by providing:

- clear and accessible marking guidelines,
- a forum to discuss assessment issues and interpretation,
- a flexible moderation process,
- easy access to external scrutiny.

## 2.3 Quality and evaluation

Evaluation procedures are the foundation of a successful quality assurance strategy, particularly where we are trying to ensure the quality of the student learning experience. Most institutions have a system in place to evaluate each course within the program every time it is offered to students. In addition, there is often an evaluation of the delivery and support structures within the program (Anderson and Simpson, 2000).

As we have discussed in Chapter 5: *Evaluation*, we can carry out a wide range of evaluations, however in terms of quality assurance, the most influential sources of feedback are the students, external agencies whose criteria we have to meet, our peers and institutional managers.

### Student Feedback

Mohamand (2000) argues that it is essential that "quality assurance is addressed through eyes of the students" and that it is unfair "to judge the rate of success or failure of such experience from the perspective of the course and its instructor, as they merely reflect the conceptual framework and deployment of the course materials."

OTiS case studies suggest that student feedback about the online learning experience is still the predominant measure of quality and is mainly collected through the traditional mechanism of a questionnaire, although the questionnaire may be accessed online. In some cases, specific aspects of the online experience are also evaluated, such as conference activity (Street, 2000). In a few cases, additional mechanisms such as integrating activities

which require "participants to reflect on the effectiveness of the course" (Pickering and Duggleby, 2000) and specific research (Thompson and Rosie, 2000) are used.

However, the standard institutional QA questionnaire is often insufficient to assess the quality of the online learning experience. As Hird (2000) suggests "there may be a need to develop an evaluation form specific to online courses...There are critical questions specific to online learning that need to be asked of students …relating to the amount of time spent on the course, the level of technical support needed, and the effectiveness of each online assignment … One recommendation … for anyone involved in new online course design is to make provisions for evaluation above and beyond that which is provided by the department or institution."

Traditional institutional QA procedures relating to obtaining student feedback need to be adapted to include issues specific to online learning and to take advantage of new ways of obtaining students feedback.

## External standards and review

The QA standards we must satisfy are often set by external bodies such as funders, accrediting agencies, professional bodies, customers and partners, as for example in Janes (2000) and Wishart (2000).

> "The New Opportunities Fund demands all approved providers have quality assurance mechanisms in place and the Teacher Training Agency will be also be checking the quality of the provision." (Wishart, 2000)

> "Our ITESM partners were very clear on their needs and monitored the work and comments of their faculty/participants. They participated in ensuring the standards set by the certificate were met." (Janes, 2000)

The UK Quality Assurance Agency for example provides codes of practice to which all UK higher education institutions are expected to adhere. Two codes, which are particularly relevant to online learning, are the codes on open and distance learning (QAA, 2001) and accessibility for students with disabilities (QAA, 2000).

An institution may also commission its own external evaluation where a new service, course or system is being introduced for the first time

> "…an independent evaluation team undertook constant formative evaluation, which was fed back to tutors, facilitators, the course co-ordinator and the course team. This allowed fine tuning of the course delivery and prompt identification of key issues and problems." (Higgison, 2000)

Institutions may also evaluate their procedures to ensure they are effective (Street, 2000). Online tutors must be aware of and comply with the QA standards that apply to their online teaching.

## Peer evaluation

A common and valued support in ensuring quality in learning and teaching are peer review mechanisms. This is often integral to the process where a team approach is used as previously noted by Gilbert-Hunt and McLaine (2000). An alternative approach is to issue guest accounts to interested peers (Hird, 2000), such as external examiners. This allows them to see how the technology is being used and provides an outside perspective.

### Appraisal and monitoring

Senior members of the teaching team may also be responsible for developing monitoring processes for online tuition. These may lead to a more formal role in tutor appraisal. In some case studies module or course leaders perform a more formal role in the quality assurance process through undertaking formal evaluations of tutor performance (Eger and Vajek, 2000). Kulp (2000) for example, notes that "course evaluation data are collected online and held to very high targets". The module/course leader treads a fine line between formal and informal support of quality assurance.

Chapter 2: *The Tutor's Role* (Cornelius, 2000) discusses the roles and activities that an online tutor may be required to undertake and the competencies which they may need. Section 11: *Staff Development* (Higgison, 2001) discusses the issue of selecting and judging online tutors against these criteria. A useful way to involve staff and get a wide range of perspectives is to set up a working group to examine the issues involved. Their findings may form the basis for staff appraisal and development (McKenzie, 2000b).

Salmon (2000) provides a summary of the types of policies and systems that need to be in place and how these can be adapted to the online environment:

> "The [UK] Open University has always had policies and extensive systems to monitor the quality of its tutors' performance. It provides them with feedback and offers development where necessary … Drawing on the experience and procedures for these, we devised and implemented… a system of monitoring of online moderation of CMC …This system involves a series of virtual 'visits' to each conference by peer or colleague tutors who have fully and successfully completed the online training. They provide reports on their view of conferences that they visit, and comment whenever they find good practice in e-moderation. They alert managers to problems or lack of participation. There is a direct correlation between active e-moderation and successful completion of the online training. The monitoring system has been gradually built up and refined over the past few years, and is now extending to other courses and faculties.

Feedback and evaluation findings provide the basic information on which we base our decisions to ensure a quality learning experience. Of these, the most influential is feedback from students.

## 2.4 Quality and teaching

The role of teaching and learning must be valued (Chapter 7: *Institutional Issues*) within an institution if it is to provide an environment that supports online learning and promotes quality.

> "… Many of the trained moderators are increasingly involved in conference design and there is considerable interaction between course deliveries and presenters as everyone involved explores the new meanings and opportunities associated with online learning on large scale distance management education." (Salmon, 2000)

Salmon (2000) demonstrates the interrelationship between leadership and guidance, monitoring and feedback, staff development and support in maintaining quality in the delivery of online learning.

## Leadership and guidance

Leadership roles identified in the OTiS case studies include course co-ordinator, principal tutor, senior course tutor, module leader and project manager. Their role is usually to provide overall guidance (Higgison, 2000), ensure that conference aims and deliverables are consistent in weight and level (Street, 2000), provide guidance on the quality of materials produced (Newby-Fraser and Clayton, 2000) and maintain responsibility for the overall administration of the program (Janes, 2000).

Examples of guidance and support include providing a module handbook and guidelines (Finkelstein, 2000), and providing template email messages for starting the online activities (Morrison, 2000).

## Staff development

Staff development (Chapter 8) is essential to ensuring the quality of the students' learning experiences. Ideally, the development should cater for different levels of experience and learning styles and support the ongoing development of the tutors. Kulp (2000) suggests a three stage "certification" path where they participate as a student in the course they will teach, participate as a teaching assistant in the course they will teach, and finally teach on their own, monitored by an experienced instructor or curriculum owner.

Formal staff development can be supplemented by the guidelines suggested above. A second effective way of supporting quality is by providing or enabling peer support mechanisms.

## Peer support

Peer support networks, normally supported online, provide a quick and effective support mechanism for tutors and thereby support quality. These private online discussion areas can be used by tutors to discuss common issues, problems and successes, and obtain technical support (Higgison, 2000). They can be used to disseminate tutor experiences throughout the community of practice and can be monitored and led by a module leader or co-ordinator to provide expert advice (McKenzie, 2000b).

Salmon (2000) describes the emergence of an online community of tutors, centred on discussion and information conferences. This provided an exchange of good practice, support, collaboration - and the flattening of communications with the full time course team. Salmon (2000) concludes: "we did not anticipate the importance and strength of these communications devices at first but they have proved an unexpected bonus".

Frequent face-to-face or virtual meetings can be scheduled to monitor progress (Finkelstein, 2000) and enable team communication and support (Pickering and Duggleby, 2000).

Peer support networks can also be a quality assurance process in themselves. Murray (2000) describes an Online Assessor and Workplace Trainer Network which is used to ensure that members meet their registration requirement to engage in on going professional development and to ensure consistency in their interpretation of industry standards, evidence presented and assessment decisions.

Quality in teaching online can be ensured by providing appropriate guidance and leadership, mechanisms that facilitate peer support networks and appropriate staff development.

## 2.5 Quality and accreditation

The QA procedures required for the accreditation process (Pickering and Duggleby, 2000) probably represent the most formal of the institutional quality requirements. In most institutions each learning program is put through the appropriate department/faculty/school QA process.

The aims of most accreditation procedures are similar, ie to ensure that the course (adapted from Juwah, 2000):

- meets the institution's internal Quality Assurance policies and procedures and is fit for purpose,
- has academic rigour;
- is practicable and effective,
- complies with any external quality requirements, for example the UK Quality Assurance Agency guidelines on distance learning education (QAA, 2001).

Gwynne and Chester (2000) describe a typical QA process for an innovative online learning course:

> "For the subject to be accepted within the culture of [the institution], it was subject to rigorous scrutiny to ensure it had incorporated a quality improvement process. In the planning stage, the subject had to be shown to have procedures for monitoring, evaluation, implementation and reflection on the process to be able to demonstrate improvement in student learning outcomes. At the end of the trial phase, the lecturers had to report on the effect of the subject on student learning outcomes, what was successful and what could be improved - in short, subject to critical quality analysis. As well, it was put to external scrutiny by the Director of Program Evaluation and Training Design. Since then, in each semester, quality improvement cycles are instituted according to the quality assurance guidelines prescribed by the university."

The QA process will only be effective if the findings and recommendations from the assessment, evaluation and teaching are acted upon. Any findings should be implemented in the next delivery of the course and incorporated into any new courses or modules. White and Moussou (2000) provide an example of a QA feedback process in action:

> "Each time we do this course, we keep notes during the course and then do a full read through and evaluation after the course to make improvements for the next session. This has refined our cybrary selections (volume becomes an "overwhelming" problem), refined our architecture (increased use of visuals and colour), our timing (ordering of topics and duration for each part of the course), and increased the amount of original writings we have done for the course delivery. It is an on going cycle of improvement."

Module and course accreditation procedures provide the formal institutional quality assurance framework for online learning, and help ensure the online learning provision is fit-for-purpose and meets the needs of the learners and the institution. It is essential that the findings from QA processes are incorporated into future courses provided by the institution ensuring that we build on success and eliminate mistakes to provide a quality learning experience for our students.

# 3 Issues

Quality Assurance is a difficult concept to define and implement. Everyone has their own idea of what quality is, whose responsibility it is and how it should be implemented.

## 3.1 Defining quality assurance

"Quality assurance is a difficult concept to discuss because everyone's picture of quality varies" (Ehmann-C) and this is particularly true of online learning. Each institution needs to define what it finds valuable about online learning and ensure its quality assurance policies and procedures support these. We have suggested some quality attributes of online learning and most of these focus on a student or learner centred approach to learning. Online methods offer the opportunity to integrate the quality mechanisms and processes into the design, development and delivery of the learning, minimising the administrative burden on teaching staff and providing information which is of direct benefit to them and their students.

## 3.2 Who is responsible for quality

Quality assurance issues are covered by a wide and diverse range of staff and groupings including quality assurance, institutional support and staff development, as illustrated by McKenzie (2000a):

> "The workshop will be an important mechanism for transferring pockets of knowledge…to a wider audience. High level sponsorship of that initiative is an important element in ensuring attendance. The current vision and strategic direction of the organisation has raised the importance of using technology to create flexibility in the teaching process. In addition, the college has instigated a working party on electronic teaching competencies, which will form the basis for staff appraisal and development. Both of these factors will help provide the momentum for greater usage and increasing acceptance."

Quality assurance needs to be addressed at four different levels:

- the institution and support infrastructure,
- the course (faculty/school/department),
- the module,
- the individual learning experiences of the students.

Identifying the appropriate quality procedures and processes, ensuring the appropriate people and groups are involved and that the feedback loops are effective are all essential pre-requisites to maintaining quality. Generally the more formal QA groups exist at the top levels and consist of a representative subgroup of the management along with internal and external evaluators. Their terms of reference include the (adapted from Wishart, 2000):

- management, oversight and development of QA processes,
- monitoring QA data and recommending action to ensure high quality courses are maintained.

Often these formal structures are missing because they have not yet been set up or a need has not been identified, as recorded by Radic (2000), for example:

> "Quality assurance and integration of the experiences in the culture of the institution should take place within a 'distance learning forum' at the level of the schools of languages. We do not have such a body at present.
>
> "A 'distance learning forum' should…discuss experiences, needs, future plans, procedures, funding, student related issues, advertising, global market approaches, commercial initiatives and any other issues involved."

Most institutions will require to review, modify and adapt their quality assurance policies and procedures to address the implications and needs of online learning as well as taking advantage of the opportunities it offers.

## 3.3 Appropriateness of existing QA procedures

Novel and innovative methods of course delivery pose additional difficulties in ensuring quality. In particular, the existing QA procedures and processes may be inadequate or inappropriate for these new methods. Often these innovations are dealt with outside the formal institutional QA framework in the initial stages while best practice is established. A typical approach to the integration of this work into the organisation is through a multi-faceted approach that includes (adapted from Rosie and Thompson, 2000):

(i) a pilot project on online learning,

(ii) a project or working group on online learning and pedagogy,

(iii) university funding for appropriate online learning projects with such projects being evaluated against defined criteria for success with learning, assessment and teaching.

Saunders (2000) argues that his institution has standard quality assurance procedures that are student centred and can be used, unchanged, for assuring the quality of online learning. Hird (2000) on the other hand has a contrasting point of view. She argues that "the development of institutional policy governing online courses poses a difficult paradox. On the one hand, it would be foolhardy for any institution to allow the development of online courses to proceed without any quality control that reflects the differences between online and face-to-face learning environments. Faculty, too, may need protection from potential problems, such as the notion that online courses are more cost-effective because of the potential for unlimited enrolment. At the same time, if the policy is developed before there is adequate collective experience with online teaching and learning, it may fail to account for new ways of learning made possible by the technology. In other words, the policy may be too deeply rooted in traditional classroom instruction to allow for creative use of the technology."

As an example she cites the unmoderated use of standard departmental course evaluation forms for obtaining student feedback about their experience of online learning. Hird (*ibid*) argues that the survey questions are geared towards "a face-to-face setting and a more conventional lecture/exam/paper mode of instruction". Her experience suggests that "although students find the constructivist learning approach and online environment valuable, it does not fit with what they have learned to expect…In other words, do students evaluate the [online] course based on the experience itself or within the context of their prior expectations (reinforced by the evaluation questions) of what a course should look like?"

Similarly Labour (2000) reports that his institution has decided not to formalise a quality assurance approach in its teaching/learning system:

> "Our aim at the moment is to conduct a series of action research studies to establish the needs and expectations of learners, tutors and the teaching institution. In our case these are not yet clearly spelled out and a system of quality assurance may cause more problems than solutions at the moment, as has been shown with the setting up of such a system (ISO 9002 type) in other related areas at our university." (Labour, 2000)

Current institutional quality assurance policies and procedures may be inadequate or inappropriate to ensure the quality of the online learning experience. Most institutions will experience a period of transition where pilot and trial online learning projects are conducted outside the formal QA procedures but under an agreed and flexible QA plan.

# 4 Examples of QA in Online Learning

Most institutions have their own quality assurance standards and any innovations, such as online learning, will have to comply with these (Murray, 2000). This ensures that innovations are subject to the same institutional scrutiny and evaluation processes as traditional provision:

> "All of the University… quality procedures that apply on campus are applied equally to distance learning. Materials are subject to internal and external review.
>
> "All assessment instruments are scrutinised by external examiners. A sample of all marking by first markers is moderated by second markers and then sent to external examiners for verification.
>
> "All modules are evaluated by students - or rather, all students on modules are given the opportunity to evaluate each module that they study." (Kennedy and Duffy, 2000)

This section includes a small number of examples of practice in online tutoring, drawn from the OTiS e-workshop, that relate to the focus of this chapter.

## 4.1 The quality assurance cycle

Quality assurance is a cyclic process of design, delivery, feedback and review at four levels: the institution and support infrastructure, the course, the module and individual learning experiences of the students. For example, if an institution wishes to introduce a new online course, some of the QA issues that must be considered are described below (adapted from Anderson-D, 2000):

1. Design — The institution wishes to reach as many people as possible. It feels that providing online courses is a cost effect and accessible means of interacting with these students.
2. Delivery — Realising that interacting in this way is a new learning environment they establish an online study skills "help desk". They provide guides on how students can become accustomed to the online environment. They ensure that all courses offered include directions on how to navigate the course and how to seek assistance.
3. Feedback — They ensure that students complete an evaluation of the online course that they have taken. This evaluation form would include questions that explored the usefulness of the student help desk, the online guide and administrative support as well as gathering information on the course itself. The information obtained would be collated and any consistent problems/success will be identified. This collated information will be segmented and distributed to the person(s) responsible for a particular area.
4. Review — Students evaluations will identify what areas of online learning are of concern and these will provide the basis for the next cycle.

## 4.2 Quality through research

In most OTiS case studies, online learning was a new and unknown sphere of education. Most approaches to quality assurance discussed by the participants and in the case studies involved some element of research. The two examples below illustrate some of the issues of concern in assuring a quality learning experience. Tammelin (2000) used her online course as a vehicle to undertake action research (see Chapter 5: *Evaluation*) to help her develop an understanding of the roles of the teacher in the online environment.

> "The three *Environmental Communication* mixed mode courses have also been an action research project for me. One of the research questions that I have examined based on the data collected during the three year period has focused on the roles of the teacher and the learner in a networked environment. As to the roles of the teacher, his or her role as a manager emerges as the key role. Among the other teacher roles are the roles of the producer, novice, expert, motivator, moderator, co-learner, team member, resource specialist and assessor. Even though it can be argued that the teacher identified above is not necessarily bound to a network based learning environment; many of the same roles may be apparent in any modern classroom where teaching and learning are in line with the constructivist conception of learning. However, in an online classroom, teachers need to be increasingly aware of these roles and they need to be capable of role switching in a flexible manner. (Tammelin, 2000)

Daele (2000) reports on an action research project where different strategies have been developed to analyse the learning of students and tutors and the costs of such systems,

> "Learn-Nett is an action research project and different strategies have been developed to analyse not only the learning of the students and the tutors but also the cost of a such system, the possible permanence of it in each institutional partner and to create a "provisional stability for change" (Charlier et al, 2000) in order to implement progressively ODL methods in traditional university courses.
>
> "From the research report, in the Learn-Nett project, the action of the tutor seems to greatly influence students' learning. Furthermore, this influence seems to work more at the affective level than at the «productive» one. The students need to be supported and to know that someone pays attention to their desires, requirements and expectations all the way through the project." (Daele, 2000)

## 4.3 Adapting existing procedure to exploit online approaches

Online methods can be exploited to modify existing institutional processes to meet quality assurance requirements in a flexible and transparent way, for example by increasing accessibility and accountability.

Creanor (2000) describes online staff-student committees that give distance learning students a greater voice in quality. Pickering and Duggleby (2000) provide the external examiner with online access to students and their assessments through online portfolios. Littlejohn (2000) records online discussions between tutors and tutors and students in a database that provides an indexed and searchable record for the external examiner.

## 4.4 Some guidelines

Kennedy and Duffy (2000) suggest some general guidelines for online and distance learning which contribute to a quality learning experience:

- Collaboration is the key to successful delivery of supported distance learning; that collaboration involves distance learning writers, technical support staff, librarians, Registry, teachers and administrators.
- The teacher in Higher Education has to adjust to this collaborative dimension; he or she may have been used to a more centre stage role in his or her teaching.
- The role of a co-ordinator or director is crucial: this is essential in a culture where the dynamics of delivering distance learning are still poorly understood.
- Experienced teachers with rudimentary IT skills can be successful distance learning teachers; the skills are primarily not technical but pedagogical.
- Academic leadership with a vision for distance learning is important in the initial stages; once the program has been initiated, maintenance skills become more important.
- It is worth surveying the attitudes to distance learning within the institution to get an idea of whether the time is right and the organisational culture is supportive or non-supportive of distance education.
- It is essential to give clear guidance to prospective students on the effort involved in, and the benefits to be realised from, distance learning; the message to the student who is about to get married is, “Don’t start a distance learning course now.”
- Online induction is an important preparation; it gives students and teachers the opportunity to come to grips not just with the technology but also with the dynamics and demands of distance education.
- Critical mass significantly influences the quality of the online discussion and debate. We have sometimes dipped below a critical mass, and persevered, but both students and teacher have found the experience less academically and socially fruitful. We suggest twelve as the minimum number for a group.
- Understanding the life and professional situation of the student is essential for responsive education that is both flexible and structured.
- The overall program should have enough flexibility to allow students to come on the program, to leave for a while and resume with ease.

# 5 Executive Summary

Quality Assurance is the responsibility of the institution and is essential to ensure that they evaluate their practices. QA also plays an important role in satisfying the demands of external scrutiny. QA procedures and systems should be built into the routine learning and teaching activities to minimise the overhead on tutors and learners, rather than inspected in.

Online learning is often perceived as a way of providing flexibility for institutions, tutors and learners. However it also raises a number of concerns relating to the quality of the learning experience, in particular student satisfaction and our ability to exploit the benefits offered by online learning.

Online methods are also perceived as contributing to the overall quality of the learning experience, in particular through recording the learning process, the ability to support different learner styles, access to multiple modes of delivery, flexibility in attendance, a transparent record of both tutor and student input, collaborative team teaching and an improved ability to research the educational process.

Online modules and courses are often subject standard QA processes, which are often ill-suited to assessing the quality of online learning. The appropriateness these procedures to ensure the quality of online learning provision was challenged. Specific indicators for measuring quality are considered including assessment of student learning, feedback from students, peers and external reviewers and institutional accreditation procedures.

Challenges were identified in assuring the quality of online learning including agreeing a common definition of QA, and knowing who is involved and identifying their responsibilities and roles.

The chapter concludes with some examples from the case studies of how existing QA procedures have been adapted and applied to ensure the quality of online learning provision.

# 6 Resources

**http://www.qaa.ac.uk/public/COP/COPswd/contents.htm**

The UK Quality Assurance Agency (http://www.qaa.ac.uk) has developed a code of practice relating to the accessibility of materials for students with disabilities as a guide for institutions.

**http://www.qaa.ac.uk/public/dlg/contents.htm**

Quality Assurance Agency (2001) Code of Practice on Open and Distance Learning, UK.

**http://www.cast.org/bobby**

Bobby is a tool that analyses web pages for their accessibility to people with disabilities.

**http://www.disinhe.ac.uk/ and http://www.techdis.ac.uk/**

The UK Joint Information Systems Committee has funded two projects to assist with ensuring access to online resources and learning for people with disabilities:

- DISinHE (Disability and Information Systems in Higher Education).
- TechDIS (Technologies for Disabilities Information Service).

**http://www.w3.org/WAI/**

International guidelines for online sites available from the W3C Web Accessibility Initiative.

# Appendix A References and Sources

## A.1 Conference sources

### OTiS Case Studies

**The case studies quoted in this chapter are listed below and are published in:**

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