A Toolkit for Harnessing Quality Assurance Processes for Technology Enhanced Learning

Purpose of the Toolkit
The Toolkit provides a framework and a set of tools that are based around standard quality assurance procedures in higher education which can be used when employing technology in teaching, learning and assessment (Technology Enhanced learning - TEL). It is designed to address the broad continuum of patterns of modes of study in TEL courses from blended courses to fully online distance courses.

The Toolkit aims to encourage a shift from a culture of quality assurance and reporting to one of quality enhancement and course improvement. It supports practitioners in

- ensuring that all aspects of the course design, implementation and maintenance processes which may be impacted by the use of TEL are addressed by their institution’s quality assurance procedures; and
- harnessing the potential of the quality assurance procedures to drive forward the enhancement of the students’ learning experience through the use of technology.

How to use the Toolkit
This Toolkit is intended to be used to aid discussion during the various stages in the design, development and quality assurance and quality enhancement of TEL programmes and courses. It is assumed that those using the Toolkit have access to their institutional Quality Assurance procedures and institutional Course Design guidelines as this Toolkit builds on those institutional procedures and guidelines and looks at what modifications may need to be applied when developing programmes and courses using TEL.

Institutions will deal with the process of development of courses and quality assurance and enhancement in somewhat different ways, including differences as to which elements are dealt with centrally and which are devolved to course teams. The Toolkit does not therefore always distinguish clearly between institutional and course issues, if the Toolkit is being used by those with institutional responsibilities then they may need to devolve some of the decisions to course teams, on the other hand course teams may identify issues that can only be dealt with at an institutional level and will wish to refer these issues to the relevant bodies within their institution.

One of the important changes that comes along with the use of TEL is that staff roles change and it is important that all staff involved with courses are involved in the development and the QA/QE processes. IT specialists, learning technologists, academic literacy support, librarians and administrators all need to be involved.

Administrators also often play a significant role in TEL courses (for example they sometimes have responsibility for the maintenance of the VLE presence) and so they also need to be more involved in the development and QA/QE processes than has been the case in the past.

The Toolkit is divided into three sections.

STAGE 1 PLANNING AND DESIGN - asking whether the necessary preparations have been put in place;

STAGE 2 MONITORING OF IMPLEMENTATION - checking how the course is actually working in practice;

STAGE 3 REVIEW AND REDESIGN - looking back at the running of a programme and deciding on changes for the future.

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1 We have chosen to use the phrase ‘Technology Enhanced Learning’ in this Toolkit for convenience, and recognise that institutions may well use other terms – including e-learning, blended learning, on-line learning, open and flexible learning – which have significant overlaps with this concept.

2 Whilst the concept of ‘Programme’ is perhaps clearly understood in the UK education system as a defined curriculum route that leads to a named award, smaller units of study are variously described as courses, modules, units and we will use the general term ‘course’ to refer to these. In much of the document we have gone one step further and used the word ‘course’ to refer to both Programmes or Courses for the sake of simplicity, since most of issues raised in this Toolkit apply equally at both levels.
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Some issues may appear several times in different sections as we look at the planning, implementation and review of these important issues. Within each section we look at the questions that the use of TEL raises for each QA procedure within that section, then suggest some possible actions to address these concerns and then provide examples of what others have done, relevant resources and research that may help in addressing these concerns. The questions are issues that we believe will need to be considered in all contexts, but the actions are suggestions for relevance which you need to assess within your own context. The lists of resources are incomplete as there are a number of places where we have not so far been able to identify useful resources; this is still work in progress. We have indicated where we think new case studies could usefully be developed. It would also be useful in some cases for local exemplars to be indicated in the Toolkit and we encourage users to adapt the Toolkit to suit their local circumstances in this way.

Some users will wish to use the whole Toolkit but others may only wish to address specific aspects, and for that reason we present a list of the contents of the Toolkit below to enable you to access the most relevant sections for your purposes:

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## STAGE 1: PLANNING AND DESIGN

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</table>
| 1.1 Proposal of New Academic Award³ | Is there a pedagogic case for using TEL?  
Is there a business case for using TEL?  
Is there an appropriate technical and administrative infrastructure to support the proposed use of TEL?  
Is there any intention to use technologies not controlled by the institution or a collaborating organisation (e.g. Web 2.0 technologies)?  
What are the planned mechanisms of student engagement?  
Are there any other issues arising out of proposed mechanisms of student engagement e.g. timing, cultural issues, etc? | Ensure that the Approval Panel has members with appropriate expertise in TEL.  
Develop pedagogic case for using TEL.  
Develop business case for using TEL.  
Complete market research to determine likely demand for the course with the proposed mode of student engagement.  
Complete a technology specific risk assessment (e.g. including privacy, ethics and IPR issues).  
Examine environmental impact of proposed technology use.  
Consider use of Open Educational Resources.  
Determine licensing of the materials produced.  
Consider whether partnerships/collaborations are necessary in order to support the course. | Case studies for developing a pedagogic case need to be developed  
Case studies of Approval Panel membership need to be developed  
Example approval forms:  
- [University of Cardiff - approval of a new course](#)  
- [University of Derby - approval of new course](#)  
- [University of Hertfordshire - approval of new course form](#)  
Example risk assessment:  
- The [University of Derby Development Approval Document](#) includes a section on risk assessment.  
General guidance on risk management:  
  - [JISC infoKit Risk management](#)  
This infoKit is a supplement to the Project Management infoKit and has a focus on managing risk as part of a project approach. It does however also look at institutional risk management in more general terms and there is a section specifically on the risks associated with e-learning.  
  - [e-Safety (JISC Legal)](#)  
Institutions have both legal and statutory duties to safeguard the welfare of all learners when making use of ICT. There are a variety of legal issues to consider within the e-safety context, including; cyberbullying, harassment, defamation, hosting liability and data protection. This web-site will help institutions address these issues.  
General guidance on use of Web 2.0: |

³ There is a balance to be struck between the issues to be considered at the time of the initial proposal and those considered at the validation stage. Institutions will make this balance in different ways, and the division we have suggested is one that seems appropriate for a many institutions, but you may wish to divide the issues differently.

⁴ Sometimes this may lead to rejection of the proposed course but identification of other course formats – such as short courses – that may be viable propositions.
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<td>Ensure reliability of partners/collaborators/software.</td>
<td>• University of Edinburgh: Web 2.0 guidelines</td>
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<td></td>
<td>Determine whether staff have the necessary skills for the course, or whether staff development opportunities exist to provide these skills.</td>
<td>This offers guidance to staff on some of the issues which need to be considered before using Web 2.0 non-University services for University purposes. The document is intended to be helpful for all staff, including researchers, teaching staff and support staff.</td>
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<td>Ensure that institutional guidelines on the use of Web 2.0 technologies are in place.</td>
<td>Guidance on the use of OER:</td>
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<td>Consider whether the nomination of a specific individual with TEL expertise from within the central learning development unit to the course development team would be an appropriate form of support. This person could support the course development and help to prepare the case for validation.</td>
<td>• JISC OER Infokit</td>
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<td>• University of Edinburgh: Web 2.0 guidelines</td>
<td>Overview of issues and solutions for using OER’s</td>
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<td></td>
<td>Provide course design guidelines that cover the range of uses of TEL likely to be used within the institutions together with good models and templates.</td>
<td>Related research and development:</td>
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<tr>
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<td>Ensure there is guidance on facilitation of online group work.</td>
<td>• The PALET project – Programme Approval Lean Electronic Toolkit - Cardiff University</td>
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<td>General guidance on quality assurance for TEL course design:</td>
<td>PALET is one of twelve projects, funded by the JISC under the Curriculum Design Programme. The project aims to develop a revised programme approval process, which will create a more efficient and flexible approach to the design of new curricula.</td>
</tr>
<tr>
<td>1.2 Course Design</td>
<td>General</td>
<td>How should existing course design processes be modified for TEL courses? Is there an equivalence of</td>
<td>• Promoting Realistic Engaging Discussions In Curriculum Teams – City University London</td>
</tr>
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<td>6</td>
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<td>The project focus is to develop a new curriculum design process that is efficient, flexible, focuses on enhancing educational development and the student experience and, is supported with responsive technology to accommodate existing curriculum models.</td>
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5 We have chosen to treat Course Design as a QA process. Course Design is expected to follow the Course Design guidelines in place in an institution, and it is ideal if the documentation for the validation process is produced as a by-product of the course design process.
### QA process

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| learning outcomes when considering different modes of study? | Ensure equivalence of learning outcomes. Ensure that students studying online develop the same values/skills as those studying face-to-face, and they have the opportunity to develop all aspects of professionalism. | • Quality Matters  
Quality Matters (QM) is a faculty-centred, peer review process designed to certify the quality of online and blended courses.  
**General guidance on TEL course design**  
• Effective use of VLEs  
A JISC infoKit to enable tutors to make informed decisions, based on sound educational principles, about the use of technology in their teaching and their students' learning when using a VLE.  
• Effective practice in a digital age: A guide to technology-enhanced learning and teaching  
Whilst quite general in scope, this JISC publication is a good introduction for staff new to TEL  
• Pedagogical templates for elearning  
A report which describes a series of pedagogic templates for the integration of technology into teaching and learning, produced by the Institute Of Education  
**Example institutional approaches to course design:**  
• University of Hertfordshire CABLE project  
TEL change management workshop for departments  
• University of Leicester Carpe Diem  
TEL change management workshop for programme teams  
• Assuring Quality & Standards in Online Learning (Edinburgh Napier University)  
A useful QA based focus to online module development  
**Related research and development:**  
• JISC – The Design Studio  
The Design Studio is a developing toolkit which draws together a range of existing and emergent resources around curriculum design and delivery and the role technology plays in supporting these processes and practices. The |
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| **Involvement of students in course design**<br>What is the extent and nature of the involvement of students in the design and trialling of TEL courses? | Ensure that the student perspective is taken into account in the design process. Consider trialling any particularly novel or untried TEL approaches with students before making them a standard part of the course. | Related research and development:  
• [Students as Agents for Change in Learning and Teaching](#)<br>Linking the Students Union and student staff liaison committees to produce evidence based change in practice  
• [In their own words: Exploring the learner's perspective on e-learning (JISC)](#)<br>This publication provides a useful introduction to the first stage of JISC-funded research into learners’ experiences, beliefs and motivations in relation to e-learning.  
• [Learners talking about their experiences of using technology (University of Northampton)](#)<br>A series of themed and categorised video and audio clips of learners talking about their experiences of using technology when they learn.  
• [Student Perspectives on Technology – demand, perceptions and training needs](#)<br>To inform the work of the Online Learning Task Force, HEFCE commissioned the National Union of Students to undertake research into the demand, perceptions and training needs of students in both further and higher education. | Studio will provide access to project outcomes and outputs from the JISC Curriculum Design and Delivery programmes as they are developed and will continue to be sustained as a community resource after the programmes finish |
| **Assessment**<br>Is the use of e-assessment (whether summative or formative) appropriate in this course? If e-assessment is used | Consider the use of e-assessment in all courses (whether there is other use of TEL or not). If e-assessment is to be used then consider staff development on item design and objective testing. | Example guidelines on assessment:  
• [University of Derby: Programme Design: Assessment Design and Practice](#)  
• [University of Nottingham: Quality Manual e-assessment](#)  
• [University of Sunderland: Guidance on e-assessment (Quality Handbook)](#) |  

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[1] Students as Agents for Change in Learning and Teaching
[2] In their own words: Exploring the learner's perspective on e-learning (JISC)
[3] Learners talking about their experiences of using technology (University of Northampton)
[4] Student Perspectives on Technology – demand, perceptions and training needs
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|            | then are there robust measures in place to ensure access, security etc? Should online submission of all coursework be allowed? Should it be a requirement? | Ensure that students have the opportunity to gain experience of the e-assessment techniques. Provide guidance on the assessment of technology supported group work and on collaborative assessment if these techniques are used. Provide guidance on online submission of coursework if this is adopted. Develop specific QA processes for e-assessment, ensuring standards compliance (See BSI/ISO Standards p. 22). In particular: | • **REAP**  
The ‘Re-engineering Assessment Practices in Higher Education’ project devised principles of good feedback practice based on a self-regulation model and showed the benefits of their application using technology across a range of disciplines.  
• **Scoping a vision for formative e-assessment (JISC)**  
This report is intended for software developers looking to integrate formative e-assessment with existing e-learning technologies and other post-16 practitioners using formative e-assessment, in order to support them in making more effective use of formative assessment.  
• **Report on eAssessment Quality (JISC)**  
A report on the quality assurance of e-assessment in Higher Education (HE) contexts both in the UK and overseas. The report includes case studies, consolidated conclusions, consolidated findings, and recommendations for future JISC activities to support uptake of e-assessment.  
• **Effective Assessment in a Digital Age**  
Effective Assessment in a Digital Age is aimed at those in higher and further education who design assessment and feedback for their learners. The guide draws on recent JISC reports and case studies from different contexts and modes of learning to explore the relationship between technology-enhanced assessment and feedback practices and meaningful, well-supported learning experiences. |

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<td>• Test the system prior to use to ensure functionality • Trial all e-assessment</td>
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| Plagiarism | Might the use of TEL encourage poor academic practice and plagiarism in certain circumstances? | Provide guidance on good assessment design that reduces the incidence of plagiarism. Review the standard measures that are in place to • support good academic practice • detect plagiarism and academic misconduct • discourage plagiarism and academic misconduct Ensure that these adequately address the ways in which assessed work is produced in TEL courses. | Case studies of good assessment design need to be developed

**General guidance:**
- University of Bedfordshire: Academic Discipline Procedures (see Section 4)

**Resources:**
- Plagiarismadvice.org
  Plagiarismadvice.org promotes best practice in addressing plagiarism.

| Digital literacies | Do students possess the necessary digital literacy skills to make effective use of the educational uses of TEL within the course? | Develop awareness of students’ digital literacy at the point of entry, e.g. through surveys. Continually review learners’ use of technology in their everyday and professional practices. Identify support that can be offered to students who have not yet developed their digital literacy to sufficient levels Provide students with a digital | Resources:  
- Digital Literacies Pilot Materials (LLiDA project)  
These materials are designed to support staff, curriculum and institutional development in response to the digital literacies agenda. The materials are freely available for adaptation, printing, piloting etc.  
- LLiDA Learning Literacies for a Digital Age : Student materials  
Many of the activities listed and described in our Best Practice Examples have resulted in student materials that may be available to inspire, be used or repurposed. This page attempts to pull those together and also points to other resources which have been developed to support learners with their digital |
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<td>literacy programme, which support learners in their use of their own technologies and the development of effective strategies for learning with technology. Use assessment and feedback to encourage innovation in learners' approaches to study, rewarding exploration as a process.</td>
<td>literacy.  • CAPLITS A centre supporting the development of digital and other literacies at the Institute of Education. <strong>General guidelines:</strong>  • Audit Reflections Work from the Learning Literacies for a Digital AGE (LLiDA) project on institutional audits.  • Write-on: On-line Support for Academic Writing: a Synthesis of Research and Current UK Projects An HEA funded synthesis of online support for academic writing. <strong>Related research and development:</strong>  • Learning Literacies for the Digital Age (LLiDA project) Learning Literacies for a Digital Age (LLiDA) project web-site. This project argues for a broadening of the ideas of 'information skills' or 'information literacies'. The convergence of communications and information media, the rise of user-owned technologies, user-created content, and widespread social networking practices imply new kinds of expertise, and the project defines the totality of this expertise as 'the range of practices that underpin effective learning in a digital age'.  • Thriving in the 21st century: Learning Literacies for the Digital Age (LLiDA project) The report of the Learning Literacies for a Digital Age (LLiDA) project.  • The Seven Pillars of Information Literacy - SCONUL (Society of College, National and University Libraries) This is a widely discussed model of information literacy.  • Information behaviour of the researcher of the future A British Library/JISC study into patterns of digital literacy in Higher Education.</td>
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| **Student Support** | What kinds of support do students require? Is the information provided to students about the use of technology in the course appropriate and up to date? How are accessibility and inclusion catered for in the use of TEL? | Identify who has overall responsibility for ensuring appropriate student support. Identify the different kinds of support that are needed: technical support, pedagogic support, accessibility, etc. Ensure that there is appropriate co-ordination between them. Ensure there are identified points of contact and procedures established for students to access support. Produce guidelines for both staff and students detailing when staff are available and typically how long students should expect to wait for a response. Provide guidelines for accessibility of materials. | **Case studies about student support need to be developed**  
**Example guidelines on accessibility:**  
- Enabling access to courses (Institute of Education, University of London)  
- LexDis (University of Southampton)  
**General guidance:**  
- JISC TechDis  
The JISC TechDis Service is an educational advisory service, which supports the education sector in achieving greater accessibility and inclusion through providing expert advice and guidance on disability and technology. |

| **Teaching staff** | Is there adequate support for teaching staff in developing approaches to the use of TEL? | Ensure there is institutional acknowledgement of the length of time that it takes to develop and support good TEL practice. Include specific reference to TEL in staff appointment, induction and development. Ensure there is access to skills development activities for all staff having a role in supporting e-learning, including staff in academic, support and technical roles. | **General guidance on skills needed by tutors:**  
- Institute of IT Training, e-tutor competence framework  
A guidance document on the Competency Framework for e-Tutors – aimed at commercial tutors and FE, but may be useful for HE as well.  
- Professional Standards Framework for Teaching and Supporting e-Learning in Higher Education Example for Standard Descriptor ½ (University of Sunderland)  
An adaptation of the UK professional teaching framework to incorporate use of TEL  
**Example skills audit:** |
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<td>Provide handbook for practitioners dealing with TEL issues. Consider any issues arising from the use of ancillary staff (e.g. graduate students) to support TEL, for example in moderating on-line discussions, particularly where their pay and conditions of service differ from full-time staff.</td>
<td>• Simple skills audit tool (Derby University) Based on a list of derived tutor competences for supporting online learning. <strong>Example staff development courses:</strong> The following links provide examples of staff development courses in the area of TEL. They are offered as examples of possible content, similar courses are offered in a wide range of institutions and may be offered in your own institution already SEDA courses • Supporting learning with technology • Embedding learning technologies Oxford Centre for Staff and Learning Development, Oxford Brookes University • Teaching online courses • Preparing online courses • Extending your online course</td>
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<tr>
<td>Technology</td>
<td>What technologies will be used, and what role will they play in the course?</td>
<td>Ensure that the suggested uses of technologies are practical and appropriate. Review proposed uses of Web 2.0 technologies against institutional guidelines on their use.</td>
<td><strong>Resources:</strong> • JISC – The Design Studio The Design Studio is a developing toolkit which draws together a range of existing and emergent resources around curriculum design and delivery and the role technology plays in supporting these processes and practices. The Studio will provide access to project outcomes and outputs from the JISC Curriculum Design and Delivery programmes as they are developed and will continue to be sustained as a community resource after the programmes finish • Learning Design Support Environment This project is constructing an interactive Learning Design Support Environment (LDSE) to scaffold teachers’ decision-making from basic planning to creative TEL design. It has developed prototype tools that can assist in judging the pedagogic suitability of technology choices. • The Phoebe Project This project developed a prototype online planning tool that offers users both flexible and guided paths through the planning process and encourages them to explore new approaches and tools in their pedagogy. Specific guidance on</td>
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#### QA process | TEL Questions | Actions to take | Good practice/case studies/resources
--- | --- | --- | ---
| **1.3 Validation** | **General**  
Is the composition of the design team appropriate for the particular use of TEL proposed?  
Is there evidence of consultation with students?  
Does the proposal provide evidence that the course design has followed (or will follow) the TEL specific guidelines for course design (as outlined in section 1.2 above)? | Ensure that the Validation Panel has members with appropriate expertise in TEL.  
Include commitment of relevant units (e.g. Library, Computing, Learning Technology.).  
Ensure that the ways in which the different specialisms involved in the course design will work together are clear and explicit.  
Ensure equivalence of experience for all students on the course. | **Examples of possible additional validation criteria:**  
- Explicit formal course management procedures, covering both the coordination of the various processes involved in the preparation and running of the course and the coordination of course teams including indication of role of administrators, and of who is responsible for the quality assurance of the course. These procedures should include arrangements for obtaining feedback from tutors, administrators, technical staff etc (particularly where these staff are either working part-time or at a distance from the IOE).  
- A plan for the evaluation of the first run of the course and possible modification before second run  
- Trialling of any new teaching approaches and technologies before the first offering of the course
| **IPR**  
Have all IPR issues with respect to access to materials been considered? | Provide guidance to staff on what IPR issues need to be taken into account – in particular taking into account that in purely on-line courses the students could be situated in any country. | Case studies on IPR issues need to be developed

The use of technologies can be found at: [Teaching and Technology Guidance](#) and [Map of technologies to activities](#).

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**Teaching staff**  
Do the staff who will teach on the course possess the necessary skills for the effective implementation of TEL (e.g. how to design and support online activities?)  
Ensure appropriate initial staffing.  
Ensure that staff development activities take place through drawing up of a staff development plan signed off by management.  
Consider succession planning, at least as part of the risk

- Indication of staff experience of, or training in, use of on-line teaching methods  
- Explicit arrangements for tutor peer observation (or some procedure which meets the same objectives within this context).
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<td>Is the proposed course overly dependent on the skills and enthusiasm of TEL innovators, and will it be sustainable if they move on?</td>
<td>assessment</td>
<td></td>
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<tr>
<td>Digital literacies</td>
<td>What steps have been taken for this course to support the digital literacies of students?</td>
<td>Ensure that effective support is in place.</td>
<td>• Indication of appropriate student induction/training or of a pre-requisite of adequate previous experience</td>
</tr>
</tbody>
</table>
| Student support | Are there transparent support structures for students relating to the use of the technology in place? | Specify how and who will support students in the full range of possible enquiries, and how this support structure will be coordinated. | • Explicit acknowledgement of the needs of students with disabilities and any arrangements made for their support  
• Explicit arrangements for obtaining feedback from students and for ensuring student representation (or some arrangement which meets the same objectives within this context). |
| Technology | Do staff and students have reliable access to the technology? | Ensure that a robust technology support framework for the actual proposal is in place and that guidelines on the use of Web 2.0 resources have been abided by. | • A statement of the role of technology in the course, and how it is expected to enhance the student experience. Where appropriate this should include a worked out plan of on-line activities.  
• If using the institutional VLE then Computing Services have been/will be informed  
• If using a VLE other than the institutional VLE then information be provided to enable the Validation Panel to determine that this VLE meets minimum requirements in terms of access, reliability, backup, and support as appropriate to the course and student group  
• Relevant sections of the Risk Analysis that refer to access to resources have been completed. |
<p>| IPR | Ensure that guidance has been provided to staff on IPR issues. |                                                                                                  | • Consideration of issues concerning rights of access to materials made available on-line |</p>
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| 1.4        | Publication of course information | Does the public information about the course set out the modes of study, and the implications of this for students in terms of expectations as to how they will study and the required access to technology? | Ensure marketing materials are correct and provide sufficient detail about the course, the expectations on the students and the technology requirements. Evaluate these materials with students and staff groups. | • Online Study and online degrees - [The University of Derby](#)  
This is an example of information provided on available courses, modules, assessment and fees. The site also includes links to virtual open days and other sources of information about online study. |
# STAGE 2: MONITORING OF IMPLEMENTATION

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</table>
| 2.1 External Examiners | What is the appropriate level of access for external examiners to student coursework, online materials etc.?  
How will the external examiner access students’ work, course content, assessments, e-portfolios etc.?  
What experience do the external examiners have in using TEL?  
Do external examiners get an opportunity to discuss the learning experience with students on TEL courses?  
Do external examiners for online courses have adequate opportunity to viva students? | Engage in dialogue with external examiners regarding online pedagogy and justification for its use in this course.  
Set out expectations regarding the examiners’ access to on-line materials and to students, and regarding feedback.  
Provide guidance for external examiners to enable them to access to online materials  
Consider the extent to which external examiners should be expected to take advantage of the potential openness of TEL courses in order to provide guidance and to pick up on potential difficulties, thus undertaking more of a quality enhancement role. | Case studies on external examiners in TEL courses need to be developed  
No appropriate resources related to the role of External Examiners in TEL courses have been identified.  
Resources:  
The Higher Education Academy has collated outputs from research and development work on ‘enhancing the support for external examining in general, see External Examining. |
| 2.2 Peer Review    | Is peer review of teaching in TEL courses required?  
Is peer review of online materials required?  
How is good practice in TEL courses shared and disseminated?  
How do the procedures for peer review for TEL courses relate to those for face to face courses? | Consider the use of Peer-to-Peer Reflection on Pedagogical Practice (PROPP) model.  
Peer review needs to be systematic and formal, but not external.  
The purpose of Peer Review is to share good practice and enhance practice through sharing with other tutors. TEL may support ways of doing this that are better | Resources:  
• Peer observation of teaching in the online environment (UCL)  
This report describes a developmental approach to peer review - the use of Peer-to-Peer Reflection on Pedagogical Practice (PROPP) meetings as an approach to peer review of teaching.  
• Collaborative Observation Online (University of Hull)  
This site describes a model for online peer observation - Collaborative Observation Online - which is aligned with existing institutional policies and processes regarding peer observation and with existing good
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<td>than teaching observation. Ensure a coordinated approach to peer review including a dissemination plan. Consider allowing online access to as many components of the course as possible to all of the team. Consider the relationship of peer reviewing to mentoring. Mentors need TEL experience. Consider use of ‘super-tutors’.</td>
<td>practice for peer observation as reflected in the literature.</td>
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<tr>
<td></td>
<td></td>
<td><strong>References:</strong></td>
<td>• Bennett, S and Barp, D (2008) <em>Peer observation - a case for doing it online</em>. Teaching in Higher Education, 13, 5 : 559 – 570</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This paper considers the challenges of online peer observation including what is observable online and how the process is managed and structured.</td>
<td>• Bennett, S and Santy, J (2009) <em>A window on our teaching practice: Enhancing individual online teaching quality though online peer observation and support. A UK case study</em>. Nurse Education in Practice, 9, 6: 403-406</td>
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<td></td>
<td></td>
<td>The paper present a case study outlining the process involved in an online peer observation.</td>
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<td><strong>Example review form for materials:</strong></td>
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<td></td>
<td>• Review of online and distributed learning (ODL) material - internal advisor report form (University of Derby)</td>
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<td></td>
<td></td>
<td><strong>General guidance on peer observation:</strong></td>
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<td>• ESCALATE resources - Peer Observation</td>
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<td>These guidelines were been prepared as a starting point for education departments wishing to undertake peer observation of learning and teaching.</td>
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### 2.3 Programme and Course Team Meetings

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<th>Who should attend the team meetings? In particular should learning technologists attend?</th>
<th>Agree communication channels and frequency of meetings. Ensure that meetings (whether on-line or face to face) take place, that agenda are drawn up, meetings are properly minuted, and that agenda and minutes are made available on-line for ready access by all the team. Provide appropriate advice to</th>
<th>Case studies of course team meetings need to be developed</th>
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<td></td>
<td>Is the distribution of responsibilities within the team clear particularly as regards aspects of the technological support? Does the whole team meet face-to-face? If not then is this a</td>
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## A Toolkit for Harnessing Quality Assurance Processes for Technology Enhanced Learning

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<td>problem with respect to co-ordination and communication? Are the views of team members who are not on-campus adequately represented? Do team leaders have management and coordination skills and experience relating to courses utilising learning technology?</td>
<td>team leaders relating to the specific needs for coordination of distributed teams. Consider the relationship between the Course Team Meeting and the Annual Monitoring process and how the information from one feeds into the other.</td>
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### 2.4 Evaluation

| Does the use of TEL have any implications for the kinds of evaluation that are being carried out, or when are they carried out? Should there be an evaluation of the use of technology-rich learning spaces? Is use to be made of data sets collected automatically by the VLE to draw conclusions about the value of particular resources to students? Will on-line evaluation techniques (such as online surveys or focus groups) be used? Is there a danger that those who had difficulty in participating in the course are also likely to find it difficult to participate in the evaluation activities? Should the staff involved in the teaching and support activities also participate in the evaluation? | Consider the use of embedded evaluation. Make decisions about what kinds of evaluation are needed, when and why. Examine confidentiality of proposed means of collecting evaluation data. Determine any uses of automatically collected data sets: • Interrogation of online discussions to identify patterns of participation • Compare participation data with demographic data to explore questions of diversity and equality • Examination of discussions to identify successes or issues in relation to students’ experience • Use time-stamped access information to inform decisions about levels of support, turn-around on enquiries and so on. Determine implications of the use | Resources: Embedded evaluation  
• *The development of methods for eliciting learner narratives within a framework for embedded evaluation for fully online distance learners*, Caroline Daly, Centre for Distance Education, End of Project Report. 
[See also: Daly, C., Pachler, N., Pickering, J. and Bezemer, J. (2007) *Teachers as e-learners: exploring the experiences of teachers in an online professional master's programme*, Journal of In-service Education 33(4), 443-462]  
Explores the idea that an evaluation activity in an online course can also enhance learning, rather than being seen as an intrusive extra  
• Evaluation of e-learning courses  
This document provides a review of evaluation resources available for practitioners which are applicable to online and mixed-mode courses with the aim of facilitating the integration of evaluative practices into e-learning courses. Includes consideration of embedded evaluation.  
• Evaluation - Planning and Designing Technology-Rich Learning Spaces  
This is a section of a JISC infoKit on technology-rich learning spaces which both outlines a process and suggests questions that can be asked in relation to their extensiveness, efficiency, effectiveness, |
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<td>activities?</td>
<td>of these techniques for staff workload.</td>
<td>service quality, impact and usefulness.</td>
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<td>• <a href="#">SEVAQ+</a></td>
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<td>SEVAQ is a self-evaluation tool for quality in e-learning in VET and HE. The tool supports the construction of questionnaires, offering both a core of questions and customisable evaluation possibilities.</td>
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<td></td>
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<td>• <a href="#">The LTDI Evaluation Cookbook</a></td>
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<td>A set of data collection techniques as a series of ‘recipes’. Suggestions are made about practical concerns such as how time intensive collection and analysis are likely to be.</td>
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<tr>
<td>2.5 Student Representation</td>
<td>How are the normal procedures for the appointment of student representatives and the participation of these representatives in course committees modified if a significant proportion of the students are studying off-campus for a significant proportion of their study time?</td>
<td>Consult the Student Union about appropriate forms of representation.</td>
<td>Case studies of student representation need to be developed</td>
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<td>Consult more open methods of consultation with the student group as a whole rather than through a representative.</td>
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<td>Create a staff-student liaison discussion forum.</td>
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<td>Consider use of technology to facilitate participation in course committees by students who are off-campus at the time of the meeting.</td>
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<td>2.6 Monitoring Student Support</td>
<td>Is the information about the use of TEL in their course provided to students appropriate and up to date?</td>
<td>Ensure that the demarcation between different support mechanisms (e.g. for specific subject support, general learning support and technical support) is clearly identified and that students know who to go to for what</td>
<td>Case studies of monitoring of student support need to be developed</td>
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<td></td>
<td>Is appropriate learning support related to TEL in place?</td>
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<td></td>
<td>Do students have an identified support contacts for subject support, general learning support and technical support? How are students helped to identify the appropriate source of support for specific issues?</td>
<td>Consider the identification of a single support person who can direct students to appropriate support as needed. Publish information on when support staff are available and typically how long they should wait for a response. Institute monitoring of responses by all support staff to students’ requests for support and ensure that this monitoring is reported appropriately.</td>
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<td>2.7 Monitoring of technical and management systems, including student data</td>
<td>What procedures are in place to ensure the required ongoing availability and performance of essential technological systems? Do the institutional management systems provide adequate performance data (e.g. retention and progression rates) and demographic student profiles in order to provide crude measures of programme effectiveness, enable trends to be identified and highlight areas that need to be addressed? Do the institutional management systems allow access tracking, and assignment submission data and grading data to be accessed and analysed to enable problems to be identified and to highlight</td>
<td>Ensure that there is a clear mechanism for publishing information about availability and performance of technological systems. Ensure there is an agreed system support schedule and that procedures are in place to minimise downtime. Ensure that systems are in place to provide the necessary data for the tracking processes which it is desired to implement.</td>
<td>Case studies of monitoring of technological and management systems need to be developed</td>
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<td>student support needs?</td>
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<td>(These last two considerations apply to courses, but particular attention to them is needed when TEL is introduced since it may give rise to new problems and identify new needs).</td>
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### STAGE 3: REVIEW AND REDESIGN

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</table>
| **3.1 Annual Monitoring** | Do management have an understanding of key learning technology problems and issues that can arise, and are there adequate processes in place to identify them when they occur?  
Is the annual monitoring process effective in bringing about quality enhancement including the consideration of the role of technology within courses?  
Is there appropriate institutional oversight of online courses that have little or no face to face element? | Consider instituting appropriate staff development for those managing the annual monitoring process.  
Organise annual monitoring as a reflective review of the course, rather than as a form filling exercise.  
Ensure annual monitoring contains procedures for identifying key learning technology problems and issues.  
Ensure that those responsible for implementing changes are clearly identified.  
Review the course experience in light of the risk analysis produced during the course design. | Case studies of annual monitoring need to be developed                                                                 |
| **3.2 Periodic Review**   | Does the review fully address the implications and issues associated with the use of TEL?  
Have aspirations relating to the equivalence of learning outcomes when considering different modes of study been fulfilled?  
Does the review explore new possibilities for the use of technology and student experiences of technology? | Ensure that the Periodic Review team includes appropriate expertise to review the TEL aspects of the course.  
Ensure that the Periodic Review identifies any opportunities to enhance courses through the use of technology in ways in which it is not presently being used in the course  
Renew the Risk Analysis in the | Resources:  
- University of Reading Pathfinder Process  
This site describes a system of support for Periodic Review which considers the role of TEL. The approach includes the review of teaching and learning; the support of curriculum re-design where appropriate; the appropriate embedding of e-learning; the inclusion of the student voice; the improvement of institutional support and alignment with institutional strategies.  
- University of Reading course review tools  
These tools support the Periodic Review procedures. They support the consultation with Schools, course data gathering and review, reflection, |
light of experience of the course. consolidation, enhancement and evaluation and work within the focus (e.g. TEL, assessment etc) of the Periodic Review.
A Toolkit for Harnessing Quality Assurance Processes for Technology Enhanced Learning

BSI/ISO STANDARDS

For e-learning:

• BS ISO/IEC 24751-1:2008 Information technology -- Individualized adaptability and accessibility in e-learning, education and training. Framework and reference model
• BS ISO/IEC 24751-2:2008 Information technology -- Individualized adaptability and accessibility in e-learning, education and training. ‘Access for all’ personal needs and preferences for digital delivery
• BS ISO/IEC 24751-3:2008 Information technology -- Individualized adaptability and accessibility in e-learning, education and training. ‘Access for all’ digital resource description

For e-assessment:

• BS ISO/IEC 23988:2007 Information technology -- A code of practice for the use of information technology (IT) in the delivery of assessments

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Helen Barefoot, Mark Gamble, Dave O'Hare, Judith Kuit, Harvey Mellar, Barbara Newland, Maria Papaefthimiou; Martin Oliver; Eileen Webb

The good practice and evidence which underpins this Toolkit is based on the work of the QAQE SIG (http://www.qe-sig.net). The SIG is a practitioner-led group, which emerged from the Pathfinder Network project 'QA-QE in e-Learning' funded by the Higher Education Academy which developed and collated a range of resources in the area of QA/QE for e-learning and ran a series of workshops in HEIs on quality assurance and quality enhancement for courses supported by learning technology. We wish to acknowledge the contributions of the members of Pathfinder Network Project on QA-QE in e-learning:

Harvey Mellar and Magdalena Jara, Institute of Education; University of London, Maria-Christiana Papaefthimiou, Reading University; Eileen Webb, Teesside University; Dave O'Hare, University of Northampton; Brian Sayer, University of London External System and David Cairns, Quality Assurance Agency, as well as the many participants in the project workshops at the Universities of London, Teesside, Derby, and Reading.

The QAQE in e-learning SIG has produced a Commentary and Critique of the QAA Code of Practice Section 2: Collaborative provision and flexible and distributed learning (including e-learning) which is available on the SIG website (http://www.qe-sig.net). We wish to thank the many participants in the on-line review of the QAA Code of practice as well as the attendees at the two workshops held to discuss the draft review, and the attendees at the QA_QE SIG Conference in June 2009 at the University of Hertfordshire who contributed to the development of the Toolkit.

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