E-Learning Maturity Model Version 2.2

Process Assessment Workbook

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E–learning Maturity Model

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Te Tāhuhu o te Mātauranga

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Introduction

This workbook is intended to assist in the evaluation of e-learning capability using the e-learning Maturity Model (eMM) methodology (Marshall and Mitchell, 2004). The processes and practices listed here are from version 2.2 of the eMM, the most recent version is always available from http://www.utdc.vuw.ac.nz/research/emm/. The material included backgrounding the individual processes is a summary only, full details of the research informing the processes and practices is provided in the *eMM Process Guide*.

This document is divided into two main sections. The first provides a brief explanation of the eMM methodology focusing on how to evaluate an institution. The remainder of this document is the actual workbook with each process listed on a two page spread in a format intended to assist the process of data collection and analysis.

Acknowledgements

A large body of research such as this is dependent on the support and assistance of a number of people. Most importantly are the staff of the various participating institutions who generously gave of their time in the completion of the capability assessments used to validate the eMM. While you cannot be named, your assistance was vital for the success of this project and is much appreciated; it is hoped that the outcomes of the analysis are of value to your institution.

The model owes much to the work of Dr Geoff Mitchell and his contribution and ongoing friendship remain key to the ongoing research. Also important was the contribution made by my research assistants, Charlotte Clements, Darren Hoshek and Warren Sellers.

The support of colleagues in New Zealand, Australia and the UK, including the ACODE member organisations and Professor Paul Bacsich, is greatly appreciated. Dr Jim Petch and colleagues at the University of Manchester provided invaluable assistance in reviewing the processes and practices and in generating the questions used to elicit evidence.

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Intellectual Property Statement

Methodology

Changes from version one of the eMM

The eMM has evolved since its initial conception (Marshall and Mitchell, 2003), this evolution was informed by an initial assessment of capability in the New Zealand sector (Marshall, 2005), extensive consultation and workshops with colleagues in New Zealand, Australia and the UK, and an extensive literature review examining a wide set of heuristics, benchmarks and e-learning quality research (Marshall, 2006). As well as a significantly improved set of processes and practices, the current version of the eMM differs most significantly in the change from levels of process capability to dimensions (Marshall and Mitchell, 2006; see below).

Key eMM concepts

The assessment of capability in a complex area such as e-learning is difficult and necessarily involves reducing large amounts of detail into a broader overview that supports management decision making and strategic planning. It is inevitable that this approach will fail to single out the subtle nuances and innovative work of individuals that motivate teaching staff to work on individual projects. Institutions and individuals will always have the ability to choose to invest time and other resources in innovative, unique opportunities. The focus of the eMM is aimed at a less lofty goal, that of changing organisational conditions so that e-learning is delivered in a sustainable and high quality fashion to as many students as possible. As noted by Fullan:

> "The answer to large-scale reform is not to try to emulate the characteristics of the minority who are getting somewhere *under present conditions* … Rather, we must change existing conditions so that it is normal and possible for a majority of people to move forward" (Fullan, 2001, page 268)

The framework used in this analysis is based on the Capability Maturity Model (CMM, Paulk *et al*., 1993) and SPICE (Software Process Improvement and Capability dEtermination, El Emam *et al*., 1998; SPICE, 2002). The underlying idea is that the ability of an institution to be effective in a particular area of work is dependent on their capability to engage in high quality processes that are reproducible and able to be sustained and built upon. The characteristics of an institution that enable high quality processes are to some extent able to be separated from the details of the actual work undertaken that will vary depending on particular circumstances. This separation means that the analysis can be done independently of the technologies selected and pedagogies applied, thus allowing for a meaningful comparison across the sector.

Capability, in the context of this model, refers to the ability of an institution to ensure that e-learning design, development and deployment is meeting the needs of the students, staff and institution. Capability includes the ability of an institution to sustain e-learning support of teaching as demand grows and staff change.

Processes

Building on the SPICE model, the eMM divides the capability of institutions to sustain and deliver e-learning up into five major categories or process areas (Table 1). The key difference from the original SPICE model is the introduction of the *Learning* area, which replaces the *Customer/Supplier* area used in software engineering.

Within each of these areas are a number of processes, derived from the research literature on e-learning quality, experience from eMM assessments, and consultation with the sector through workshops. Processes define an aspect of the overall ability of institutions to perform well in the given process area, and thus in e-learning overall. The advantage of this approach is that it breaks down a complex area of institutional work into related sections that can be assessed independently and presented in a comparatively simple overview without losing the underlying detail.

Process category	Brief description
Learning	Processes that directly impact on pedagogical aspects of e-learning
Development	Processes surrounding the creation and maintenance of e-learning resources
Support	Processes surrounding the oversight and management of e-learning
Evaluation	Processes surrounding the evaluation and quality control of e-learning through its entire lifecycle.
Organisation	Processes associated with institutional planning and management

Table 1: eMM process categories (revised from Marshall and Mitchell, 2003)

An obvious requirement of this model is that the processes chosen are based on empirical evidence and represent 'common truths' about e-learning capability:

> "are there common practices or ways of creating e-learning resources and learning environments that are accepted, useful and able to be described in a way that others can adopt them and improve their own e-learning capability?" (Marshall and Mitchell, 2003, page 4)

The processes used in version one of the eMM were developed from the 'Seven Principles' of Chickering and Gamson (1987) and 'Quality on the Line' benchmarks (IHEP 2000) as outlined in Marshall and Mitchell (2004). These have the advantage of being widely accepted as guidelines or benchmarks for e-learning delivery (Sherry, 2003), however extensive feedback through the workshops and from collaborators in New Zealand, Australia and the UK as well as the experience of applying the first version of the eMM identified a number of additional aspects of capability that needed assessment (Marshall, 2006).

Dimensions of capability

A key development that arose from the evaluation of the first version of the eMM is that the concept of levels used was unhelpful (Marshall and Mitchell, 2006). The use of levels implies a hierarchical model where capability is assessed and built in a layered way. The key idea underlying the dimension concept in contrast, is holistic capability. Rather than the model measuring progressive levels, it describes the capability of a process from synergistic perspectives. An organization that has developed capability on all dimensions for all processes will be more capable than one that has not. Capability at the higher dimensions that is not supported by capability at the lower dimensions will not deliver the desired outcomes; capability at the lower dimensions that is not supported by capability in the higher dimensions will be ad-hoc, unsustainable and unresponsive to changing organizational and learner needs.

In thinking about the relationship between the dimensions it is helpful to consider them arranged as in Figure 1 below. The matrix of boxes used on the left to display capabilities is helpful when performing comparisons but it can imply a hierarchical relationship that is misleading when interpreting results.

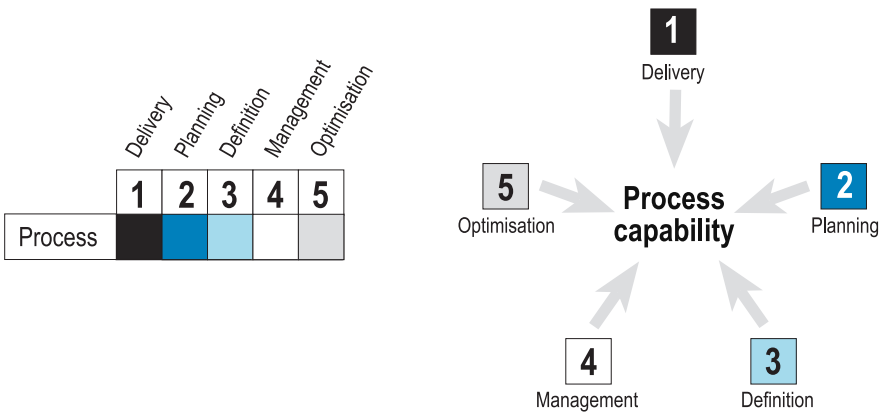

Figure 1: eMM Process Dimensions

Dimension 1 (Delivery) is concerned with the creation and delivery of process outcomes. Assessments of this dimension are aimed at determining the extent to which the process is seen to operate within the institution. It is important to emphasise that institutions can have extremely effective processes operating within this dimension, but in the absence of capability in other dimensions there is risk of failure or unsustainable delivery and wasting resources through needless duplication.

Dimension 2 (Planning) assesses the use of predefined objectives and plans in conducting the work of the process. The use of predefined plans potentially makes process outcomes more able to be managed effectively and reproduced if successful.

Dimension 3 (Definition) covers the use of institutionally defined and documented standards, guidelines, templates and policies during the process implementation. An institution operating effectively within this dimension has clearly defined how a given process should be performed. This does not mean that the staff of the institution follows this guidance.

Dimension 4 (Management) is concerned with how the institution manages the process implementation and ensures the quality of the outcomes. Capability within this dimension reflects the extent of measurement and control of the outcomes and the way in which the practices of the process are performed by the staff of the institution.

Dimension 5 (Optimisation) captures the extent an institution is using formal approaches to improve capability measured within the other dimensions of this process. Capability of this dimension reflects a culture of continuous improvement.

Practices

Each process is further broken down within each dimension into practices that are either essential (listed in bold type) or just useful (listed in plain type) in achieving the outcomes of the particular process from the perspective of that dimension. These practices are intended to capture the key essences of the process as a series of items that can be assessed easily in a given institutional context. The practices are intended to be sufficiently generic that they can reflect the use of different pedagogies, technologies and organisational cultures. The eMM is aimed at assessing the quality of the processes - not at promoting particular approaches.

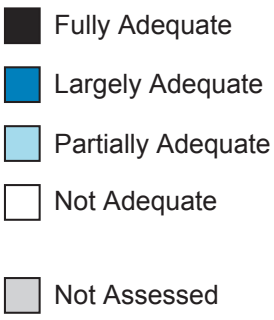

Figure 2: eMM Capability Assessments (based on Marshall and Mitchell, 2003)

When conducting an assessment each practice is rated for performance from 'not adequate' to 'fully adequate' (Figure 2). The ratings at each dimension are done on the basis of the evidence collected from the institution and are a combination of whether or not the practice is performed, how well it appears to be functioning, and how prevalent it appears to be. The practices have been deliberately designed to minimise variation in determining capability but this is necessarily an exercise of judgement and assessors are encouraged to work with an experienced assessor before conducting their own capability assessments. It is also very useful to note what evidence underpins the assessment and to have more than one assessor work independently and then make the final determination jointly.

Evidence should be collected primarily from examples of courses actually being delivered by the institution. This ensures that the assessment is being made on the basis of actual performance, not intended or idealised performance. The courses used should be representative rather than exceptional (either good or bad). This does not mean randomly selected, as it is generally unhelpful to assess courses that are not representative of the institution (see below for further discussion about the selection of courses). Naturally this evidence needs to be supplemented by materials from the enrolment packs, websites and formal documents, including

policies, procedures and strategies (see below). If an external assessment is being undertaken (as is strongly recommended) then the initial assessment evidence should be verified with knowledgable insiders, although they should not influence the capability determination itself.

Process L1: Learning objectives are apparent in the design and implementation of courses (Dimension 1)		
	Assessment	**Practices**
1		**Learning objectives are provided explicitly in the formal descriptions of the course provided to students, including the summary versions provided prior to enrolment as well as within detailed course prospectuses or syllabi.**
		Learning objectives are linked explicitly throughout learning and assessment activities using consistent language.
		Learning objectives for individual courses or modules are explicitly linked to wider programme or degree objectives and institutional graduate attributes.
		Learning objectives are aimed at supporting student cognitive outcomes that go beyond recall and acquisition of knowledge.
		Course workload expectations and assessment tasks are consistent with the learning objectives.

Figure 3: Example eMM Capability Assessment

Once each practice has been assessed, the results are averaged as a rating for the given dimension of the process. Practices listed in bold should be used primarily to make this summary assessment, with the other practices used when making a choice between two possible assessments. In the example shown in Figure 3, the assessment for dimension one would be Largely Adequate, although the two practices with lower assessments indicate where additional attention should be focused. A purely mechanical process with a mathematical summation has been deliberately avoided in order to provide enough flexibility within the model for differences of pedagogy, technology, organisational culture and national culture.

It should be noted that experience of applying this type of assessment in the field of software engineering and with the first version of the eMM suggests that most, if not all, institutions initially assessed will show a low level of capability for the processes selected (SEI, 2004; Marshall, 2005). This is not surprising as one of the drivers for the model in the first place is the widely held perception that e-learning could be implemented more effectively and efficiently in most institutions.

Collecting and Interpreting Evidence for Capability Assessments

Each of the individual process descriptions that follow include a section titled "Sources of Information Providing Evidence of Capability". This contains lists of questions and potential documents which can be examined when determining institutional capability. These are provided to assist assessors in their consideration of the individual practices listed for the process. In some cases this is straightforward, in others more evidence will be needed to provide confidence in the results.

The exact procedure taken in using this evidence to determine capability will depend on the circumstances of the assessment and the particular institution. In general, it is recommended that the questions be used to determine whether or not the documents listed exist and to obtain copies for examination. Assessors should then familiarise themselves with these documents in general terms, keeping in mind that a particular question or document will likely provide evidence addressing multiple processes and practices within those processes. Once an initial assessment has been undertaken as described above, the evidence collected should be carefully reviewed to ensure that key information has not been overlooked, particularly when a practice has been assessed as Not Adequate or Partially Adequate. Further consultation with relevant staff of the institution is useful at this point in identifying whether gaps in capability are likely real or a consequence of a gap in the evidence collected.

Institutional Context

This discussion of the methodology uses the word 'institution' to indicate the level at which assessments are conducted. It is, however, entirely possible and useful to conduct assessments using other organisational levels or forms of grouping courses. Potentially this could include:

- Faculties or Colleges of an institution
- Different campuses of an institution
- Different modes of delivery (distance versus face-to-face)
- Different forms of support and course development/creation (centrally versus ad-hoc)

In these cases the courses used to find evidence of capability would be selected as being representative of the institutional aspect of interest.

Modifying the eMM to reflect local concerns

It is entirely possible to extend or modify the eMM to reflect issues of particular concern to a given sector or context, such as legislative requirements, e-learning practices required by accreditation bodies, or contextual factors arising from local experience or culture. Normally this should be done at the level of the practices as this would then still allow for comparison at the summary process level.

If a particular aspect of e-learning capability is identified—along with evidence to support its effectiveness—that needs to be reflected as a process then please contact the author with the details so that it can be accomodated or included in future versions of the eMM.

Interpretation of results

Once the assessment of capability is undertaken, the results can be interpreted. Figure 4 demonstrates some typical results showing a single process capability as assessed for five different sample institutions.

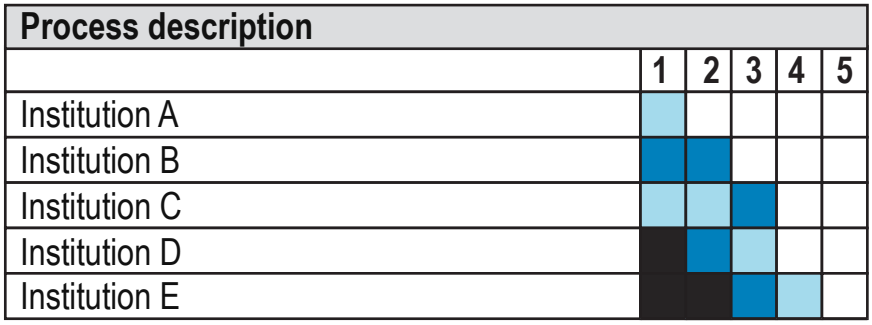

Figure 4: Example practice result comparing five institutions

Institution A is not performing the process well, with only evidence of some ad-hoc attempts shown by the partially adequate rating supplied for level 1 and the absence of any capability in the other levels.

Institution B is significantly more capable in the process than either A or C with evidence that the process is mostly performed well (the largely adequate rating of level 1) and in a planned fashion (the largely adequate rating of level 2). Note that despite there being evidence at level 2 of planning, this appears to be done without any attempt for consistency within the institution as no capability is shown at level 3.

Institution C on the other hand, while not as capable as B, shows evidence of having defined standards or guidelines for performing the process (level 3). However, these do not appear to be having an impact on actual e-learning projects as shown by the lower ratings at level 1 and level 2.

Institution D shows a pattern of very good performance of the process (fully adequate rating at level 1), supported by largely adequate planning (level 2) and an initial set of standards or guidelines (partially adequate rating at level 3). This is perhaps the expected pattern of capability development, building from a base of ad-hoc behaviours that are becoming more standardised as the institution has more experience in e-learning.

Finally, institution E performs the process very well (fully adequate rating at level 1) supported by effective planning (fully adequate rating at level 2), largely adequate standards and guidelines (level 3) and an initial programme of evaluation and measurement of process performance (level 4).

Further analysis of the results in this example suggests that institutions C and E will provide potential examples of useful standards, guidelines and policies, while institutions D and E (and to some extent B) will provide individual examples of how to perform the process well. A more in-depth analysis can then be undertaken if necessary, dropping down to the level of individual practices to determine shared or complementary areas of strength or weakness.

Comparison across groups of processes provides an institution with the ability to identify aspects of related weakness that can be addressed strategically. Priorities can be easily identified by either comparison with the wider sector, or by comparing process ratings within an institution. Action plans can then be developed with reference to the practices within each of the process dimensions.

Process L1.

Learning objectives are apparent in the design and implementation of courses

Practices

Learning outcomes are results of learning that mainly derive from educational intentions or learning objectives, which clearly describe the learning content, the actions to be taken or performed, and how these will be assessed (Laurillard, 2002). Quality learning objectives clearly and explicitly specify both pedagogical approach and content, are accompanied by a flexible and responsive teaching attitude to diverse learning processes and styles, and assess authentic practice, which engages learner ownership (Harden, 2002). High-quality learning outcome achievement accompanies a more transferable and higher level of understanding of a subject (Prosser and Trigwell, 1999).

Good documentation of learning objectives is explicit about pedagogical strategies, ideals, and values, looks for learning processes rather than testing for content knowledge, accepts interdisciplinary work and diverse outcomes, and considers team as well as individual achievement (Salmon, 2000). Clear, explicit specification of personal, transferable subject outcomes is commensurate with quality of learning experience and learner success (Allan, 1996). The writing of learning outcomes must relate generically and specifically to the level of the programme or course, and achievement is assessed to be either complete, or not, but grades may provide feedback on the quality of work. Outcome statements constitute an active verb and its object in a contextual or conditional phrase and describe either declarative knowledge, or performative skill/knowledge synthesis capability, which are categorised as 'knowledge and understanding' or 'skills and other attributes' (Holmes, 2004, p. 14). Finally, detailed planning for learning outcomes can benefit from revisions of Bloom's (1956) cognitive taxonomy that afford access to more current, complex and complete knowledge of learning processes (Anderson *et al.*, 2001; Dettmer, 2006; Tomei, 2005).

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are students made aware of the expectations that are inherent in all forms of assessment? (Dim1/Dim2)
2. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim2)
3. In what proportion of modules is the e-learning component required in order to attain the intended learning outcomes? (Dim2)
4. Are you able to carry out as much online assessment as you would wish to design into the courses? (Dim2)
5. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
6. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim2/Dim3)
7. Are courses designed to ensure that students engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements? (Dim3)
8. Are there guidelines regarding minimum standards for course design and development? (Dim3)
9. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
10. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
11. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
12. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
13. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, particularly timetables and assessment task descriptions. Evaluation and review documents.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, particularly timetables and assessment task descriptions. Formal proposals for funding and other design and (re)development resources. Course development and project planning documents, development checklists, staff research and reflections including portfolios. Staff development and support materials. Evaluation and review documents.

Dimension 3: Definition

Assessment, evaluation, course design and (re)development policies and guidelines. Statement of graduate learning outcomes. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Evaluation and feedback planning documents. Quality assurance documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Annual reviews and reports. External audit and review project plans.

	Assessment	Practices	Notes
5		**Information on student achievement of learning outcomes is used to inform and support the current and future design and (re)development of courses, programmes and degrees.**	
		Strategic planning of teaching and learning across the institution is used to determine new or modified objectives that are promulgated to courses, programmes and degrees.	
4		**Courses are regularly reviewed to ensure that staff are incorporating learning objectives in course design and delivery consistent with the expectations of the institutional policies, guidelines and standards.**	
		Performance of students against the expected outcomes measured using a variety of qualitative and quantitative metrics.	
		Information is collected on the extent to which courses are providing learning objectives that address the full range of cognitive outcomes appropriate to the course and students.	
		Regular reviews of course learning objectives undertaken to ensure currency and effectiveness.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Financial costs and benefits of delivering course learning objectives regularly assessed and reported on.	
		Feedback collected regularly from students regarding the effectiveness of the course e-learning activities and tasks.	
		Feedback collected regularly from staff regarding the effectiveness of the course e-learning activities and tasks.	
3		**Institutional policies require that a formal statement of learning objectives is part of all course documentation provided to students.**	
		Teaching staff are provided with training, guidelines and examples for developing learning objectives that address the full range of cognitive outcomes appropriate to the discipline, pedagogical approach and students.	
		Training, templates, examples, standards and guidelines are provided on how to use learning objectives explicitly in the design and delivery of course learning activities and assessment in order to assist student learning.	
		Teaching staff are provided with training, guidelines and examples in assessing student outcomes and the extent to which learning objectives are being met.	
		Insitutionally defined graduate attributes exist and are referenced in policy guiding course, programme and degree design, development and delivery.	
		A researched evidence base of effective learning objectives and associated e-learning activities undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**Statements of learning objectives are mandated in institutional templates for course summaries and documents such as course prospectuses or syllabi.**	
		E–learning design and (re)development activities reference the learning objectives and use them to determine the nature and relationship of content, activities and assessment used.	
		E–learning design and (re)development activities reference the course learning objectives when selecting and implementing e-learning technologies and pedagogies.	
		Programme or degree planning and review processes consider the relationship between learning objectives of individual courses with those of the programme or degree as a whole.	
		E–learning planning and review documentation explicitly refers to the learning objectives when assessing the course and making any decisions about the course structure, learning design and content.	
		E–learning design and (re)development activities reference a researched evidence base of effective learning objectives and associated e-learning activities.	
		E–learning design and (re)development activities formally link learning objectives and decisions regarding e-learning technologies and pedagogies with the institutional e-learning strategies and associated operational plans.	
		Assistance in course design and (re)development is provided to staff engaging in course design and (re)development activities.	
1		**Learning objectives are provided explicitly in the formal descriptions of the course provided to students, including the summary versions provided prior to enrolment as well as within detailed course prospectuses or syllabi.**	
		Learning objectives are linked explicitly throughout learning and assessment activities using consistent language.	
		Learning objectives for individual courses or modules are explicitly linked to wider programme or degree objectives and institutional graduate attributes.	
		Learning objectives are aimed at supporting student cognitive outcomes that go beyond recall and acquisition of knowledge.	
		Course workload expectations and assessment tasks are consistent with the learning objectives.	

Process L2.

Students are provided with mechanisms for interaction with teaching staff and other students

Practices

In this process area, evidence of the use of a variety of communication modes or channels and encouragement for students to engage with peers and teaching staff is used to determine capability. It is not sufficient that tools be provided, there must also be activities designed to encourage their use and support of effective engagement such as set out by Salmon (2000). Students should be provided with information on how to access and use different communication channels or modes. They should be given a clear explanation as to why the channels or modes have been included within the course and how they will assist in achieving the learning objectives of the course.

As with a traditional face-to-face class, it is the responsibility of the teaching staff to set the 'ground rules' and expectations for the communication undertaken in a particular course (Ramsden, 2003). Particularly, while many students are unfamiliar with e-learning, it is necessary for them to get clear information on how to use the communication channels effectively and appropriately (Palloff and Pratt, 2001; Harasim *et al*., 1995). Communicating expectations early is also essential if staff workloads are to be managed (Waterhouse and Rogers, 2004).

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is there a structured system in place to gather and respond to students' comments on e-learning issues? (Dim1/Dim2)
2. Is student interaction with teaching staff and other students an intrinsic characteristic of learning and is it facilitated through a variety of ways? (Dim2/Dim3)
3. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim2/Dim3)
4. Are there guidelines regarding minimum standards for course design and development? (Dim3)
5. Is student interaction with teaching staff monitored? (Dim3/Dim4)
6. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
7. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
8. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
9. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
10. Do staff respond to performance measures of support relating to student expectations? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Assessment task descriptions. Student support websites and materials. Evaluation and review documents.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, development checklists, staff research and reflections including portfolios. Student support websites and materials. e-learning guides and publicity information for staff and students.

Dimension 3: Definition

Feedback, course design and (re)development policies and guidelines. Statement of graduate learning outcomes. Communication and conduct online policies and guidelines. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Evaluation and feedback planning documents. Quality assurance documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Annual reviews and reports.

L2 Students are provided with mechanisms for interaction with teaching staff and other students

	Assessment	Practices	Notes
5		**Interaction between students and teaching staff has been measured with the results used to plan and resource particular forms of communication.**	
		Interaction between students and teaching staff has been measured with the results used to ensure that staff and students have received sufficient training and support.	
		Interaction between students and teaching staff has been measured with the results used to identify effective teaching and learning strategies for reuse when designing and (re)developing other courses.	
		Interaction between students and teaching staff has been measured with the results used to inform strategic planning relating to future e-learning initiatives.	
4		**Measures are collected of student and staff use of different forms of interaction available in courses.**	
		Feedback collected regularly from students regarding the effectiveness of the different communication channels.	
		Feedback collected regularly from staff regarding the effectiveness of the different communication channels.	
		Measures are collected of the impact the use of communication channels are having on student learning.	
		Measures are collected of the timeliness and effectiveness aspects of the communication between staff and students.	
		Regular reviews of student's experiences of the different channels conducted to ensure compliance with policies and standards.	
		Financial costs and benefits of the different communication channels regularly assessed and reported on.	
3		**Policies and standards provide guidelines for staff responsiveness to student communication.**	
		Formal communication to all teaching staff of institutional expectations that they support student engagement through a mix of different types of interaction.	
		Training provided to teaching staff on effective ways of using the different communication channels to support student learning.	
		Examples and templates provided of ways in which different communication channels can be used to support student learning.	
		Standard communication channels are defined for use in all courses offered by the institution.	
		Institutional policies describe expectations for appropriate use of standard communication channels by staff and students.	
		A researched evidence base of effective e-learning communication and interaction examples and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**Course outlines and descriptions provided to students include descriptions of the range of communication channels that will be used in the course.**	
		Course outlines provide information to students on how the different channels will support their learning linked with course activities and assessments.	
		Course designs or rationales include a structured interaction design incorporating a variety of communication channels.	
		Course outlines incorporate a formal requirement or expectation that students use communication channels during the course	
		Course outlines provide information as to what uses are appropriate for the different channels.	
		Course outlines include expectations about the purpose for which different communication channels are to used by staff and students.	
		Plans for monitoring all of the channels used by the courses are in place in order to ensure that students are supported and motivated to engage appropriately.	
		Course design and (re)development activities reference a researched evidence base of effective e-learning communication and interaction examples.	
		Programme or degree planning and review processes consider the effectiveness of the interaction designs and communication channels in use by individual courses.	
1		**Courses provide alternative mechanisms for interaction between staff and students, including, but not limited to providing LMS tools such as discussion forums, face-to-face lectures and tutorials.**	
		Email contact information is provided for teaching staff.	
		Technical support information provided for the various communication channels in use.	
		Information on how to use the communication channels for learning is provided.	
		Introductory material provided within each communication channel to guide student use.	
		Information on appropriate use of each communication channel is provided.	

Process L3.

Student skill development for e-learning is provided

Practices

Students' capability for effective e-learning is a combination of their skills as learners and their abilities to make effective use of the various information sources and technologies provided by institutions generally, and specifically in particular courses and programmes. Some degree of technical aptitude and experience can now be generally assumed although this does not mean that students are effective online learners (Hrabe *et al*., 2005). Care must be taken when designing the pedagogical elements of e-learning to ensure that students are provided with clear and explicit guidance of how the technologies should be used to support their learning. A strong constructive alignment of learning outcomes, technologies and pedagogies must be clear in the design and delivery of e-learning courses and programmes (Kirkwood and Price, 2005). Communication tools are a key aspect of engaging students provided that their use is focused in a way that generates shared experiences and effective connections between the students, the teaching staff and the course or programme domain (Visser and Visser, 2005).

Evidence of capability in this process is shown by clear communication to students of the pedagogical strategy of courses and programmes. The contribution of technological tools in assisting students in attaining the learning objectives of the course or programme should be clear. Students should be supported in understanding what is expected from them as learners and in gaining the necessary generic and specific learning skills, including attaining competency with the associated technologies. Teaching staff should be supported in developing their own skills as learning facilitators able to engage the students in effective learning built on a foundation of practice, demonstrated competency and guided reflection.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
2. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
3. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
4. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
5. Do staff respond to performance measures of support relating to student expectations? (Dim4/ Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials and assessment task descriptions. Student support websites and materials. Evaluation and review documents.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, particularly timetables and assessment task descriptions. Course development and project planning documents, assessment plans, development checklists, staff research and reflections including portfolios. Staff development and support materials. Evaluation and review documents.

Dimension 3: Definition

Assessment, evaluation, course design and (re)development policies and guidelines. Formal process for obtaining funding and other resources for design and (re)development. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Assessment planning documents. Quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Institutional e-learning operational plans.

L3 Student skill development for e-learning is provided

	Assessment	Practices	Notes
5		**Information on the extent to which courses are providing learning activities that are progressively building student capabilities for learning is used to identify effective teaching and learning strategies for reuse when designing and (re)developing other courses.**	
		Information on the extent to which courses are providing learning activities that are progressively building student capabilities for learning is used when designing and (re)developing courses and programmes.	
		Performance of students as learners used to inform strategic planning relating to future e-learning initiatives.	
		Information on the extent to which courses are providing learning activities that are progressively building student capabilities for learning is used to ensure that staff and students have received sufficient training and support.	
4		**Courses are regularly reviewed to ensure that staff are incorporating learning activities that are progressively building student capabilities consistent with the expectations of the institutional policies, guidelines and standards.**	
		Feedback collected regularly from students regarding the effectiveness of the support facilities.	
		Feedback collected regularly from staff regarding the effectiveness of the support facilities.	
		Performance of students as learners measured regularly using a variety of qualitative and quantitative metrics.	
		Student use of support facilities is measured and reported on regularly.	
		The impact the use of support facilities are having on student learning outcomes is measured and reported on regularly.	
		Regular reviews of student's experiences of the support facilities conducted to ensure compliance with policies and standards.	
		Financial costs and benefits of support facilities regularly assessed and reported on.	
3		**Institutional policies require that assessment tasks be designed to support incremental development of student skills and capabilities for learning.**	
		Teaching staff are provided with training, guidelines and examples for developing learning activities and assessment tasks that support incremental development of student skills and capabilities for learning.	
		Teaching staff are provided with training, guidelines and examples in assessing student's capabilities for learning.	
		Teaching staff are provided with training, templates, examples, standards and guidelines on how to use a variety of effective strategies when building student capabilities to learn.	
		Insitutionally defined policies, standards and guidelines describe available student support for learning.	
2		**Support staff appointed and tasked with providing students assistance in their learning.**	
		Assessments of individual student capabilities undertaken early in the course and used to guide activities and support during the remainder fo the course.	
		Learning activities and assessment tasks designed to build and develop skills and understanding rather than knowledge acquisition and recall.	
		Course outlines provide students with an explicit description of the pedagogical approach being used.	
1		**Relationships between the individual components and activities within the courses are made explicit to students.**	
		Opportunities for student practice with e-learning technologies and pedagogies built into course design and activities.	
		Contact information provided to students for access to support through a variety of communication channels, formats and facilities aimed at addressing learning issues.	
		Opportunities for substantive feedback on student's individual performances built into course design and activities.	

Process L4.

Information provided on the type and timeliness of staff responses to communications students can expect

Practices

Responsive and timely teacher-learner communications significantly effect positive learning experiences and outcomes (Blignault and Trollip, 2003; Bolliger and Martindale, 2004). Effective interactive communication requires careful planning and thoughtful management to ensure responses meet student expectations and are unambiguous (Busch and Johnson, 2005). To this end, a taxonomy of response types (Blignault and Trollip (2003) is useful for engaging with the complex needs of the e-learning environment. Training in the use of communication tools and strong technical support are also necessary (Ortiz-Rodriguez *et al*., 2005). Furthermore, concise policy statements, setting out what is expected of learners and what they expect of teachers, improves course management (Waterhouse and Rogers, 2004). And, Dennen (2005) reports teacher modelling of appropriate online responses and discussions is another method of communicating effective practices that has the additional benefit of demonstrating the communications process.

Evidence of capability in this process is shown by clear commitments to provide feedback and responses within a designated time period. This may include formal processes for how the different channels are used and a description of how teaching staff will respond on these channels (if at all). A clear design is apparent in the selection of the range of channels and the integration with course activities and the information provided to students on type and timliness of responses is consistent with that design. Performance is monitored in order to ensure that the commitments being made are adhered to and resourced appropriately.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are the staff's response (to student communications) type and timeliness monitored? (Dim1/Dim2/Dim3/Dim4)
2. Is student interaction with teaching staff and other students an intrinsic characteristic of learning and is it facilitated through a variety of ways? (Dim1/Dim2)
3. Do teaching staff manage response to student communications, explaining and aligning expectations for various types of communications, such as: learning related, admin related, personal/pastoral (Dim1/Dim2)
4. Is there a structured system in place to gather and respond to students' comments on e-learning issues? (Dim2)
5. Are there guidelines for giving feedback to student questions? (Dim3)
6. Are there guidelines regarding minimum standards for course delivery? (Dim3)
7. Do guidelines on feedback to students address provision of constructive and timely feedback? (Dim3/Dim4)
8. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
9. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
10. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
11. Do staff respond to performance measures of support relating to student expectations? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Communication and assessment task descriptions. Student support websites and materials. Evaluation and review documents.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, development checklists, staff research and reflections including portfolios. Student support websites and materials. Teaching staff workload planning documents.

Dimension 3: Definition

Assessment, feedback, intellectual property, privacy, course design and (re)development policies and guidelines. Communication and conduct online policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Evaluation and feedback planning documents. Quality assurance documents. Operational reports on the operation of communication channels.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Annual reviews and reports.

L4 Information provided on the type and timeliness of staff responses to communications students can expect

	Assessment	Practices	Notes
5		**The type and timeliness of interaction between students and teaching staff used to ensure that staff and students have received sufficient training and support.**	
		The type and timeliness of interaction between students and teaching staff used to identify effective communication strategies for reuse when designing and (re)developing other courses.	
		The type and timeliness of interaction between students and teaching staff used to plan and resource particular forms of communication.	
		The type and timeliness of interaction between students and teaching staff used to inform strategic planning relating to future e-learning initiatives.	
4		**Measures are collected of the timeliness and effectiveness aspects of the communication between staff and students.**	
		Feedback collected regularly from students regarding the effectiveness of the communication channels and staff responses.	
		Feedback collected regularly from staff regarding the effectiveness of the communication channels.	
		Regular reviews of student's experiences of the different communication channels conducted to ensure compliance with policies and standards regarding type and timeliness of staff responses.	
		Reports generated about usage of different communication channels by students and the timeliness and effectiveness of staff responses on those channels.	
		Financial costs and benefits of the staff use of different communication channels regularly assessed and reported on.	
3		**Policies and standards provide guidelines and minimum expectations for staff responsiveness to student communication.**	
		Training provided to teaching staff on how different communication channels can be used by staff to engage in effective and timely communication with students.	
		Guidelines and support materials provided to students to assist them in making effective use of staff feedback and responses through the communication channels in their learning.	
		Examples and templates provided of ways in which different communication channels can be used by staff to engage in effective and timely communication with students.	
		Policies and standards are provided that prescribe staff and student conduct while using the communication channels.	
		Policies and standards are provided that define and protect the privacy of staff and student information provided and collected through the communication channels.	
		Policies and standards are provided that ensure intellectual property laws, licences and individual staff and student rights are observed during course use of the communication channels.	
2		**Plans for monitoring all of the channels are in place in order to ensure that students are appropriately responded to in a timely manner.**	
		Course designs or rationales include a structured interaction design incorporating the available communication channels which defines how each channel is to be used.	
		Assessment tasks and communication channels are linked explicitly in the task descriptions and supporting materials.	
		Teaching staff provide virtual 'office hours' to students in the course outline.	
		Course outlines incorporate a formal requirement or expectation that students use communication channels in order to accomplish specified activities or tasks and achieve defined learning objectives.	
1		**Course outlines provide expected response times students can expect from staff when using the communication channels provided in the course.**	
		Course outlines provide information as to what uses are appropriate for the different communication channels.	
		Course outlines provide information as to what type of response staff will provide on different communication channels.	

Process L5.

Students receive feedback on their performance within courses

Practices

Evidence of capability in this process is seen through the use of informal feedback through various communication channels complemented by formal assessment feedback processes such as marking rubrics. Policy should require prompt and useful feedback aimed at improving student capability in related tasks rather than just the immediate goal and teaching staff should be provided with guidelines and assistance in the provision of more effective feedback.

Feedback that learners' receive from teachers and from other students enables comparison of actual performance with expectations (Mory, 2004). Timely, constructive feedback affects students' participation, performance, and engagement on a course, and learning outcomes (Laurillard, 2002). Optimal feedback looks for balance between student needs and teaching management (Dennen, 2005), and must enhance understanding rather than just indicating correctness (Garrison, 1989). Feedback links knowledge and skills for understanding (Duhon *et al*., 2006). It involves numerous models that centre on a 'feedback triad' (Kulhavey and Wagner, 1993) of motivation, reinforcement, and information (Mory, 2004). Because feedback and action link to productive learning, extrinsic and intrinsic feedback is crucial for learners (Laurillard, 2002). A learning goal, or outcome, also prefigures unity between action, feedback and integration (Laurillard, 2002). Substantive and timely feedback improves online learning participation (Dennen, 2005). However, feedback also involves complex effects including: 'candlepower' (Hudson, 2002), which characterises the subtle intimacy that arises in online dialogue and concerns effects of critical dialogue; and 'feedback specificity'. Although more specific feedback benefits learning responses in those who perform well, it is detrimental to learning responses in those who perform poorly (Goodman and Wood, 2004). *Kiasu* (a predominantly Asian attitude to diligent academic performance) has both positive (diligence to outperform others) and negative (diligence to prevent/hinder others outperforming) forms that impact on e-learning feedback practices (Hwang and Arbaugh, 2006).

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Do teaching staff manage response to student communications, explaining and aligning expectations for various types of communications, such as: learning related, admin related, personal/pastoral (Dim1/Dim2)
2. Are there guidelines for giving feedback to student assignments? (Dim3)
3. Are there guidelines for giving feedback to student questions? (Dim3)
4. Are there guidelines regarding minimum standards for course delivery? (Dim3)
5. Do guidelines on feedback to students address provision of constructive and timely feedback? (Dim3/Dim4)
6. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
7. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
8. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
9. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
10. Do staff respond to performance measures of support relating to student expectations? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Communication and assessment task descriptions. Student support websites and materials. Evaluation and review documents. Assessment and communication feedback examples from courses.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, assessment and feedback plans, development checklists, staff research and reflections including portfolios. Communication and assessment task descriptions and marking rubrics. Student support websites and materials. e-learning guides and publicity information for staff and students.

Dimension 3: Definition

Assessment. feedback, course design and (re)development policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Assessment planning documents. Quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Institutional e-learning operational plans.

L5 Students receive feedback on their performance within courses

	Assessment	Practices	Notes
5		**Student satisfaction with feedback and measures of feedback types and quality are used to ensure that staff and students have received sufficient training and support.**	
		Student satisfaction with feedback and measures of feedback types and quality are used to identify effective teaching and learning strategies for reuse when designing and (re)developing other courses.	
		Student satisfaction with feedback and measures of feedback types and quality are used to determine ongoing resourcing and training requirements for staff and courses.	
		Student satisfaction with feedback and measures of feedback types and quality are used when designing and (re)developing courses.	
		Student satisfaction with feedback and measures of feedback types and quality are used to plan and resource particular forms of communication.	
		Student satisfaction with feedback and measures of feedback types and quality are used to inform strategic planning relating to future e-learning initiatives.	
4		**Measures are collected of the extent to which feedback is delivered in response to student work.**	
		Feedback collected regularly from students regarding the effectiveness of the feedback provided.	
		Feedback collected regularly from staff regarding the effectiveness of the mechanisms and support for providing student feedback.	
		Measures are collected of the use of formative assessment techniques.	
		Compliance with institutional expectations for the quality and type of feedback reviewed regularly.	
		Financial costs and benefits of feedback regularly assessed and reported on.	
3		**Institutional expectations for the quality and type of feedback to be provided to students are formally defined and communicated to staff.**	
		Guidelines, examples templates and training provided to teaching staff on how to use feedback to improve student learning.	
		Guidelines and support materials provided to students to assist their making effective use of staff feedback in their learning.	
		Guidelines and training provided to teaching staff on how to use formative as well as summative assessment.	
2		**Course designs or rationales include a structured feedback design incorporating the available communication channels.**	
		Staged assessment tasks are used with opportunities for feedback and reflection provided in a structured way.	
		Course outlines provide information to students on the timeliness, type and extent of feedback they can expect from teaching staff.	
		Assessment marking rubrics with spaces explicitly provided for formative feedback are used and provided to students in advance.	
1		**Individual courses have mechanisms for students to be provided with feedback beyond the marks assigned for assessed work.**	
		Students are provided with feedback which addresses motivation.	
		Students are provided with feedback which reinforces learning.	
		Students are provided with feedback which corrects errors and supplies information in context.	
		A variety of communication channels used to provide in-depth and contextual feedback.	

Process L6.

Research and information literacy skills development by students is explicitly supported

Practices

Evidence of capability in this process is seen through the provision of resources on conducting research, resources on finding content and other information via links to suitable databases, instructions on where to find suitable books and support materials provided by groups such as libraries on information literacy skills. Development of skills in identifying useful materials and more general research skills should also be reflected in the assessment tasks of a course and the associated marking and feedback rubrics. Information literacy and research skill development should be reflected in the learning objectives either implicitly or explicitly. Teaching staff are provided with templates, examples, training and support in using the range of information resources available to support student learning. Explicit guidance and support should be provided to staff and students with policies and examples on intellectual property aspects, particularly copyright and plagiarism.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim2/Dim3)
2. Are there guidelines regarding minimum standards for course design and development? (Dim3)
3. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
4. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
5. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
6. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Library webpages and support materials. Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support websites and materials, guides for studying online. Assessment task descriptions and marking criteria.

Dimension 2: Planning

Library webpages and support materials. Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, assessment and feedback plans, development checklists, staff research and reflections including portfolios. Assessment task descriptions and marking rubrics. Student support websites and materials.

Dimension 3: Definition

Assessment, course design and (re)development policies and guidelines. Information literacy and research skills policies and guidelines, bibliography and citation materials and tutorials. Formal process for obtaining funding and other resources for design and (re)development. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Library usage reports, library annual reports.

Dimension 5: Optimisation

Library strategy, business cases and planning documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

L6 Research and information literacy skills development by students is explicitly supported

	Assessment	Practices	Notes
5		**Measures of the ability of students to conduct research, access and assess content resources are used to determine standards for course design as well as resourcing for support facilities.**	
		Information on the effectiveness of information resources and tools is used when designing and (re)developing courses and programmes.	
		Measurements of when students access information resources and tools are used to plan and resource the hours of operation of the information facilities and their support.	
		Effectiveness of information resources and tools is used to inform planning relating to future e-learning initiatives.	
4		**Measures of students' abilities to conduct effective research collected and reported on regularly.**	
		Feedback collected regularly from students regarding the effectiveness of the information literacy and research resources and services provided.	
		Feedback collected regularly from staff regarding the effectiveness of the information literacy and research resources and services provided to students.	
		Measures of student ability to access content resources effectively are collected and reported on regularly.	
		Measures of the use of information resources and tools collected and reported on regularly.	
		Financial costs and benefits of information literacy and research resources and services regularly assessed and reported on.	
3		**Institutionally defined standards for student research skills and information literacy are available and supported through groups such as the library.**	
		Teaching staff are provided with training, guidelines and examples on how to use library services to support student research and information literacy development.	
		Standard bibliography and citation formats defined and made available for use by students and staff along with examples and training in their use provided.	
		Teaching staff provided with training, guidelines and examples on how to support students using information resources appropriately to avoid plagiarism and violations of intellectual property.	
		Formal institutional policies require that students have course work on conducting research throughout their studies.	
		Standards are defined for how course content and resources are stored and made available to students with consistent methods of access and support.	
		Templates and examples provided that illustrate how to link course learning outcomes explicitly to the range of information resources provided.	
		Templates provided for use in course materials describing how to use the range of technologies available to locate and make use of information resources.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**Information literacy and research skills development sessions or tutorials organised and provided to all students as part of the course.**	
		Assessment task marking rubrics include aspects that relate to the quality of research and information use undertaken by students.	
		Designated library staff contact information supplied to students in the course outline.	
		Summaries of useful library resources provided on a course or discipline basis.	
		E–learning design and (re)development activities reference a researched evidence base.	
		Course outlines include policies and guidance for students on intellectual property and plagiarism issues.	
		Systems provided for automatic detection of plagiarism and collusion.	
1		**Detailed instructions are provided to students on the range of information sources available, and how they should be used to assist in attaining the learning outcomes.**	
		Students provided with instructions on where and how to get assistance on research methods.	
		Students are provided with instructions on where and how to access course content and resources.	
		Students are provided with lists of starting points for their own research and information collection activities rather than pre-defined and complete reading lists.	

Process L7.

Learning designs and activities result in active engagement by students

Practices

Student learning success is significantly affected by the creation of an e-learning environment that provides active engagement in experiential contexts. This requires teachers to clearly understand programme outcomes, teaching approach, students' motivation and learning styles, all of which depends on diligent planning. Also, students need to be able to link their learning to their life experiences. Technology plays a significant role in this and requires that the online teaching/learning environment undergo a reconstruction of student and teacher roles, relationships and strategies – students need to become active players in their own learning in regard to learning approach and intellectual challenges (Grabinger and Dunlap, 2000). Teachers need to be conversant with current research and theory and familiar with the complexities of human interactions with ICT, so that as users they are not detached from students. Teachers and learners need to be cognisant of their embodiment in technology relations that integrates knowing acting and being. Such embodied knowing opens understandings of the mind-body/machine nexus (Dall'Alba and Barnacle, 2005).

Evidence of capability in this process is seen through course and programme designs that provide students with authentic and personally relevant contexts for their learning. E-learning technologies and pedagogies should be flexibly designed so as to allow incorporation of student experience and knowledge. Analysis and reflection should be encouraged and practised rather than recall and information retrieval. Teaching staff should be supported in developing the skills needed to facilitate e-learning approaches that build engagement through active learning pedagogies rather than replicating passive, traditional learning environments.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim2)
2. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim2/Dim3)
3. Are there guidelines regarding minimum standards for course design and development? (Dim3)
4. Are there guidelines regarding minimum standards for course delivery? (Dim3)
5. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
6. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
7. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
8. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
9. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
10. Do staff respond to performance measures of support relating to student expectations? (Dim4/Dim5)
11. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, learning and assessment task descriptions.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, learning and assessment task descriptions. Formal proposals for funding and other design and (re)development resources. Course development and project planning documents, development checklists, staff research and reflections including portfolios. Staff development and support materials.

Dimension 3: Definition

Assessment, course design and (re)development policies and guidelines. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Evaluation and feedback planning documents. Quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. e-learning design and (re)development policies and guidelines.

	Assessment	Practices	Notes
5		**Information on the extent to which courses are providing learning activities that are actively engaging students is used when designing and (re)developing current and future courses and programmes.**	
		Active engagement of students as learners used to inform strategic planning relating to future e-learning initiatives.	
4		**Courses are regularly reviewed to ensure that staff are incorporating learning activities that are actively engaging students consistent with the expectations of the institutional policies, guidelines and standards.**	
		Feedback collected regularly from students regarding the effectiveness of the e-learning activities and tasks.	
		Feedback collected regularly from staff regarding the effectiveness of the e-learning activities and tasks.	
		Engagement of students as learners measured regularly using a variety of qualitative and quantitative metrics.	
		Regular reviews of student's experiences of the courses conducted to ensure they are engaging actively with their learning.	
		Course design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Financial costs and benefits of e-learning activities regularly assessed and reported on.	
3		**Teaching staff are provided with training, guidelines and examples for designing and developing learning activities and assessment tasks that support active engagement by students.**	
		Teaching staff are provided with training, templates, examples, standards and guidelines on how to deliver courses using a variety of effective strategies that support active engagement by students.	
		Institutional policies require that courses be designed to support active engagement by students in learning.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**Students are provided in the course outline with an explicit description of the pedagogical approach being used.**	
		Learning activities and assessment tasks designed to build and develop student engagement.	
		Course design and development includes active engagement as a formally stated objective and learning activities are selected accordingly.	
		E–learning design and development is guided by and delivers an authentic context for student learning.	
		E–learning design and (re)development activities reference a researched evidence base.	
		Assistance in course design and (re)development is provided to staff engaging in course design and (re)development activities.	
1		**Learning activities are designed to encourage analysis and skill development rather than recall and knowledge acquisition.**	
		Students are provided with opportunities to describe and reflect upon their own learning.	
		Students are able to integrate previous experience and knowledge into course activities and tasks.	
		Students are provided with opportunities for cooperative and collaborative learning tasks.	
		Learning activities and tasks are placed within an authentic context for student learning.	

Process L8.

Assessment of students is designed to progressively build their competence

Practices

To be effective, assessment needs to be integrated throughout the teaching-learning process in visible but seamless ways. That is, effective assessment will communicate ongoing high expectations through affirming competencies and capabilities, as well as technical and specific knowledge using a variety of approaches, such as 1. traditional, 2. activity oriented, 3. group, and 4. self-reflective and readily accessible practices, such as online quizzes, surveys, gradebooks and e-portfolios. Whatever methods are utilised, students need a rigorous understanding of qualitative and quantitative aspects of their assessment to ensure e-learning success.

Evidence of capability in this process is seen through the use of assessment programmes designed to support students in achieving the learning objectives and which learner build capability progressively with opportunities for feedback and reflection. Policy and guidelines should encourage the use of a mix of assessment techniques throughout the course and encourage the use of challenging tasks to motivate performance and learning.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are students made aware of the expectations that are inherent in all forms of assessment? (Dim1/Dim2)
2. What percentage of assessment is online? (Dim1/Dim2)
3. Are you able to carry out as much online assessment as you would wish to design into the courses? (Dim2)
4. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim2/Dim3)
5. Are there guidelines regarding minimum standards for course delivery? (Dim2/Dim3)
6. Are there guidelines regarding minimum standards for course design and development? (Dim3)
7. Are there guidelines for giving feedback to student assignments? (Dim3)
8. Are there guidelines for giving feedback to student questions? (Dim3)
9. Do guidelines on feedback to students address provision of constructive and timely feedback? (Dim3/Dim4)
10. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
11. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
12. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
13. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
14. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
15. Do staff respond to performance measures of support relating to student expectations? (Dim4/Dim5)
16. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Assessment task descriptions. Assessment and communication feedback examples from courses.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, assessment and feedback plans, development checklists, staff research and reflections including portfolios. Assessment task descriptions and marking rubrics.

Dimension 3: Definition

Assessment, feedback, course design and (re)development policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Assessment planning documents. Course design and (re)development planning and project documents, quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**Information on the extent to which courses are providing assessment activities that are progressively building student capabilities is used when designing and (re)developing current and future courses and programmes.**	
		Performance of students as learners used to inform strategic planning relating to future e-learning initiatives.	
4		**Feedback collected regularly from students regarding the effectiveness of the assessment tasks, support and feedback.**	
		Feedback collected regularly from staff regarding the effectiveness of the assessment tasks, support and feedback mechanisms.	
		Courses are regularly reviewed to ensure that staff are incorporating assessment activities that are progressively building student competence consistent with the expectations of the institutional policies, guidelines and standards.	
		Student workload information is collected regularly and used to ensure that standards are maintained in all programmes.	
		Course design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Financial costs and benefits of assessment activities regularly assessed and reported on.	
3		**Teaching staff are encouraged to design e-learning assessment programmes with sufficient time for feedback from staff and reflection by students to meaningfully occur.**	
		Training, staff development, templates and examples are provided to support teaching staff designing more effective assessment programmes in their courses.	
		Teaching staff provided with training, guidelines and examples on how to support students completing assessment tasks appropriately to avoid plagiarism and violations of intellectual property.	
		Standards exist for e-learning assessment requirements that are used to sustain high expectations through linked assessments.	
		Guidelines and training provided to teaching staff on how to design e-learning assessment programmes with a mix of formative and summative aspects.	
		Guidelines, templates, examples and training provided to teaching staff on how to use feedback to improve student learning.	
		Guidelines and support materials provided to students to assist their making effective use of staff assessment feedback in their learning.	
		A researched evidence base of e-learning assessment activities undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**Course outlines provide students with a clear overview of the programme of assessment and the relationship between the individual assessment tasks and other learning activities.**	
		The assessment programme is designed to make effective and consistent use of e-learning technologies used in other course activities.	
		The assessment programme is designed to build on student skills and experience attained in previous work.	
		There is an explicit relationship between the individual assessments and other timetabled activities.	
		Assessment design and (re)development activities reference a researched evidence base.	
		Assessment tasks provide guidance for students on intellectual property and plagiarism issues.	
		Systems provided for automatic detection of plagiarism and collusion.	
1		**Assessments are described in terms of course and programme objectives and requirements.**	
		Students are provided with opportunities to discuss assessment tasks with each other and the teaching staff before attempting marked work.	
		Students are provided with opportunities to practice assessment tasks before attempting marked work.	
		Students are provided with timely feedback while engaging in assessed work.	
		A range of assessment formats are used in courses.	

Process L9.

Student work is subject to specified timetables and deadlines

Practices

E-learning provides a time flexible environment that demands attention to the management of timeliness in the conduct of teaching and learning on courses (Laurillard, 2002; Salmon, 2000). Negotiated agreements, between teachers and learners, concerning the ordering and timing of course elements must be clearly communicated in course timetables and assignment deadlines. Furthermore, explicit expectations and guidelines encourage and motivate learners to make the most effective use of time and enable teachers to facilitate effective time management (Clarke, 2004). As the e-learning environment imposes more self-regulated learning responsibilities on the student than they may have previously experienced, there is need for personal learning structures that ensure productivity and reduce stress (Clarke, 2004).

Evidence of capability in this process is seen by the provision of a clear timetable that relates all of the elements of a course together and communicates the logic underlying the design of the various activities. Particularly in online courses, there should be frequent pointers and reminders to students as to where they should be focusing their energies and the upcoming deadlines that they should be aware of. During the design of materials, explicit consideration should be given to student and staff workload expectations and the impact that this has on the timing of elements of the course.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are students made aware of the expectations that are inherent in all forms of assessment? (Dim1/Dim2)
2. Are there guidelines regarding minimum standards for course design and development? (Dim3)
3. Are there guidelines regarding minimum standards for course delivery? (Dim3)
4. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
5. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
6. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
7. Do staff respond to performance measures of support relating to student expectations? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, particularly timetables, assessment task descriptions and archives of communication channels.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, assessment and feedback plans, student workload plans, development checklists. Staff research and reflections including portfolios.

Dimension 3: Definition

Assessment, student workload, course design and (re)development policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Assessment planning documents. Course design and (re)development planning and project documents, quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

L9 Student work is subject to specified timetables and deadlines

	Assessment	Practices	Notes
5		**Information on the impact of particular activities on student workload and course timetabling is used when designing and (re)developing current and future courses and programmes.**	
		Student workloads and timetable constraints used to inform strategic planning relating to future e-learning initiatives.	
4		**Student workload information is collected regularly and used to ensure that standards are maintained in all programmes.**	
		Feedback collected regularly from students regarding the effectiveness of the timetables and deadlines.	
		Feedback collected regularly from staff regarding the effectiveness of the timetables and deadlines.	
		Courses are regularly reviewed to ensure that activities and assessment are timetabled in line with the expectations of the institutional policies, guidelines and standards.	
3		**Institutional policies and standards define expectations for student workloads within courses.**	
		Teaching staff provided with templates and examples of effective timetabling and workload approaches.	
		Teaching staff provided with professional development in designing effective timetabling and workload approaches.	
		Institutional policies and standards cover the need to communicate deadlines and timetables clearly to students.	
2		**Clear timetable for key activities and communication of deadlines provided in course outlines.**	
		Workload assessment used to plan extent and timing of course activities.	
		Explicit process for negotiating variances to timetables and deadlines communicated to students in course outlines and documentation.	
		An explicit chronological relationship designed between the learning activities and the expectations on the students.	
		Tutorials or other support on time management skills included in course design.	
1		**Students provided with details of the workload and time commitment required for course activities prior to enrolment.**	
		Deadline and timing information provided as part of the descriptions of individual assessments and activities.	
		The relationships between activities such as assessment and other course elements are explicit and logical.	
		Timing information repeated throughout course materials as necessary.	
		Students provided with regular reminders of upcoming deadlines as necessary during delivery of the course.	

Process L10.

Courses are designed to support diverse learning styles and learner capabilities

Practices

Inclusion of diversity is the coherent and consistent theme throughout the research literature, regarding both accessibility and learning preferences. Inclusivity underpins the argument that efforts to improve accessibility and ways of learning for some benefit all. Being inclusive requires respecting capabilities, disabilities, and styles of learning (Ragan, 1999; Salmon, 2000). As well, it requires respecting values, orientations, language factors, cultural and ethnic traditions, and the special requirements of learners (Reeves, 1997). Inclusivity involves issues of gender (Kramarae, 2003) and age (Witt and McDermott, 2004). Overall, the consideration of inclusive design benefits all learners (Kinash *et al.*, 2004; Witt and McDermott, 2004).

Evidence of capability in this area is seen through course design and implementation practices that use a variety of complementary pedagogical approaches to support student learning, including a variety of media, assessment types and communication channels. Teaching staff should be enabled and supported in being open to flexible teaching and learning methods and should support and encourage students negotiating or using alternative learning approaches that are better suited to their personal circumstances. Policies and guidelines for courses should explicitly incorporate an expectation of diversity in learning styles and learner capabilities being supported proactively, rather than being reacted to in response to student complaints.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Do staff respond to performance measures of support relating to student expectations? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1/Dim2/Dim3)
3. Are online modules in courses piloted/tested with relevant users? (Dim1/Dim2/Dim4)
4. What percentage of assessment is online? (Dim1/Dim2)
5. Are you able to carry out as much online assessment as you would wish to design into the courses? (Dim2)
6. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim2)
7. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim2/Dim3)
8. Are there guidelines regarding minimum standards for course design and development? (Dim3)
9. Are there guidelines regarding minimum standards for course delivery? (Dim3)
10. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
11. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim4)
12. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
13. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
14. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
15. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials and websites.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course development and project planning documents, development checklists, staff research and reflections including portfolios. Student support websites and materials.

Dimension 3: Definition

Equity, accessibility, disability, course design and (re)development policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Student support websites and materials.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews and compliance audits. Evaluation and feedback planning documents. Quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning, equity, accessibility, disability strategies and plans. e-learning design and (re)development policies and guidelines.

	Assessment	Practices	Notes
5		**Effectiveness of attempts to provide support for diversity is measured and used to inform planning relating to future e-learning initiatives.**	
		Diversity requirements applied during the selection and implementation of new technologies for e-learning.	
		Information on the extent to which courses are providing activities and materials that support diversity is used when designing and (re)developing courses and programmes.	
4		**Course materials regularly reviewed to ensure that diversity policies are implemented where possible and appropriate.**	
		Feedback collected regularly from students regarding the effectiveness of the e-learning tasks and activities in supporting diversity.	
		Feedback collected regularly from staff regarding the effectiveness of the e-learning tasks and activities in supporting diversity.	
		Students regularly provided with opportunities to provide feedback on diversity issues as well as on related institutional guidelines and standards.	
		Extent of participation of students with diverse backgrounds and capabilities formally assessed and regularly reported on.	
		Financial costs and benefits of supporting diversity regularly assessed and reported on.	
3		**Diversity standards, guidelines and key principles for designing and participating within courses for diversity are provided to all staff and students.**	
		Institutional policy mandates compliance with standards, guidelines and key principles for supporting diversity in all course design, (re)development and delivery activities.	
		Staff training and development provided to ensure that all staff are aware of the need to support diversity within courses and how they can provide alternatives for students.	
		Staff provided with templates and guidelines that illustrate how to support diversity.	
		Institutional policy prohibits the use of inappropriate cultural bias and stereotypes in course materials and activities.	
		Institutional e-learning strategy and associated plans formally include consideration of diversity aspects.	
		A researched evidence base of diversity projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**Students provided with information in the course outline and documentation on the procedure to follow if course elements fail to meet their individual needs.**	
		Teaching staff provided with e-learning design and (re)development assistance that encourages and supports diversity.	
		E–learning design and (re)development procedures include formal testing and review of diversity support with student participants.	
		Formal design and development approaches used to ensure variety and diversity of activities.	
		Students are formally consulted regarding diversity aspects during the design process.	
		Programme or degree planning and review processes incorporate diversity criteria in their analysis of courses and programmes.	
		Student support facilities provided to specifically address diversity issues and requirements.	
		E–learning design and (re)development activities reference a researched evidence base of diversity issues and requirements.	
1		**Students told of measures undertaken to support diversity and encouraged to make use of the provided alternatives.**	
		Consistent use of variety in teaching and learning activities throughout the course.	
		Consistent use of a variety of media throughout the course.	
		Course materials and activities avoid inappropriate bias and stereotypes.	

Process D1.

Teaching staff are provided with design and development support when engaging in e-learning

Practices

Support provided to teaching staff in effective learning design is vital if courses are to develop pedagogical approaches that reflect the state of current understanding, as opposed to traditional approaches (Ragan, 1999). By working with pedagogical experts, teaching staff can be encouraged to consider pedagogies that may make more effective use of available technology or, alternatively, technologies that enable particularly effective pedagogical approaches that they may not have considered (Wingard, 2004). Staff must not only be trained and supported to develop strong computer, information literacy and management skills, but must also acquire relevant and appropriate pedagogical knowledge and skills to apply an informed critical perspective to using the knowledge and skills (Weaver, 2006). Policy issues that require attention include intellectual property use and ownership as well as decisions about the infrastructure and support (Picciano, 2006).

Evidence of capability in this process is seen in the availability of technical assistance and staff development for the full range of technologies that are provided as standard in the institution, along with expert assistance in the design of the pedagogical approaches for courses. Access to this support is managed to ensure efficient and equitable use of time and the achievement of strategic goals as well as short term requirements. Effective approaches in the institutional context are communicated through examples, case studies, standards and guidelines customized for the institution, as well as during training for teaching staff.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim1/Dim2/Dim3)
3. Does instructor training and assistance in e-learning continue through the progression of the online course? (Dim1/Dim2/Dim3)
4. Are there processes in place to ensure that staff understand the potential of e-learning? (Dim1/Dim2)
5. Are there training staff to train e-learning staff? (Dim2)
6. Is there a staff development strategy? (Dim2/Dim3)
7. Are there guidelines regarding minimum standards for course design and development? (Dim3)
8. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
9. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
10. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
11. Are you able to carry out as much online assessment as you would wish to design into the courses? (Dim4)
12. Is teaching staff capability for making the transition from classroom to online teaching formally assessed during training? (Dim4)
13. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
14. Is staff support and development monitored and evaluated? (Dim4/Dim5)
15. Are there processes in place for evaluating the impact of e-learning on staff? (Dim4/Dim5)
16. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim4)
17. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
18. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Staff development and support materials.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Staff development and support materials. Teaching staff research and reflections including portfolios.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. E-learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E–learning design and (re)development policies and guidelines.

	Assessment	Practices	Notes
5		**Information on the effectiveness of assistance provided to teaching staff and the outcomes of courses is used to guide the nature and type of assistance provided for current and future e-learning initiatives.**	
		Information on the effectiveness of assistance provided to teaching staff and the outcomes of courses is used to inform strategic and operational planning for current and future e-learning initiatives.	
		Type and availability of technical and pedagogical assistance is determined in response to the assessed skills of the teaching staff working with particular technologies.	
		Type and availability of technical and pedagogical assistance is determined in response to measures of effectiveness of different technologies and associated pedagogies.	
		Pedagogical support implications explicitly addressed when introducing new technologies to the institution.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of design and development support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Effectiveness and impact on course designs and implementations of templates, project supporting materials and quality assurance procedures used by teaching staff is measured and reported on.**	
		Course design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Feedback collected regularly from staff regarding the effectiveness of the e-learning design and development support.	
		Use of technical assistance by teaching staff is measured and reported on as to its effectiveness and impact on the final course design and implementation.	
		Use of pedagogical assistance by teaching staff is measured and reported on as to its effectiveness and impact on the final course design and implementation.	
		Measures collected of the effectiveness of pedagogical approaches adopted for particular technologies.	
		Financial costs and benefits of technical and pedagogical support and assistance regularly assessed and reported on.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional standards are used to define the support resources and assistance available to teaching staff (re)developing courses.**	
		Teaching staff are provided with training and professional development opportunities when engaging in design and (re)development activities using e-learning technologies and pedagogies.	
		Teaching staff are provided with project tools including standard contracts and licenses, checklists and quality assurance procedures to support design and development of e-learning projects and initiatives.	
		Standards and guidelines covering technical and pedagogical aspects of course (re)development are available and are used by the staff providing assistance.	
		Formal processes for course (re)development explicitly consider the allocation and use of technical assistance.	
		Formal processes for course (re)development explicitly include consideration of pedagogical issues.	
		Formal processes for course (re)development explicitly consider appropriate licensing and use of intellectual property.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Institutional procedures for acquiring and maintaining e-learning technologies explicitly consider the technical support needs of teaching staff.	
2		**Assistance in course development is scheduled or planned for throughout the process of course design and development.**	
		Assistance in changing pedagogies explicitly included in the process of (re)developing individual courses.	
		E–learning design, (re)development and delivery procedures include formal risk assessment and risk mitigation plans for staff skills in using e-learning pedagogies and technology.	
		E–learning design, (re)development and delivery procedures supported by teams of specialist staff, academic colleagues and students.	
1		**Technical design and development assistance available to staff designing and (re)developing courses.**	

Process D2.

Course development, design and delivery are are guided and informed by formally developed e-learning procedures and standards

Practices

There is general agreement that institution-wide successful implementation of effective e-learning depends on explicit institutional procedures and standards. Standards and guidelines can support more effective practice (Marshall, 2004) and their use can result in cheaper, more useful materials to support student learning. Schauer *et al*. (2005) note that teachers cannot develop new skills and redesign courses without financial and organizational support from administration. But neither can administrators develop and maintain effective policy without input and feedback from teachers willing to engage with the pedagogical and technical issues (de Freitas and Oliver, 2005).

Evidence of capability in this area is seen through the use of consistent, documented practice that reuses previous experience within the institution to build capability. Formal standards are used where available to inform and guide practice and ensure quality and reusability of materials. These standards and guidelines are communicated widely within the institution to encourage wider adoption by teaching staff.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are there guidelines regarding minimum standards for course design and development? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Are there guidelines regarding minimum standards for course delivery? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim1/Dim2/Dim3/Dim4/Dim5)
4. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim1/Dim2/Dim3/Dim4/Dim5)
5. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
6. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim3)
7. Are there systems in place (faculty and institution) to deal with issues arising from student use of electronically accessed data? (Dim3)
8. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
9. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
10. Are online modules in courses piloted/tested with relevant users? (Dim4)
11. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
12. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
13. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Staff development and support materials.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Staff development and support materials. Teaching staff research and reflections including portfolios.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. e-learning design and (re)development policies and guidelines.

	Assessment	Practices	Notes
5		**Information on the effectiveness of e-learning procedures and standards and the outcomes of courses is used to inform strategic and operational planning for current and future e-learning initiatives.**	
		Content of e-learning technical and pedagogical standards and procedures are determined in response to measures of effectiveness of teaching staff use of different technologies and associated pedagogies.	
		Changes to e-learning procedures and standards are explicitly addressed when introducing new technologies to the institution.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning procedures and standards and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Use of e-learning procedures and standards by teaching staff is measured and reported on as to its effectiveness and impact on the final course design and implementation.**	
		Feedback collected regularly from staff regarding the effectiveness of the e-learning design and development support.	
		Effectiveness and impact on course designs and implementations of e-learning procedures and standards used by teaching staff is measured and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Financial costs and benefits of e-learning technical and pedagogical procedures and standards regularly assessed and reported on.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Standards and guidelines covering technical and pedagogical aspects of course (re)development are available and are used by the staff providing assistance.**	
		Teaching staff are provided with training and professional development opportunities when engaging in design and (re)development activities using e-learning technologies and pedagogies.	
		Teaching staff are provided with project tools including checklists and quality assurance procedures to support design and development of e-learning projects and initiatives.	
		Teaching staff provided with training, guidelines and examples on how to design and (re)develop e-learning resources appropriately to avoid plagiarism and violations of intellectual property.	
		Formal processes for course (re)development explicitly consider the allocation and use of technical assistance.	
		Teaching staff are provided with templates, examples, training and support in using the e-learning procedures and standards.	
		Formal processes for course (re)development explicitly include consideration of pedagogical issues.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Institutional procedures for acquiring and maintaining e-learning technologies explicitly consider the technical support needs of teaching staff.	
2		**Guidelines and procedures for changing pedagogies explicitly referred to in the process of (re)developing individual courses.**	
		Teaching staff are provided with time, recognised, rewarded and supported in their engagement with innovative e-learning initiatives and experiments.	
		Assistance in course development is scheduled or planned for throughout the process of course design and development in line with the e-learning procedures and standards.	
		E–learning design, (re)development and delivery procedures supported by teams of specialist staff, academic colleagues and students.	
		E–learning design, (re)development and delivery procedures include formal risk assessment and risk mitigation plans for staff skills in using e-learning pedagogies and technology.	
		E–learning design, (re)development and delivery procedures include contracts and agreements covering the ownership and use of intellectual property when designing and (re)developing courses.	
1		**Technical design and development guidelines, procedures and standards provided and used by staff designing and (re)developing courses.**	

Process D3.

Explict linkages are made in the design rationale regarding the pedagogies, content and technologies chosen

Practices

Effective e-learning requires the complex links between pedagogical approach, course content, and use of technologies to be constructively aligned to defined learning objectives and outcomes (Laurillard, 2002; Ragan, 1999). Learning objectives are the foundation for an educational event that forms a contract between teacher and learner and helps to ensure the selection of instructional strategies for content presentation that successfully delivers defined outcomes. Interactions are the ways teachers and learners interact as geographically distant members of a learning community. Assessment also serves both teacher's and learner's purposes by monitoring progress that enables the teacher to supply formative feedback information to the learner, and, for the learner to provide feedback on the course design to the teacher (Ragan, 1999). The distance and time constraints of e-learning require pedagogical practices and technology selection be pre-planned as there is less flexibility for teaching staff to make spontaneous changes to e-learning activities (Herrington *et al*., 2005).

Evidence of capability in this area is seen with the use of explicit design processes and plans that link technology decisions with defined student learning outcomes and graduate attributes. This should also include making the underlying design rationale and pedagogy apparent to students when they are introduced to how the technology will be used in the particular course. Teaching staff are provided with templates, examples, training and support in using the range of technologies available to support student learning in a range of contexts and disciplines.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim1/Dim2/Dim3)
2. Are you able to carry out as much online assessment as you would wish to design into the courses? (Dim4)
3. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
4. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course design rationale, development and project planning documents, project resourcing proposals. Teaching staff research and reflections including portfolios.

Dimension 2: Planning

Course design rationale, development and project planning documents and templates. Teaching staff research and reflections including portfolios. Design and development quality assurance documents. Risk assessments and mitigation plans.

Dimension 3: Definition

Course design and (re)development policies, guidelines, templates, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E–learning design and (re)development policies and guidelines.

D3 Explict linkages are made in the design rationale regarding the pedagogies, content and technologies chosen

	Assessment	Practices	Notes
5		**Changes in graduate attributes or guidance in developing learning outcomes reflected in technology planning processes.**	
		Information on the effectiveness of formal design and (re)development assistance provided to teaching staff and the outcomes of courses is used to inform strategic and operational planning for future e-learning initiatives.	
		Information on the effectiveness of formal design and (re)development assistance provided to teaching staff and the outcomes of courses is used to inform resourcing for ongoing and new assistance, and guides the nature and type of assistance provided.	
		Type and availability of technical and pedagogical design and (re)development assistance is determined in response to the assessed skills of the teaching staff working with particular technologies.	
		Type and availability of design and (re)development assistance is determined in response to measures of effectiveness of different technologies and associated pedagogies.	
		Design and (re)development support implications explicitly addressed when introducing new technologies to the institution.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of design and development support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Courses are regularly reviewed to ensure that staff are providing explicitly designed linkages between the pedagogies, content and techologies consistent with the expectations of the institutional policies, guidelines and standards.**	
		Regular independent reviews of student's experiences of courses conducted to ensure they are aware of the relationships between course elements and the contribution those elements are making to them achieving the defined learning objectives.	
		A formal post-delivery review is a standard component of any formal course design and (re)development processes.	
		Feedback collected regularly from staff regarding the effectiveness of any formal design and (re)development procedures.	
		Course design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Financial costs and benefits of particular e-learning technologies and pedagogies regularly assessed and reported on.	
3		**Institutional policies require that a description of the explicit relationships between course elements is part of all course documentation provided to students.**	
		Institutional policies require that a formal statement of learning objectives is used as the starting point for course design and (re)development.	
		Teaching staff are provided with training, guidelines and examples for creating design rationales that effectively link learning outcomes with the pedagogies, content and technologies used.	
		Teaching staff are provided with project tools including checklists and quality assurance procedures to support the creation of rationales linking pedagogy and technology.	
		Templates and guidelines provided for individual technologies that convey what types of cognitive outcomes for students can be supported by the technologies.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Teaching staff are provided with training, guidelines and examples for creating design rationales that are informed, aligned with and support institutional e-learning strategies and technology plans.	
2		**E–learning design activities reference the learning objectives and use them to determine the nature and relationship of content, activities and assessment used in the delivery.**	
		Programme or degree planning and review processes incorporate design rationales and planning documents in their analysis of courses and programmes.	
		Explicit plan relating the learning outcomes to technology and pedagogy decisions used to guide the design and delivery of the course.	
		Formal design and (re)development procedures are followed.	
		Students are formally consulted during the design process.	
		A defined list of graduate and learning outcomes for the course and programme are defined prior to the design and (re)development process.	
		Course design and (re)development activities reference a researched evidence base.	
1		**Activities, content and assessment used in the course design are linked with common learning outcome statements.**	
		The design rationale is explicitly stated and covers pedagogical and technological decisions taken during the design and (re)development process.	
		The design rationale is used to convey to students the explicit relationships between course elements.	

Process D4.

Courses are designed to support disabled students

Practices

Ensuring that materials are accessible to students with disabilities requires careful design and consideration of accessibility issues throughout the creation of materials, as well as the use of development tools to support student use of assistive technologies (Witt and McDermott, 2004). Although assistive technologies are readily available to enable ICT access for those with disabilities, they often only help overcome the first of many barriers that need to be addressed with effective learning design.

Differences that affect accessibility extend beyond vision, hearing, and motor impediments to include learning disabilities. Whilst there is a general lack of research-based resources for diverse learners, new technology offers potential for greater accessibility and flexibility, and there is a common view that implementing accessibility protocols and features for disabled learners inevitably benefits all online learners (Edmonds, 2004).

Evidence of capability in this area is seen through design and implementation practices that use a variety of complementary approaches to support student learning, including a variety of media. Accessibility should be explicitly considered during the design process and standards such as those provided by the W3C (http://www.w3c.org/WAI/) used to ensure compliance. Formal and regular reviews involving students as key stakeholders should be conducted both of courses and the supporting standards, templates and staff development materials.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim1/Dim2/Dim3/Dim4/Dim5)
4. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim1/Dim2/Dim3)
5. Are there guidelines regarding minimum standards for course design and development? (Dim3)
6. Are there guidelines regarding minimum standards for course delivery? (Dim3)
7. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
8. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim3)
9. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
10. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3)
11. Are online modules in courses piloted/tested with relevant users? (Dim4)
12. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
13. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Quality assurance documents.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Quality assurance documents.

Dimension 3: Definition

Equity, accessibility, disability, course design and (re)development policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Student support websites and materials.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews and compliance audits. Quality assurance and compliance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning, equity, accessibility, disability strategies and plans. E–learning design and (re)development policies and guidelines. Institutional e-learning risk assessments.

D4 Courses are designed to support disabled students

	Assessment	Practices	Notes
5		**Effectiveness of attempts to provide support for accessibility is measured and used to inform strategic planning for future e-learning initiatives.**	
		Accessibility requirements applied during the selection and implementation of new technologies for e-learning.	
		Information on the extent to which courses are providing activities and materials that support accessibility is used when designing and (re)developing courses and programmes.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of accessibility support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Effectiveness and impact on accessibility within courses arising from the use of templates, project supporting materials and quality assurance procedures used by staff is measured and reported on.**	
		Students regularly provided with opportunities to provide feedback on accessibility issues as well as on related institutional guidelines and standards.	
		Feedback collected regularly from staff regarding the effectiveness of the support for assisting disabled students.	
		Compliance with standards for accessibility is monitored prior to and during delivery of all courses.	
		Course materials regularly reviewed to ensure that accessibility measures are implemented where possible and appropriate.	
		Financial costs and benefits of complying with standards for disability access regularly assessed and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
3		**Institutional policy mandates compliance with standards, guidelines and key principles for supporting accessibility when engaging in course design, (re)development and delivery.**	
		Standards, guidelines and key principles for accessibility are provided to all staff and students.	
		Students are provided with a clear set of standard accessibility support services available in all courses.	
		Teaching staff are provided with accessibility training and professional development opportunities when engaging in design and (re)development activities using e-learning technologies and pedagogies.	
		Staff are provided with project template documents and tools including checklists, workflow tools, and quality assurance procedures to support design and development of accessible e-learning projects and initiatives.	
		A researched evidence base of accessibility projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Institutional procedures for acquiring and maintaining e-learning technologies explicitly consider disability and accessibility aspects of use by staff and students.	
2		**Formal design and development approaches used to ensure variety and accessibility of activities.**	
		Students are provided with information in the course outline and documentation on the procedure to follow if course elements fail to meet their individual needs.	
		E–learning design and (re)development procedures include formal testing and review of accessibility support with student participants.	
		Students are formally consulted regarding accessibility aspects during the design process.	
		Programme or degree planning and review processes incorporate accessibility criteria in their analysis of courses and programmes.	
		Student support facilities provided to specifically address accessibility issues and requirements.	
		E–learning projects and initiatives include formal risk assessment and risk mitigation plan for accessibility and disabled student participation.	
1		**Students told of measures undertaken to support accessibility and encouraged to make use of the alternatives provided.**	
		Consistent use of variety and alternatives in teaching and learning activities throughout the course.	
		Consistent use of alternative forms of media throughout the course.	

Process D5.

All elements of the physical e-learning infrastructure are reliable, robust and sufficient

Practices

The physical infrastructure used to provide and sustain e-learning delivery must be as reliable and robust as the personnel infrastructure that depends on it. Technology that is unreliable will rapidly destroy the confidence of students, will disrupt the process of building effective engagement and act as a significant barrier to the use of technology by staff (Butler and Sellborn, 2002). In this context 'physical' includes the hardware, software and other facilities needed to deploy e-learning such as teaching rooms, cameras, servers etc. The highly interdependent complexity of elements in the e-learning infrastructure implies the consequent need for policies and agreements to establish and maintain reliability.

Evidence of capability in this process is seen through the creation and use of an integrated infrastructure with hardware, software and teaching facilities able to be easily accessed by staff and student, design processes that include explicit consideration of reliability aspects when choosing technology and the basing of this decision on evidence of reliability collected in the institutional context whenever possible. Course designs include consideration of alternatives to be used by teaching staff when technology fails and ensuring there are support procedures in place to deal with potential failures. Standards and guidelines are used to communicate which technologies have been proven reliable and regular monitoring and reporting is used to prove and sustain reliability. The selection of new technologies is done with reference to formal standards and the ability for them to be integrated within the existing infrastructure.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Does the organisation have adequate space and equipment to support e-learning? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. At your level (project/school/faculty), is there a strategy to ensure the reliability of the delivery technology or do you rely on higher level strategy? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are there guidelines regarding minimum standards for course design and development? (Dim3)
4. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
5. Are there guidelines regarding minimum standards for course delivery? (Dim3)
6. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim3)
7. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
8. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3)
9. Are online modules in courses piloted/tested with relevant users? (Dim4)
10. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
11. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
12. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practicectice (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course development and project planning documents, templates, development checklists and procedures. Project reviews, operational monitoring reports, business cases and equipment selection procedures. Service level agreements and backup validation reports.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Project reviews, operational monitoring reports, business cases and equipment selection procedures. Service level agreements, system audit documentation and backup validation reports. Quality assurance documents, procedures and guidelines.

Dimension 3: Definition

IT standards, equipment selection and purchasing guidelines and policies. Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. E–learning, strategy and plans. Service level agreement templates.

Dimension 4: Management

Operational system monitoring reports, e-learning technology evaluations and assessments, project reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Service level agreements and institutional risk assessments. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**Information on technology performance, reliability and compliance with service level agreements used to make decisions regarding the deployment and ongoing use of e-learning technologies.**	
		Effectiveness of the physical e-learning infrastructure is used to inform strategic planning for future e-learning initiatives.	
		Service level agreements and standards regularly revised as student e-learning needs and technology use evolve.	
		Measures of performance of e-learning infrastructure and interoperability are used to develop characteristics and standards that determine the selection of new elements and the retention of existing technology.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the reliability and robustness and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Technologies used in the physical e-learning infrastructure are subject to automatic monitoring and reporting of performance.**	
		Formal e-learning infrastructure risk assessment and mitigation strategy review is undertaken, reported on regularly and the results endorsed by institutional leadership.	
		Feedback collected regularly from staff on the ease of use, effectiveness, robustness and reliability of the e-learning infrastructure.	
		Feedback collected regularly from students on the ease of use, effectiveness, robustness and reliability of the e-learning infrastructure.	
		Compliance with service level agreements for elements of the physical e-learning infrastructure regularly reported on.	
		Standards for reliability and support are subject to regular review from the perspectives of the institution, teaching staff and students.	
		Regular review undertaken of financial costs and benefits of e-learning infrastructure purchase and ongoing maintenance.	
		Infrastructure (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Financial costs and benefits of the e-learning infrastructure regularly assessed and reported on.	
		Institutional decisions to add new or modify existing e-learning infrastructure elements are informed by formal testing and review by student and staff users.	
3		**Technologies used in the physical e-learning infrastructure, either institutionally provided or outsourced, are subject to regularly revised service level agreements that explicitly consider the impact of the technology on student learning.**	
		Institutional decisions to add or modify e-learning infrastructure elements are informed, aligned with and supportive of e-learning strategies and technology plans.	
		Standards for reliability and support of delivery technologies in place and used when selecting technologies used in the physical e-learning infrastructure.	
		Service level agreements and associated support facilities used to ensure that technologies used are reliable and sufficient.	
		Institutional decisions to add new or modify existing e-learning infrastructure elements are informed by defined standards for interoperability.	
		A researched evidence base of e-learning infrastructure projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning infrastructure design and (re)development.	
2		**E–learning design and (re)development procedures include formal consideration of e-learning technology reliability and support issues.**	
		E–learning design and (re)development procedures include formal risk analysis and planning for potential technology failure and strategies for alternatives to be used in the event of failure.	
		Regular audits of all e-learning infrastructure elements are conducted to ensure the validity of backups and disaster recovery procedures.	
		Explicit consideration of reliability made when selecting technologies used in the physical e-learning infrastructure.	
		Selection and deployment of new technologies used in the physical e-learning infrastructure is undertaken according to a formally defined plan.	
		Selection and deployment of new technologies informed by formal support of innovation, exploration and experimentation.	
		Explicit consideration is given to interoperability with existing elements when designing, planning and implementing additions or modifications to the e-learning infrastructure.	
		Formal risk assessment and mitigation process undertaken when designing, planning and implementing additions or modification to the e-learning infrastructure.	
		Regular and systematic upgrading and maintenance undertaken of all elements of the e-learning infrastructure.	
1		**Technologies used in the physical e-learning infrastructure are implemented with maintenance, reliability and support issues explicitly addressed.**	
		All user information captured by technologies is protected by regular backup processes.	
		Decisions to add new e-learning infrastructure elements are informed by the ability of the new technology to integrate with other pre-existing infrastructure.	

Process D6.

All elements of the physical e-learning infrastructure are integrated using defined standards

Practices

Standards and guidelines can support more effective practice (Marshall, 2004) and their use can result in cheaper, more useful materials to support student learning. The physical e-learning infrastructure, as discussed in process D5, is a complex environment in which various media facilitate a multitude of connections and interactions through highly interdependent technical elements (Gunawardena and McIsaac, 2004). The Joint Information Systems Committee identifies two challenges for e-learning infrastructures: one cultural – involving institution-wide collaboration for change in pedagogical concepts; the other technical – concerning systems integration. They comment that "[f]ull integration…is most likely to come from a standards or specifications based approach… that requires the close collaboration of the entire community of colleges, support agencies and suppliers" (2003, p. 1). Hirumi (2005) notes that the conversations occurring in the quest for quality e-learning may be as, or even more, helpful than the standards they seek to determine.

Evidence of capability in this area is seen through the use of consistent, documented practice that reuses previous experience within the institution to build capability. Formal standards are used where available to inform and guide practice and ensure quality and reusability of materials. These standards and guidelines are communicated widely within the institution to encourage wider adoption by teaching staff.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are there guidelines regarding minimum standards for course design and development? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Are there guidelines regarding minimum standards for course delivery? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim1/Dim2/Dim3)
4. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
5. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
6. Does the organisation have adequate space and equipment to support e-learning? (Dim3)
7. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3)
8. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
9. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)
10. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Information systems and e-learning standards. Project reviews, operational monitoring reports, business cases and equipment selection procedures. Course development and project planning documents, templates, development checklists and procedures.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Project reviews, operational monitoring reports, business cases and equipment selection procedures. Service level agreements, system audit documentation and backup validation reports. Quality assurance documents, procedures and guidelines.

Dimension 3: Definition

IT and e-learning standards, equipment selection and purchasing guidelines and policies. Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. e-learning, strategy and plans.

Dimension 4: Management

E–learning technology evaluations and assessments, project reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Institutional risk assessments and e-learning infrastructure performance reviews and planning documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

D6 All elements of the physical e-learning infrastructure are integrated using defined standards

	Assessment	Practices	Notes
5		**The effectiveness of institutional standards in influencing student outcomes and efficiency of e-learning courses is measured and this information used to maintain and introduce standards for use.**	
		Measures of performance and interoperability of e-learning infrastructure are used to (re)develop standards and guidelines.	
		Standards regularly revised as student learning needs and e-learning technology use evolve.	
		New standards developed, either externally or internally, are reviewed when promulgated and introduced using a formal process if appropriate and useful.	
		Institutional e-learning risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning projects and initiatives as well as changing standards and staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Compliance with and use of defined institutional standards is measured and enforced through regular review of the physical e-learning infrastructure and individual courses.**	
		Feedback collected regularly from staff on the effectiveness, robustness and reliability of the e-learning infrastructure.	
		Feedback collected regularly from students on the effectiveness, robustness and reliability of the e-learning infrastructure.	
		Standards are subject to regular review from the perspectives of the institution, teaching staff and students.	
		The effectiveness of individual standards in enabling the physical e-learning infrastructure is regularly reviewed and reported on.	
		Financial costs and benefits of compliance with the defined institutional standards regularly assessed and reported on.	
		E–learning infrastructure (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Formal e-learning infrastructure risk assessment and mitigation strategy review is undertaken, reported on regularly and the results endorsed by institutional leadership.	
		Institutional decisions to add new or modify existing e-learning standards are informed by formal testing and review by student and staff users.	
3		**Institutional policies require the use of defined standards when designing, (re)developing or using the physical e-learning infrastructure.**	
		Staff are provided with training, guidelines and examples for working with institutional standards for the physical e-learning infrastructure.	
		Staff are provided with project template documents and tools including checklists, workflow tools, and quality assurance procedures to support design and development of e-learning projects and initiatives.	
		Templates and guidelines provided for creating and modifying standards.	
		A researched evidence base of e-learning standards relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Institutional decisions to add new or modify existing e-learning standards are informed, aligned with and supportive of institutional e-learning strategies and technology plans.	
2		**A searchable repository of standards for the physical e-learning infrastructure is provided.**	
		Course, programme or degree planning and review processes incorporate assessment of the contributions made by standards for the physical e-learning infrastructure.	
		Reviews of the physical e-learning infrastructure include assessment of the risks introduced and mitigated by the use or not of standards.	
1		**The physical e-learning infrastructure is integrated seamlessly with other key institutional IT systems.**	
		Reference is made to institutional or external standards and guidelines when designing and (re)developing the physical e-learning infrastructure.	
		Standards for the physical e-learning infrastructure are defined for all technologies used in the design, (re)development and delivery of courses.	
		Reference is made to institutional or external standards and guidelines when providing access to the physical e-learning infrastructure to staff and students.	

Process D7.

Resources created are designed and managed to maximise reuse

Practices

It is argued that a major economic and efficiency advantage of e-learning is its potential for sharing and reusing learning materials (Jochems *et al*., 2004; Weller, 2004; Wiley, 2000). The reuse and sharing of learning materials relies on the ability to store and retrieve them effectively. To achieve this, the material's description – metadata – and packaging must be accurately documented and standardised for an institution. Beyond this, staff need to be enabled and encouraged to reuse e-learning resources and be provided with training, opportunities and incentives to create reusable resources themselves.

Evidence of capability in this process is seen through the creation and use of metadata standards and templates along with repositories for storing and accessing course resources for reuse. Teaching staff should be provided with training and support in the creation and resue of resources as well as incentives to both create reusable resources in the first place as well as enable reuse. Intellectual property aspects of resource creation and use should be addressed explicitly at a policy and employment level and all staff involved in the design, (re)development and delivery of courses must be trained and supported in understanding the implications of intellectual property in their work. Ongoing design and development of the physical e-learning infrastructure should be done with an awareness of reuse as well as an appreciation of the rapid pace of change and development in this area.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Is there a system in place to support re-use of learning materials? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim1/Dim2/Dim3)
4. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim1/Dim2/Dim3)
5. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
6. Are there guidelines regarding minimum standards for course design and development? (Dim3)
7. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
8. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3)
9. Are online modules in courses piloted/tested with relevant users? (Dim4)
10. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
11. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
12. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course materials, metadata and associated schemas.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Course materials, metadata schemas and templates. Quality assurance documents. Intellectual property agreements and reuse plans.

Dimension 3: Definition

Intellectual property, course design and (re)development policies and guidelines. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Metadata schemas and templates.

Dimension 4: Management

E–learning technology evaluations and assessments, project reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Institutional risk assessments and e-learning infrastructure performance reviews and planning documents. Project resourcing applications and planning documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

D7 Resources created are designed and managed to maximise reuse

	Assessment	Practices	Notes
5		**Information on the ability of particular technologies to support reuse used to make decisions about new technologies being made available and whether to allow the ongoing use of existing technology.**	
		Effectiveness of attempts to encourage reuse is measured and used to inform strategic planning relating to future e-learning initiatives.	
		Information on the extent to which courses are reusing resources is used when designing and (re)developing courses and programmes.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of design and (re)development support for reuse and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**The extent to which resources are being reused is measured and reported on regularly.**	
		The extent to which staff are creating reusable resources is measured and reported on regularly.	
		E–learning resources intended for reuse are tested and reviewed by staff and student users.	
		Feedback collected regularly from staff regarding the effectiveness of systems and procedures for encouraging and supporting reuse of course resources.	
		Effectiveness and impact on reuse of templates, project supporting materials and quality assurance procedures used by staff is measured and reported on.	
		Compliance with standards for metadata creation is monitored prior to and during delivery of all courses.	
		Financial costs and benefits of reuse are regularly assessed and reported on.	
		Formal e-learning resource reuse risk assessment and mitigation strategy review is undertaken, reported on regularly and the results endorsed by institutional leadership.	
3		**Intellectual property agreements are defined and implemented with all staff engaged in the design, and (re)development of course resources.**	
		Staff are provided with training, guidelines and examples for creating and adapting reusable resources.	
		Institutional strategies, policies, contracts and standards support and encourage the reuse of e-learning resouces.	
		Metadata templates and schemas are defined for use at a disciplinary and institutional level.	
		Staff are provided with training, guidelines and examples for creating effective metadata for all resources they create or use.	
		Standards, including pre-defined licenses and terms of use, for the storage and interoperability of content resources are defined.	
		Institutional policies require that designed and (re)developed content resources be able to be reused beyond the immediate course context.	
		Institutional policies and standards define procedures governing the archiving and orderly deletion of e-learning resources and information.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
2		**A searchable repository of reusable e-learning resources is provided.**	
		E–learning design and (re)development procedures include explicit consideration of licensing or purchasing and reuse of pre-existing resources before new resources are created.	
		Incentives provided to teaching staff to create resources that can be effectively reused.	
		Incentives provided to teaching staff that reuse resources sourced internally or licensed from external repositories.	
		E–learning resources are explicitly designed to support ongoing maintenance and adaptation.	
		Metadata templates used when creating and using content resources during course design, (re)development and delivery.	
		Ownership and use conditions stored in a consistent manner with content resources during course design, (re)development and delivery.	
		Course e-learning resources are designed to support ongoing use and reuse by students.	
		Plans for reuse of e-learning materials and resources include formal risk assessment and mitigation of risks arising from reuse.	
1		**E–learning resources packaged and stored for reuse beyond initial delivery.**	
		Metadata is provided for all e-learning resources created and used in courses.	
		Ownership and use conditions apparent for all e-learning resources delivered as part of courses.	

Process S1.

Students are provided with technical assistance when engaging in e-learning

Practices

The dependence of e-learning on technology means that students must be able to receive support to ensure they can make effective use of that technology whenever they choose to study (Ragan, 1999; Salmon, 2000; Laurillard, 2002). Access to support facilities has been shown to correlate with improved learning outcomes (Fredericksen *et al*., 1999) but this is obviously predicated on students getting a professional and timely service. Recent research shows that student's need for technical assistance is no longer seen as a significant barrier to e-learning for younger students (Muilenburg and Berge, 2005), however, older students report the need for greater assistance (Kvavik and Caruso, 2005, p. 9). Clyde and Delohery (2005) recommend, as do others (for example, Vonderwell and Zacharia, 2005), a preemptive approach to technical problems that assesses student's technical capabilities to ensure that appropriate levels of institutional or specific training and support are made available as needed before they impact negatively on student learning.

Evidence of capability in this process is seen in the provision of information on how to get assistance with technology. This should consist of contact information for both telephone and email support as well as self-help facilities such as web pages and documentation. It should convey how student requests will be treated and the timeframe within which they can expect assistance. Course specific information should be supplied when technologies are used other than those formally and normally required and supported by the institution. Policies and guidelines should communicate the extent of support available and the timeframes within which support is provided. Support staff are provided with templates, examples, training and support in using the range of resources available to assist students.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1/Dim2/Dim3)
2. Are students provided with the training and technical assistance necessary to complete the course? (Dim1/Dim2/Dim3)
3. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim1/Dim2/Dim3/Dim4)
4. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
5. At your level (project/school/faculty), is there a strategy to ensure the reliability of the delivery technology or do you rely on higher level strategy? (Dim2/Dim3)
6. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim2/Dim3/Dim4)
7. Are there guidelines regarding minimum standards for course design and development? (Dim3)
8. Are there guidelines regarding minimum standards for course delivery? (Dim3)
9. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
10. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
11. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
12. Does the organisation have adequate space and equipment to support e-learning? (Dim4)
13. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based independent evaluations? (evidence at school, faculty and institution level) (Dim4)
14. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim4)
15. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
16. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim4)
17. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
18. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
19. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
20. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)
21. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Student support websites and materials. Course outlines and other materials including enrolment materials and course descriptions. IT webpages, e-learning system support pages.

Dimension 2: Planning

Student support websites and materials. Service level agreements. Course outlines and other materials including enrolment materials and course descriptions. IT webpages, e-learning system support pages. Course development and project planning documents

Dimension 3: Definition

Course design and (re)development policies and guidelines. Service level agreement templates. Student support websites and materials. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Operational system monitoring reports, service level agreement monitoring reports and reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Support service business cases and operational plans. Service level agreements and institutional risk assessments. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**The support needs of students are taken into account during new e-learning technology selection and deployment.**	
		The types and content of student requests are used to influence technologies introduced and supported, and to manage the process of introducing new technologies.	
		The types and content of student requests for e-learning technical support are used to inform the risk assessments undertaken and mitigation strategies implemented for current and future e-learning projects and initiatives.	
		Measures of support performance used to determine resources provided to support students.	
		Measurements of when students access e-learning services are used to plan and resource the hours of operation of support.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of student support and changing student requirements arising from e-learning technologies and pedagogies being used.	
		Formal risk assessments undertaken of e-learning initiatives and projects are used to identify requirements for new or changed technical assistance.	
4		**Measures of the demand for and effectiveness of the technical support provided to students are collected and reported on regularly.**	
		Feedback collected regularly from students regarding the clarity and effectiveness of the technical support provided.	
		Feedback collected regularly from staff regarding the clarity and effectiveness of the technical support provided to students.	
		Measures of student support response times and effectiveness collected and reported regularly.	
		Compliance of e-learning technical support with defined student support service level agreements monitored and regularly reported on.	
		Compliance of e-learning technical support with institutional e-learning strategies and technology plans monitored and reported on regularly.	
		Financial costs and benefits of technical support provided to students regularly assessed and reported on.	
		E–learning support provided to students is subject to formal quality assurance reviews and re-prioritisation of resources and objectives.	
		Measures of the demand for and effectiveness of the e-learning technical support provided to disabled students are collected and reported on regularly.	
		Overlap and duplication of support and resources provided to students engaged in e-learning is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional standards and service level agreements for the type and extent of student technical support are defined in a way that is informed, aligned with and support institutional e-learning strategies and technical plans.**	
		Institutional procedures for acquiring and maintaining e-learning technologies explicitly consider the student support implications.	
		Staff involved in providing technical support to students are provided with templates, examples, training and support in using the range of resources available to assist students.	
		Templates available for use by staff providing information on the support provided for commonly used technologies.	
2		**Course design and (re)development plans include information on likely support implications arising from technology use, including costs and workload implications for the organisation, staff and students.**	
		Clear, consistent instructions are available prior to enrolment to all students on what support they can expect from the institution when engaging in e-learning.	
		The distribution of responsibility for student support between the teaching staff and institutional support services is explicit and communicated clearly to students.	
		E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the available support facilities.	
		E–learning design and (re)development plans include a formal assessment and mitigation plan for the risks associated with student use of technology for e-learning.	
		Course outlines include defined procedures and contact information for technical support through a variety of communication channels.	
		Students are provided with a clear description of the timeframe and procedures that will be followed to resolve any concerns or complaints they raise.	
		Students are provided with technical support during the same hours that they are engaging in e-learning activities.	
		Technical support facilities include a procedure and repository for storing the information supplied by students when seeking support.	
		Service level agreements for the type and extent of student technical support are defined and owned by units responsible for providing the support.	
1		**Information for students on accessing technical support and training through a variety of communication channels is provided.**	
		Technology support is linked to materials describing individual e-learning facilities such as on-campus computer laboratories.	
		Technology support is linked to administration facilities such as systems for managing student usercodes and passwords.	

Process S2.

Students have access to a range of library resources and services when engaging in e-learning

Practices

One of the significant benefits of campus-based learning is access to library and research facilities. Regardless of the mode of delivery, if students are to achieve the full benefit of their courses they need similar access (Lebowitz, 1997), particularly if they are to engage in research (process L6). The American Library Association guidelines for distance learning clearly state "Access to adequate library services and resources is essential for the attainment of superior academic skills in post-secondary education" (ALA, 2004). E–learning introduces a new way of understanding students' access to, and use of, library facilities, resources, and services. It involves three issues: the students' own capabilities for access; the organisation and management of the materials to be accessed; and the organisation and management of the services and facilities used for access. The literature also emphasises the need for collaborative relationships between all stakeholders to engender ownership of a 'new partnership' to make the best possible services and support available to students (Stubley, 2005).

Evidence of capability in this process is seen through the provision of a full range of library facilities and associated support and training information to assist students with their use. Information on using these services is provided both through the central library website as well as directly within courses where it is customized to reflect the needs of the particular discipline and learning outcomes.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim1/Dim2)
2. Are students provided with the training and technical assistance necessary to complete the course? (Dim1/Dim2/Dim3)
3. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1/Dim2/Dim3)
4. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
5. At your level (project/school/faculty), is there a strategy to ensure the reliability of the delivery technology or do you rely on higher level strategy? (Dim2/Dim3)
6. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim2/Dim3)
7. Are there guidelines regarding minimum standards for course design and development? (Dim3)
8. Are there guidelines regarding minimum standards for course delivery? (Dim3)
9. Are there systems in place (faculty and institution) to deal with issues arising from student use of electronically accessed data? (Dim3)
10. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
11. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
12. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
13. Does the organisation have adequate space and equipment to support e-learning? (Dim4)
14. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
15. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim4)
16. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
17. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
18. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
19. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
20. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Library support websites and materials. Course outlines and other materials including enrolment materials and assessment task descriptions.

Dimension 2: Planning

Library support websites and materials. Course outlines and other materials including enrolment materials and assessment task descriptions. E–learning development and project planning documents, templates, development checklists and procedures.

Dimension 3: Definition

E–learning design and (re)development policies and guidelines. Library support websites and materials. Staff development and support materials. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

E–learning technology evaluations and assessments, project reviews. Design and development quality assurance documents. Library management and annual reports.

Dimension 5: Optimisation

Library service business cases and operational plans. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**Strategic changes to e-learning pedagogy and technology are integrated with the planning and support of library services.**	
		The effectiveness of library resources and services in supporting student learning is used to inform strategic planning for to future e-learning initiatives.	
		Information on the effectiveness of library resources and services in supporting student learning is used when designing and (re)developing courses and programmes.	
		The range and type of library services provided is maintained and developed in response to the information collected on student usage and satisfaction.	
		Measurements of when students access library resources and services are used to plan and resource the hours of operation of the library facilities.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of library support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
		The effectiveness of library resources and services in supporting student learning is used to inform the risk assessments and mitigation strategies implemented for current and future e-learning projects and initiatives.	
4		**Measures of student ability to access library resources and services effectively are collected and reported on regularly.**	
		Feedback collected regularly from students regarding the effectiveness of the library resources and services provided.	
		Feedback collected regularly from staff regarding the effectiveness of the library resources and services provided to students.	
		Measures of the demand for and effectiveness of library support provided to disabled students are collected and reported on regularly.	
		Compliance of library support with institutional e-learning strategies and technology plans monitored and reported on regularly.	
		Financial costs and benefits of providing library services to students engaged in e-learning regularly assessed and reported on.	
		Library support services for e-learning are subject to formal quality assurance reviews and re-prioritisation of resources and objectives.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed library services and support.	
		Overlap and duplication of support and resources provided to students engaged in e-learning is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional policy, standards, service level agreements and licenses ensure that students have access to a full range of library resources and services when engaged in e-learning.**	
		Institutional standards for the type and extent of student library support are informed, aligned with and support institutional e-learning strategies and technical plans.	
		Decisions about the type and extent of library support provided to students are informed, aligned with and support institutional e-learning strategies and technical plans.	
		Templates and examples provided for use in course materials describing how to communicate library services available to students in individual courses.	
		Standard templates for library resource pages listing useful databases, journals etc. are provided and supported by designated course or discipline librarians.	
		Staff are provided with training, guidelines and examples on how to use library services to support student learning.	
2		**Summaries of useful library resources provided on a course or discipline basis.**	
		Library staff are involved in the planning and (re)development of e-learning projects and initiatives.	
		E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the available library services and appropriately licensed resources.	
		The institutional distribution of responsibility for student support services is explicit and communicated clearly to staff and students.	
		Library services designed for students engaged in e-learning are specified and provided along with support and instructions in enrolment materials and the library webpages.	
		Individual courses have a designated librarian assigned on a course or discipline basis.	
		Designated library staff contact information supplied to students in the course outline.	
		Students are provided with a variety of mechanisms to access physical resources without having to go to a designated library.	
		Students are provided with support and training in effective use of the full range of library services available to support their learning.	
		Students are provided with library services and support during the same hours that they are engaging in e-learning activities.	
		Library staff are involved in the (re)development of institutional e-learning policy and strategy.	
1		**A standard service for students engaged in e-learning is available through an institutional library, including web access to databases and other support resources.**	
		Links to library services accessible through a variety of formats and communication channels are provided in multiple places throughout course materials.	
		Students are given clear information on how to access the full range of library services available to support their learning.	
		Students are provided with lists of starting points for using library services rather than pre-defined and complete reading lists.	

Process S3.

Student enquiries, questions and complaints are collected formally and managed

Practices

The isolation of many students in e-learning situations calls for closer academic and administrative attention to all enquiries, questions, and complaints (Curry, 2003). While all institutions will have formal processes for student grievances, there are many other day-to-day concerns that need to be resolved quickly and professionally if they are to not to impair learning outcomes for students. Prompt, attentive responses to student enquiry communications ensure that motivation for learning is not compromised and lessens the potential for student noncompletions (Moody, 2004).

Evidence of capability in this process is seen in the provision of instructions to students in all courses on where to communicate any concerns they might have about any aspect of their learning. This should either be a single student help desk or a clear list that provides alternatives and indicates how these are to be used, such as particular contacts for technical issues and others for learning concerns or complaints. Policy should require the provision of this information in some standard way and guidelines should be provided on how student communications are to be handled, including timeframes and record-keeping. Teaching and support staff are provided with templates, examples, training and support in handling student complaints.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is there a structured system in place to gather and respond to students' comments on e-learning issues? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Is student interaction with teaching staff and other students an intrinsic characteristic of learning and is it facilitated through a variety of ways? (Dim1/Dim2/Dim3)
3. Do teaching staff manage response to student communications, explaining and aligning expectations for various types of communications, such as: learning related, admin related, personal/pastoral? (Dim1/Dim2/Dim3/Dim4)
4. Do staff respond to performance measures of support relating to student expectations? (Dim1/Dim4/Dim5)
5. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
6. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
7. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
8. Are there guidelines for giving feedback to student questions? (Dim3)
9. Are there guidelines regarding minimum standards for course delivery? (Dim3)
10. Is there a documented plan in place and operational to ensure the integrity and validity of information delivered- collected and stored? (Dim3/Dim4)
11. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim3/Dim4)
12. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
13. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
14. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim4)
15. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
16. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
17. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
18. Is student interaction with teaching staff monitored? (Dim4)
19. Are the staff's response (to student communications) type and timeliness monitored? (Dim4)
20. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
21. Does the organisation have adequate space and equipment to support e-learning? (Dim4)
22. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim4)
23. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim4)
24. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Student support websites and materials. Course outlines and other materials including enrolment materials and course descriptions. IT webpages, e-learning system support pages.

Dimension 2: Planning

Student support websites and materials. Course outlines and other materials including enrolment materials and course descriptions. IT webpages, e-learning system support pages.

Dimension 3: Definition

Feedback, customer service, grievance policies and guidelines. Service level agreements. Staff development and support materials. Student/institution 'contract' for studies.

Dimension 4: Management

Operational system monitoring reports, service level agreement monitoring reports and reviews. Student support quality assurance documents.

Dimension 5: Optimisation

Institutional risk assessments, strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**Student complaint reports are used to inform technical and pedagogical support processes, resourcing and (re)development of new and existing e-learning technology and courses.**	
		Student concerns and complaints are incorporated into the process of strategic planning for future e-learning initiatives.	
		Staff development and training resources are allocated in response to questions, concerns and complaints from students engaged in e-learning.	
		Student concerns and complaints are incorporated into the process of evaluating and selecting new e-learning technologies and pedagogies.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of handling of student complaints and concerns as well as changing student requirements arising from e-learning technologies and pedagogies being used.	
		The types and content of student concerns and complaints are used to inform the risk assessments undertaken and mitigation strategies implemented for current and future e-learning projects and initiatives.	
4		**Information on the type and resolution of student complaints and concerns are aggregated and reported regularly.**	
		Feedback collected regularly from students regarding the effectiveness of the collecting and resolution of student concerns and complaints.	
		Feedback collected regularly from staff regarding the effectiveness of the collecting and resolution of student concerns and complaints.	
		Financial costs and benefits of collecting and addressing student enquiries, questions and complaints regularly assessed and reported on.	
		Collection and resolution of student concerns and complaints are subject to formal quality assurance reviews and re-prioritisation of resources and objectives.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed complaints handling procedures and standards.	
		Compliance of the collection and resolution of student concerns and complaints with institutional e-learning strategies and technology plans monitored and reported on regularly.	
		Overlap and duplication of support and resources provided to students engaged in e-learning is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Standards and service level agreements for the handling of student complaints are defined along with detailed procedures that must be followed by staff receiving complaints or concerns.**	
		Teaching and support staff are provided with templates, examples, training and support in handling student complaints.	
		Institutional expectations for the quality and type of feedback to be provided to students are formally defined and communicated to staff.	
		Institutional standards for the handling of student complaints are informed, aligned with and support institutional e-learning strategies and technical plans.	
		A single repository for collecting student concerns and complaints is provided.	
		Type and extent of responsibility for handling student complaints noted in teaching staff role descriptions.	
2		**A formal process for making complaints and having them resolved is communicated to students.**	
		Students are provided with a clear description of the procedures that will be followed to resolve any concerns or complaints they raise.	
		Facilities for collecting and resolving student concerns and complaints are provided using a variety of alternative communication channels consistent with the course as a whole.	
		Students are provided with information on the timeframes for receiving responses to concerns and complaints.	
		Records of complaints and the resolution of them are retained in a designated repository.	
		Facilities for collecting and resolving student concerns and complaints operate over the same hours of the day that the course is being engaged with by students.	
		Design and development of procedures for handling student enquiries, questions and complaints includes a formal risk assessment and mitigation plan.	
		Course outlines provide information to students on the timeliness, type and extent of feedback they can expect from teaching staff in response to any complaints or concerns.	
1		**A mechanism for collecting complaints through a variety of communication channels and formats is provided explicitly in the course infrastructure.**	
		Students are provided with clear and comprehensive information on how they raise any concerns or complaints.	
		Teaching staff are provided with information regarding e-learning student concerns and complaints and an opportunity to address them.	
		Institutional websites provide students with information on how to raise any concerns or complaints.	

Process S4.

Students have access to support services for personal and learning issues when engaging in e-learning

Practices

The use of e-learning to remove the constraint that students attend courses face-to-face does not remove the need for institutions to provide as full a range of support services as possible (Sewart, 1993). As well as technical support for e-learning students need support with personal and learning issues. It is important for the student to be welcomed and made sufficiently comfortable with the e-learning environment so that they are able to express and explain their need for and what they require from support.

Evidence of capability in the process is seen in clear documentation, complying with a consistent institutional template, setting out the information necessary for accessing all available student services. Policy should require that this information be accurate, regularly reviewed and provided to students in advance of enrolment. Templates should be provided to ensure a consistent organisation and content. Elements that are standard to all courses should use wording prescribed by policy.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1/Dim2/Dim3)
2. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim1/Dim2/Dim3/Dim4)
3. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
4. Are there guidelines regarding minimum standards for course delivery? (Dim3)
5. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
6. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
7. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
8. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim4)
9. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim4)
10. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
11. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)
12. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
13. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim4)
14. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Student support websites and materials. Course outlines and other materials including enrolment materials and course descriptions. E–learning system support pages.

Dimension 2: Planning

Student support websites and materials. Course outlines and other materials including enrolment materials and course descriptions. E–learning system support pages.

Dimension 3: Definition

Feedback, customer service, grievance policies and guidelines. Service level agreements. Staff development and support materials. Student/institution 'contract' for studies.

Dimension 4: Management

Operational system monitoring reports, service level agreement monitoring reports and reviews. Student support quality assurance documents.

Dimension 5: Optimisation

Institutional risk assessments, strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**Measures of personal and learning support services' performance used to determine resources provided to support students.**	
		The types and content of student requests for personal and learning support inform the selection and deployment of new e-learning technologies.	
		Review information used to inform allocation of resources for services that support the students independently of the courses and programmes.	
		Measurements of when students access e-learning services are used to plan and resource the hours of operation of support.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of personal and learning support and changing student requirements arising from e-learning technologies and pedagogies being used.	
		The types and content of student requests for personal and learning support are used to inform the risk assessments undertaken and mitigation strategies implemented for current and future e-learning projects and initiatives.	
4		**Measures of the demand for personal and learning support provided to students are collected and reported on regularly.**	
		Feedback collected regularly from students regarding the clarity and utility of the personal and learning support provided.	
		Feedback collected regularly from staff regarding the clarity and utility of the personal and learning support provided to students.	
		Measures of personal and learning support response times collected and reported regularly.	
		Measures of the demand for personal and learning support provided to disabled students are collected and reported on regularly.	
		Compliance of the personal and learning support provided with institutional e-learning strategies and technology plans monitored and reported on regularly.	
		Financial costs and benefits of providing support to students for personal and learning issues regularly assessed and reported on.	
		Personal and learning support provided to students is subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed personal and learning support.	
		Overlap and duplication of support and resources provided to students engaged in e-learning is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional standards and service level agreements for the type and extent of student personal and learning support are defined.**	
		Institutional standards and service level agreements for the type and extent of student personal and learning support are informed, aligned with and support institutional e-learning strategies and technical plans.	
		Clear, consistent instructions are available prior to enrolment to all students on what personal and learning support they can expect from the institution when engaging in e-learning.	
		Clear, consistent instructions are available prior to enrolment to all students on how they can access personal and learning support.	
		Staff involved in providing personal and learning support support to students are provided with templates, examples, training and support in using the range of resources available to assist students.	
		Course outline templates available providing information on the personal and learning support provided.	
2		**E–learning design and (re)development plans include information on likely personal and learning support implications arising from technology use, including costs and workload implications for the organisation, staff and students.**	
		Course outlines include a defined set of procedures for students to access personal and learning support services through a variety of communication channels.	
		The institutional distribution of responsibility for student support services is explicit and communicated clearly to staff and students.	
		Students are provided with a clear description of the procedures that will be followed to address their personal and learning support needs.	
		Personal and learning support facilities include a procedure and repository for storing the information supplied by students when seeking support.	
		Students are provided with a procedure to follow if responses to personal and learning support queries are unsatisfactory.	
		Students are provided with information on the timeframes for receiving responses to personal and learning support service queries.	
		Students are provided with personal and learning support during the same hours that they are engaging in e-learning activities.	
		The distribution of responsibility for personal and learning support between the teaching staff and institutional support services is explicit and communicated clearly to students.	
		Student personal and learning support services have in place a risk assessment and mitigation plan and strategy for e-learning projects and initiatives.	
1		**Information on personal and learning support services available to students through a variety of communication channels and formats is provided throughout course materials.**	
		Institutional websites provide students with information on accessing personal and learning support services.	

Process S5.

Teaching staff are provided with pedagogical support and professional development in using e-learning

Practices

Teaching staff need training and support if they are to be effective with new technologies and the associated pedagogies. This is a complex area and teaching staff need to be able to access a range of professional support as they encounter issues during their work (Harasim *et al.* 1995). E–learning is not just a technological add-on that teachers need to learn how to use; it is a new educational system involving new pedagogical and professional procedures and processes that require support and professional development. Khan (2005) notes that many academic and administrative staff may have not experienced e-learning themselves. He recommends that they should undertake a course using the medium in order to better understand the learner's position (p. 35). Another problematic issue that Khan raises is teaching staff workload, which, particularly in the early stages of e-learning implementation, is very demanding because of the additional preparation and communication requirements.

Evidence of capability in this process is seen through the use of formal staff capability assessments during training and as part of the design and development process for courses and projects. Evidence from these assessments should be used to determine additional support and training allocations. Design and development plans should include formal processes for ongoing support of teaching staff and courses. Policy and guidelines should mandate staff capability assessments and require their use in ongoing staff development. Regular overview reports of capability should inform strategies for ongoing resourcing and development of e-learning.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim1/Dim2/Dim3/Dim4)
2. Is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim1/Dim2/Dim3)
3. Is teaching staff capability for making the transition from classroom to online teaching formally assessed during training? (Dim1/Dim2/Dim3)
4. Is there a system in place to support re-use of learning materials? (Dim1/Dim2)
5. Are formal criteria used to determine access to funding and other resources which support course and programme (re)development? (Dim2)
6. Are there training staff to train e-learning staff? (Dim2)
7. Is there a staff development strategy? (Dim2/Dim3)
8. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim2/Dim3/Dim4)
9. Are there processes in place to ensure that staff understand the potential of e-learning? (Dim2/Dim3/Dim4)
10. Does instructor training and assistance in e-learning continue through the progression of the online course? (Dim2/Dim3)
11. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim3)
12. Are there guidelines regarding minimum standards for course design and development? (Dim3)
13. Are there guidelines regarding minimum standards for course delivery? (Dim3)
14. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
15. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
16. Does the organisation have adequate space and equipment to support e-learning? (Dim4)
17. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim4)
18. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
19. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
20. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
21. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
22. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)
23. Is staff support and development monitored and evaluated? (Dim5)
24. Are there processes in place for evaluating the impact of e-learning on staff? (Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Staff development and support materials. Teaching staff research and reflections including portfolios.

Dimension 2: Planning

Staff development and support materials. Teaching staff research and reflections including portfolios. Course development and project planning documents, templates, development checklists and procedures.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Staff development and support quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, E–learning strategy, teaching and learning strategies and plans. E-learning design and (re)development policies and guidelines.

S5 Teaching staff are provided with pedagogical support and professional development in using e-learning

	Assessment	Practices	Notes
5		**Reports on the effectiveness and use of technological and pedagogical support are used to inform the process of resourcing e-learning projects, selecting new technologies and pedagogies and the provision of support when technologies are deployed.**	
		Measures of teaching staff capability to use e-learning technology and pedagogies effectively are used to determine resourcing for support.	
		Pedagogical support implications explicitly addressed when introducing new technologies to the institution.	
		Reports on the effectiveness and use of technological and pedagogical support are used to determine resourcing and the type of support and assistance provided.	
		Institutional e-learning strategies and technology plans include formal consideration of the e-learning design and (re)development support requests of teaching staff.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of pedagogical support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
		The types and content of requests for pedagogical support and assistance are used to inform the risk assessments and mitigation strategies for current and future e-learning projects and initiatives.	
4		**Measures of the use and effectiveness of pedagogical support and assistance provided to teaching staff collected and regularly reported on.**	
		Measures of teaching staff capability to use e-learning technology and pedagogies effectively are collected and reported on regularly.	
		Feedback collected regularly from students regarding the effectiveness of the teaching staff to make use of e-learning pedagogies to support student learning.	
		Feedback collected regularly from staff regarding the effectiveness of the pedagogical support and training provided.	
		Compliance of e-learning pedagogy and technology support with institutional e-learning strategies and technology plans monitored and reported on regularly.	
		Financial costs and benefits of providing staff with pedagogical support and assistance are regularly assessed and reported on.	
		E–learning pedagogical support activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed e-learning pedagogical support.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional standards for assessing teaching staff capability to use e-learning technology and pedagogies effectively are defined and applied.**	
		Formal processes for course (re)development explicitly include consideration of pedagogical issues.	
		Standards and guidelines covering pedagogical aspects of course design, (re)development and delivery are available and are used in the provision of support and training.	
		Teaching staff are provided with project template documents and tools including checklists, workflow tools, and quality assurance procedures to support design and development of e-learning projects and initiatives.	
		Decisions about the type and extent of technical and pedagogical support provided to staff are informed, aligned with and support institutional e-learning strategies and technical plans.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Institutional procedures, service level agreements and guidelines for acquiring and maintaining e-learning technologies explicitly consider the staff pedagogical support implications.	
2		**Pedagogical support and training for teaching staff in course design and (re)development reference a researched evidence base.**	
		Assessment of teaching staff capability to use e-learning technology and pedagogies effectively is done as part of course design and (re)development.	
		Assistance for teaching staff in changing pedagogies explicitly included in the process of designing and (re)developing individual courses to incorporate e-learning technologies.	
		Teaching staff are recognised, rewarded and supported in their engagement with innovative e-learning initiatives and experiments.	
		Assistance for teaching staff is scheduled or planned for throughout the process of course design and (re)development.	
		Assistance for teaching staff is provided during the same hours that they are engaging in e-learning activities.	
		E–learning projects and initiatives include a formal assessment of the risks arising from staff skills and experience in e-learning technologies and pedagogies.	
		Selection criteria used to employ and reward teaching staff include an assessment of individual skills and experience in the use of e-learning technologies and pedagogies.	
		E–learning design, (re)development and delivery procedures supported by teams of specialist staff, academic colleagues and students.	
1		**Teaching staff are provided with templates, examples, training and support in pedagogical aspects of the range of e-learning technologies available to support student learning.**	
		Teaching staff are provided with training and support in researching and reflecting upon their own practice with e-learning technologies and pedagogies.	
		Teaching staff are provided wth support and training on how to assist students in developing effective skills for e-learning.	
		Formal arrangements are made in individual courses for ongoing support and assistance addressing potential technological or pedagogical issues.	
		Pedagogical support in course development available to staff designing and (re)developing courses to incorporate e-learning technologies.	

Process S6.

Teaching staff are provided with technical support in the handling of electronic materials created by students

Practices

E–learning involves a dynamic and complex information and communications environment that necessitates technical support for teaching staff to ensure students are able make best use of facilities and resources. The creation and use of electronic information resources by students is particularly challenging as Internet sources, in particular, are simultaneously easier to search and access while also generally being less reliable. The handling and storage of documents created by students also presents challenges ranging from the technical ones of format, through concerns arising from viruses. Backup and authorised access to student work also needs careful attention.

Evidence of capability in this process is seen with the provision of facilities and support during the design and development of projects, including documentation and training for staff as well as templates and other materials for use with students. Policy and guidelines should require and support this. Student attainment of skills in this area should be part of the overall learning objectives in line with their acquisition of research and information literacy skills.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is teaching staff capability for making the transition from classroom to online teaching formally assessed during training? (Dim1/Dim2/Dim3/Dim4)
2. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim1/Dim2/Dim3)
3. Are there training staff to train e-learning staff? (Dim2)
4. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
5. Does instructor training and assistance in e-learning continue through the progression of the online course? (Dim2/Dim3)
6. Are there systems in place (faculty and institution) to deal with issues arising from student use of electronically accessed data? (Dim2/Dim3)
7. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim2/Dim3/Dim4)
8. Are there guidelines regarding minimum standards for course design and development? (Dim3)
9. Are there guidelines regarding minimum standards for course delivery? (Dim3)
10. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim3)
11. Is there a staff development strategy? (Dim3)
12. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
13. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3/Dim4)
14. Is there a documented plan in place and operational to ensure the integrity and validity of information delivered- collected and stored? (Dim3/Dim4)
15. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim4)
16. Does the organisation have adequate space and equipment to support e-learning? (Dim4)
17. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim4)
18. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
19. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim4)
20. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
21. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
22. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
23. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
24. Is staff support and development monitored and evaluated? (Dim4/Dim5)
25. Are there processes in place for evaluating the impact of e-learning on staff? (Dim4/Dim5)
26. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Staff development and support materials. Teaching staff research and reflections including portfolios. Library web pages and support materials.

Dimension 2: Planning

Staff development and support materials. Teaching staff research and reflections including portfolios. Course development and project planning documents, templates, development checklists and procedures.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Library web pages, management and annual reports. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Staff development and support quality assurance documents. Library management and annual reports.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E–learning design and (re)development policies and guidelines. Library business cases and operational plans.

S6 Teaching staff are provided with technical support in the handling of electronic materials created by students

	Assessment	Practices	Notes
5		**Reports on effectiveness and use by staff of support resources for students' use of electronically accessed information determine resourcing and the type of support and assistance provided.**	
		Measures of teaching staff capability to support student use of electronically accessed and submitted information are used to determine support and resourcing for training and are used to plan for (re)development of courses.	
		Reports on student and staff effectiveness in using electronic information are used to inform the process of selecting new e-learning technologies.	
		Institutional e-learning strategies and technology plans include formal consideration of the student electronic information use support requests of teaching staff.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of staff support for student use of electronic information creation and changing staff requirements arising from e-learning technologies and pedagogies being used.	
		The types and content of staff and requests for support regarding student use of electronic information are used to inform the risk assessments undertaken and mitigation strategies implemented for current and future e-learning projects and initiatives.	
4		**Measures of the effectiveness and uses of staff support resources for student use of electronically accessed information are collected and reported on regularly.**	
		Feedback collected regularly from students regarding the effectiveness of the electronic information creation and use support provided.	
		Feedback collected regularly from staff regarding their effectiveness in supporting the use of electronically accessed and submitted information by students.	
		Measures of teaching staff capability to use e-learning technology and pedagogies effectively are collected and reported on regularly.	
		Use of technical assistance by teaching staff is measured and reported on as to its effectiveness and impact on the final course design and implementation.	
		Financial costs and benefits of providing staff with support in the handling of electronic materials created by students is regularly assessed and reported on.	
		Staff support in the handling of electronic materials created by students is subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed technical support.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional support standards for staff supporting the use of electronically accessed information and associated resources by students are defined and mandated for use when (re)developing courses.**	
		Teaching staff are provided with templates, examples, support and training in supporting the use of electronically accessed, created and submitted information by students, including intellectual property, plagiarism and assessment aspects.	
		Formal procedures for course (re)development explicitly include consideration of the use, protection and privacy of electronically accessed and submitted information by students.	
		Institutional procedures for acquiring and maintaining e-learning technologies explicitly consider the student electronic information use support needs of teaching staff.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Decisions about the type and extent of technical support in the use of electronically accessed and submitted information by students provided to staff are informed, aligned with and support institutional e-learning strategies and technical plans.	
2		**Plans in place for each course to ensure that all student information supplied or collected electronically is stored in a validated backup system.**	
		Plans in place for each course to ensure that access to all student information supplied or collected electronically is authenticated and authorised.	
		E–learning design and (re)development procedures explicitly consider the implications of students accessing and supplying information electronically during course activities and assessments.	
		Assessment of teaching staff capability to effectively support electronic information use by students is done as part of course design and (re)development.	
		Support in the use of electronically accessed information and associated resources by students is allocated as part of planning for (re)development of individual courses.	
		E–learning design and (re)development procedures include a formal risk assessment and mitigation plan addressing risks arising from the student creation and use of electronic materials.	
		Systems provided for automatic detection of plagiarism and collusion	
1		**Teaching staff provided with resources and technical support in the use of electronically accessed or submitted information by students.**	
		Students encouraged and supported in creating and using electronic information during course activities and assessments.	

Process E1.

Students are able to provide regular formal and informal feedback on the quality and effectiveness of their e-learning experience

Practices

The need for institutions and teachers to solicit and analyse student feedback that is formative, summative, and based on multiple independent and standard evaluations is well acknowledged (Kirkpatrick, 1977; Forsyth *et al*., 1999; Arrelola, 2000; Sherry, 2003; Thompson and Irele, 2003; Brennan and Williams, 2004). Student feedback is a reliable and important measure of teaching and learning quality that can be used to inform action for improvements; it is also informative for prospective students (Brennan *et al*., 2003; Richardson, 2005a, 2005b). However, for feedback to be of use for improving teaching and learning it must be understood and acted upon (Kember *et al*., 2002). Richardson (2005a) identifies some obvious but key issues for obtaining reliable and useful information: "Feedback should be sought at the level at which one is endeavouring to monitor quality…the focus should be on students' perceptions of key aspects of teaching or on key aspects of the quality of their programmes…feedback should be collected as soon as possible after the relevant educational activity" (p. 409-10).

Evidence of capability in this process is seen in the inclusion of a formal student evaluation plan in the design and development of projects and courses. This plan should include conducting multiple formal evaluations, both summative and formative, in a standard way that allows for comparison of results between projects and over time. Information on how the evaluation results are being used to improve the quality and effectiveness of their learning should be provided to students. Policy and guidelines should require that student evaluations to be independently conducted and provide standard forms that they should take. The results of the evaluations should be used to inform ongoing and new development, and to support resources and strategy. Teaching staff are provided with templates, examples, training and support in using the range of evaluation resources available to support student learning.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are programmes' educational effectiveness formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are online modules in courses piloted/tested with relevant users? (Dim1/Dim2)
4. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim1/Dim2)
5. Is there a structured system in place to gather and respond to students' comments on e-learning issues? (Dim1/Dim2)
6. Do guidelines on feedback to students address provision of constructive and timely feedback? (Dim2/Dim3)
7. Is student interaction with teaching staff monitored? (Dim2/Dim4)
8. Do teaching staff manage response to student communications, explaining and aligning expectations for various types of communications, such as: learning related, admin related, personal/pastoral (Dim2/Dim4)
9. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim2/Dim4)
10. Are there guidelines for giving feedback to student questions? (Dim3)
11. Do staff respond to performance measures of support relating to student expectations? (Dim4)
12. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
13. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
14. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Evaluation reports, evaluation procedures and interpretation guides.

Dimension 2: Planning

Evaluation reports, evaluation procedures and interpretation guides.

Dimension 3: Definition

Feedback, evaluation and review policies, guidelines, procedures and checklists. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans. External accreditation and review websites and documents.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Institutional e-learning risk assessments and mitigation strategies.

E1 Students are able to provide regular formal and informal feedback on the quality and effectiveness of their e-learning experience

	Assessment	Practices	Notes
5		**Results of student evaluations of the quality and effectiveness of e-learning are used to determine what pedagogical and technological changes are sustained.**	
		Results of student evaluations of the quality and effectiveness of e-learning are used to determine how current offerings and teaching staff are supported.	
		All new e-learning technologies or pedagogies are accompanied with an evaluation programme when introduced.	
		Results of student evaluations and feedback used to inform risk analysis and mitigation procedures for e-learning projects and initiatives.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the outcomes of student evaluations and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Evaluation results are collected across all courses and reported regularly to management, staff and students in a manner that allows for comparison of the educational effectiveness of e-learning aspects of similar courses and initiatives.**	
		Financial costs and benefits of collecting feedback and conducting formal and informal student evaluations are regularly assesssed and reported upon.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed e-learning evaluations.	
		Changes in e-learning delivery, projects and initiatives occuring as a result of feedback and evaluations are monitored and reported on regularly.	
3		**Institutional standards for evaluations of educational effectiveness of e-learning are defined including the tempo and content of the evaluations.**	
		Institutional expectations for the quality and type of evaluation feedback to be provided to students are formally defined and communicated to staff.	
		Teaching staff are provided with templates, examples, training and support in using the range of evaluation resources and results available to support student learning.	
		Expert assistance available and used in designing the collection, analysis and interpretation of student feedback on the quality and effectiveness of e-learning.	
		Guidelines and support materials provided to students to assist their making effective use of staff feedback in their e-learning experiences.	
		Institutional policy requires that student evaluations of the quality and effectiveness of e-learning are performed by independent assessors according to a standard timetable and defined procedures.	
2		**Students are provided with information on how feedback and evaluation information has been and will be used to modify and improve their e-learning experience.**	
		E–learning design and (re)development procedures include explicit evaluation phases assessing quality and effectiveness of e-learning.	
		E–learning design and (re)development procedures include opportunities for user testing and feedback from students.	
		Student requirements for e-learning are collected prior to initiating course design and (re)development to incorporate e-learning technologies and pedagogies.	
		Consistent evaluation procedures used to enable comparisons between courses.	
		A searchable repository of e-learning evaluation and feedback information is provided and maintained.	
1		**Summative feedback collected regularly from students regarding the quality and effectiveness of their e-learning experience.**	
		Formative feedback collected regularly from students regarding the quality and effectiveness of their e-learning experience.	

Process E2.

Teaching staff are able to provide regular formal and informal feedback on quality and effectiveness of their e-learning experience

Practices

The e-learning environment presents many new and/or different teaching and learning challenges that can benefit from valid, reliable, and informative feedback from teachers. Laurillard (2002) recommends the establishment of a forum for teachers to "discuss their experience of learning technologies, and the academic issues surrounding the balance of learning methods"(p. 227). Scrimshaw (2004) refers to professional development approaches "fall[ing] along a spectrum from informal mutual support to the use of formal training courses" (p. 21). He discusses several approaches and concludes that the question is "less which specific approach is best, but which combination of methods are needed to suit the level of progress staff individually and as a whole have already reached" (p. 22).

Evidence of capability in this process is seen in the inclusion of a formal staff evaluation plan in the design and development of projects and courses. This plan should include conducting multiple formal evaluations, both summative and formative, in a standard way that allows for comparison of results between projects and over time. Information on how the evaluation results are being used to improve the quality and effectiveness of their work should be provided to teaching staff. Policy and guidelines should require that staff evaluations to be independently conducted and provide standard forms that they should take. The results of the evaluations should be used to inform ongoing and new development, and to support resources and strategy.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Is staff support and development monitored and evaluated? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are there processes in place for evaluating the impact of e-learning on staff? (Dim1/Dim2/Dim3/Dim4/Dim5)
4. Are there processes in place to ensure that staff understand the potential of e-learning? (Dim1/Dim2/Dim3/Dim4)
5. Is teaching staff capability for making the transition from classroom to online teaching formally assessed during training? (Dim1/Dim2)
6. Are online modules in courses piloted/tested with relevant users? (Dim1/Dim2)
7. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim1/Dim2)
8. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim2)
9. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim2/Dim4)
10. Is there a staff development strategy? (Dim3)
11. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
12. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
13. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Evaluation reports, evaluation procedures and interpretation guides. Teaching staff research and reflections including portfolios.

Dimension 2: Planning

Evaluation reports, evaluation procedures and interpretation guides.

Dimension 3: Definition

Feedback, evaluation and review policies, guidelines, procedures and checklists. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans. External accreditation and review websites and documents.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Institutional e-learning risk assessments and mitigation strategies.

E2 Teaching staff are able to provide regular formal and informal feedback on quality and effectiveness of their e-learning experience

	Assessment	Practices	Notes
5		**Results of evaluations on the quality and effectiveness of e-learning are used to determine what pedagogical and technological changes are sustained.**	
		Results of evaluations on the quality and effectiveness of e-learning are used to determine how current offerings and teaching staff are supported.	
		All new e-learning technologies or pedagogies are accompanied with an evaluation programme when introduced.	
		Results of staff feedback used to inform risk analysis and mitigation procedures for e-learning projects and initiatives.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the outcomes of staff evaluations and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Evaluation results are collected across all courses and reported regularly to management, staff and students in a manner that allows for comparison of the educational effectiveness of e-learning aspects of similar courses and initiatives.**	
		Financial costs and benefits of collecting feedback from staff are regularly assesssed and reported upon.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed e-learning evaluations.	
		Changes in e-learning delivery, projects and initiatives occuring as a result of feedback and evaluations are monitored and reported on regularly.	
3		**Institutional standards for evaluations of educational effectiveness of e-learning are defined including the tempo and content of the evaluations.**	
		Support staff are provided with templates, examples, training and support in using the range of evaluation resources and results available to support teaching staff.	
		Expert assistance available and used in designing the collection, analysis and interpretation of staff feedback.	
		Institutional policy requires that evaluations of the quality and effectiveness of e-learning are performed by independent assessors according to a standard timetable and defined procedures.	
		Teaching staff supported in researching and reflecting on their own practice and experiences of e-learning.	
2		**Staff are provided with information on how feedback and evaluation information has been and will be used to modify and improve their e-learning experience.**	
		E–learning design and (re)development procedures include explicit evaluation phases assessing the quality and effectiveness of e-learning.	
		E–learning design and (re)development procedures include opportunities for user testing and feedback from staff.	
		Staff are provided with time, recognised, rewarded and supported in their engagement with innovative e-learning initiatives and experiments.	
		Consistent evaluation procedures used to enable comparisons between courses.	
		Staff requirements for e-learning are collected prior to initiating course design and (re)development to incorporate e-learning technologies and pedagogies.	
		A searchable repository of staff e-learning evaluation and feedback information is provided and maintained.	
1		**Summative feedback collected regularly from teaching staff regarding the quality and effectiveness of their e-learning experience.**	
		Formative feedback collected regularly from teaching staff regarding the quality and effectiveness of their e-learning experience.	

Process E3.

Regular formal independent reviews of e-learning aspects of courses are conducted

Practices

The dependence of e-learning on the use of an appropriate pedagogy and well-designed technology means that when assessing the success of courses and projects it is very important to ensure that the effectiveness of the technology is also formally measured. Evidence of success or limitations in the local context is an important factor in ensuring the efficient design and development of existing and new courses and projects.

Evidence of capability in this process is seen through the use of formal data collection processes that are incorporated into design and development and which allow for regular reporting and analysis of the effectiveness of the technologies used. These processes should be standards based and designed to support comparisons over time and between courses and projects. Policy should require the collection and reporting of this information and the results used to inform ongoing and new development and support resources and strategy. Formal content and materials review plans should be used during the design and development of projects and courses. Policy and guidelines should require these reviews be conducted formally and provide guidance on what aspects require checking

An important factor to be conscious of in this area is that the impact of technology on student satisfaction and student learning need to be separately evaluated as they are linked but distinct. Similarly, staff satisfaction may not be related to the effectiveness of the technologies or innovations deployed.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim1/Dim2/Dim3/Dim4/Dim5)
4. Are there processes in place for evaluating the impact of e-learning on staff? (Dim1/Dim2/Dim3/Dim4/Dim5)
5. Is there a defined and operative planning-review cycle? Does this operate at school, faculty and instutution level? (Dim1/Dim2/Dim3/Dim4/Dim5)
6. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim1/Dim2/Dim3/Dim4/Dim5)
7. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim2/Dim4)
8. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
9. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
10. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Review reports, policy, and guidelines.

Dimension 2: Planning

Review reports, policy, and guidelines. Quality assurance procedures and guidelines.

Dimension 3: Definition

Review reports, policy, and guidelines. Quality assurance procedures and guidelines. E-learning standards, strategy and plans, teaching and learning strategies and plans. External accreditation and review websites and documents.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Quality assurance documents. Operational management reports, finance reports and budgets.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Institutional e-learning risk assessments and mitigation strategies.

E3 Regular formal independent reviews of e-learning aspects of courses are conducted

	Assessment	Practices	Notes
5		**E–learning evaluation and review information used to inform strategic planning relating to future e-learning initiatives.**	
		Reviews of success or failure of new e-learning technologies are used to determine ongoing support and resourcing for the use of the technologies.	
		Reviews of success or failure of new e-learning technologies are used to determine resources for and content of staff development for the use of the technologies.	
		Results of course e–learning reviews are used to determine support and resourcing for existing courses and used to plan the design and (re)development of courses.	
		Risk assessments of failed courses and e-learning initiatives are formally reviewed to identify factors for inclusion in the risk analysis and mitigation plans of existing and future e–learning projects and initiatives.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the outcomes of reviews and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Review information collected and reported upon to management, staff and students in a manner that allows for comparison of the e-learning aspects of similar courses.**	
		Measures of the success of new technologies/innovations collected and reported on in a manner that allows for comparison of similar courses and analysis of the factors impacting on the successful adoption of the new technology/innovation.	
		Financial costs and benefits of conducting formal reviews and assessments of courses are regularly measured and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed e-learning review procedures.	
		Changes in e-learning delivery, projects and initiatives occuring as a result of feedback and evaluations are monitored and reported on regularly.	
3		**Institutional standards for the review of the e-learning aspects of courses defined and implemented.**	
		Staff are provided with training and support in the analysis and use of review and evaluation information in improving course delivery and student outcomes.	
		Institutional standards for assessing the success of new technologies/innovations defined and applied to all courses.	
		Institutional standards for e-learning materials defined along with processes for regular review of e-leaning aspects of all courses.	
2		**Students and staff are provided with information on how review and evaluation information has been and will be used to modify and improve their e-learning experiences.**	
		Reviews are conducted formally as part of the normal procedures for delivering courses using e-learning technologies and pedagogies.	
		Formal plan for assessing the success of new technologies/innovations explicit within the delivery of individual courses.	
		A searchable repository of e-learning evaluation and feedback information is provided and maintained.	
		Courses are subject to regular assessment of the risks arising from the use of e-learning technologies and pedagogies.	
1		**Courses have a regular assessment and review of the e-learning materials and resources used.**	
		Courses have a regular assessment and review of the effectiveness of the teaching provided using e-learning technologies and pedagogies.	
		Courses have a regular assessment and review of the student outcomes achieved.	
		Courses have a regular assessment and review of the effectiveness of assessment and other learning activities.	

Process O1.

Formal criteria used to allocate resources for e-learning design, development and delivery

Practices

Provision of expert technical and pedagogical assistance is vital if institutions are to move away from ad-hoc developments in e-learning. Like any other scarce resource, expertise in e-learning development within an institution must be managed in a way that ensures efficient and effective use. Formal criteria which align the use of these resources with defined outcomes for the institution are essential in this process (Hagner, 2000).

Evidence of capability in this process is seen in the provision of formal funding and resourcing criteria and guidelines, mandated by policy, which provide consistency and clarity in the allocation of resources. Access to support is managed by these criteria to ensure efficient and equitable use of time and the achievement of strategic goals as well as short term requirements. Effective approaches in the local context are communicated through examples, case studies, standards and guidelines, customised for the institution, that demonstrates the benefits of the criteria used.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are there processes in place to account for the full cost of e–learning (including staff time) and its relationship in forwarding strategic objectives (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim1/Dim2/Dim3/Dim4)
3. Are formal criteria used to determine access to funding and other resources which support course and programme (re)development? (Dim1/Dim2/Dim3/Dim4/Dim5)
4. Does the organisation have adequate space and equipment to support e-learning? (Dim1/Dim2/Dim3/Dim4)
5. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
6. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
7. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim2/Dim3/Dim4)
8. Are there guidelines regarding minimum standards for course design and development? (Dim3)
9. Are there guidelines regarding minimum standards for course delivery? (Dim3)
10. Is e-learning developed around a recognised business model? (Dim3)
11. Are e-learning programmes developed around a strategic plan or business plan? (Dim3)
12. Are e-learning developments project managed? (Dim3)
13. Is summative data such as enrolment numbers, completion rates and costing used as a measure of effectiveness within courses/programmes? (Dim4)
14. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
15. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
16. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
17. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
18. Is there a defined and operative planning-review cycle? Does this operate at school, faculty and instutution level? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Project funding and resourcing criteria. Course development, project planning and budget documents.

Dimension 2: Planning

Project funding and resourcing criteria. Course development, project planning and budget documents.

Dimension 3: Definition

Project funding and resourcing criteria. Course design and (re)development policies, guidelines and templates. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

E–learning technology evaluations and assessments, project reviews. Design and development quality assurance documents. Institutional e-learning risk assessments.

Dimension 5: Optimisation

Institutional risk assessments and e-learning infrastructure performance reviews and planning documents. Project resourcing applications and planning documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

	Assessment	Practices	Notes
5		**Allocation of support and resourcing across all courses and programmes using similar technology or pedagogies is handled consistently on the basis of outcomes from trial or pilot e-learning projects and initiatives.**	
		Successful e-learning projects and initiatives are documented as case studies that show the relationships between the criteria, the use of technology in particular ways and the educational outcomes for students.	
		Consideration of the impact of the criteria for e-learning design, development and delivery on the achievement of the goals of the institutional e-learning strategies and technology plans is included in formal e-learning strategy and planning (re)development reviews.	
		All applications using the institutional criteria for allocating resources and funding for e-learning technologies and projects are analysed for potential reuse or improvement.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning projects and initiatives and changing staff requirements arising from e-learning technologies and pedagogies being used.	
		Criteria for e-learning design, development and delivery resource allocation are reviewed when the institutional e-learning strategies and technology plans are reviewed.	
4		**Measures are collected of the success or failure of e-learning projects and initiatives supported and this information reported on regularly.**	
		Feedback collected regularly from students regarding the effectiveness of e-learning projects and initiatives for their learning.	
		Feedback collected regularly from staff regarding the effectiveness of e-learning projects and initiatives for enabling student learning and assisting staff teaching responsibilities.	
		Contribution of the formal criteria used to allocate resources for e-learning design, development and delivery to addressing the goals of the institutional e-learning strategies and technology plans are regularly reviewed and reported on.	
		Financial costs and benefits of compliance with selection criteria used to allocate resources for e-learning design, development and delivery are regularly assessed and reported on.	
		E–learning projects and initiatives are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Reports on what projects and initiatives and on what basis resources were allocated are provided regularly.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed e-learning resource allocation criteria.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed by the criteria in line with institutional e-learning strategy and technology plans.	
3		**Criteria used to allocate resources for e-learning design, (re)development and delivery are formally and explicitly linked to the institutional e-learning strategies and technology plans.**	
		Staff are provided with training and support in the development of e-learning proposals and plans that effectively address the criteria used to allocate resources for e-learning design, development and delivery.	
		Templates and examples are used to communicate how the criteria for resource allocation should be interpreted and applied.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context and consistent with the resource allocation criteria is maintained for use by staff engaged in e-learning design and (re)development.	
		Resource allocation, associated policies and strategies are coordinated across the institution.	
2		**A formal procedure that references the criteria for allocating resources for e-learning design, development and delivery is followed at designated times during the budget cycle.**	
		Plans for e-learning projects and initiatives formally link decisions regarding e-learning technologies and pedagogies with the institutional criteria used to allocate resources.	
		Criteria used to allocate resources for e-learning design, development and delivery include consideration of the costs of maintaining e-learning initiatives and projects.	
		Criteria used to allocate resources for e-learning design, development and delivery include an assessment of risks arising during or as a consequence of e-learning initiatives and projects.	
1		**Institutional criteria are defined for selecting and prioritising the allocation of resources and funding for e-learning technologies and projects.**	
		Resources and funding for all e-learning technologies and projects are allocated according to formally defined criteria.	

Process O2.

Institutional learning and teaching policy and strategy explicitly address e-learning

Practices

Jamieson (2004) notes that e-learning brings pedagogical, technological, and operational challenges to teaching practice (p. 22). E–learning involves a 'major realignment of the institutions organizational identity' (p. 26) that calls for intensive, strategic professional development activity. Garrison and Anderson (2003) identify ten topics that should be considered for strategic planning and policy: 1. Vision; 2. Needs and risk assessment; 3. Description of educational principles and outcomes; 4. Implementation initiatives and strategy; 5. Infrastructure; 6. Infostructure; 7. Support services; 8. Budget and resources; 9. Research and development; 10. Benchmarking (p. 108). They also comment that sustainable innovation emerges through middle-level leadership rather top down or bottom up management approaches. Turoff, Discenza, and Howard (2004) note that the e-learning environment "will make the quality of teaching more visible to the public and prospective students" (p. 18), thus making learning and teaching policy and strategy more imperative.

Evidence of capability in this process is seen in the provision of a complete and redeveloped set of institutional strategies and policies incorporating a thoughtful and strategic assesment of the contribution e-learning can make to the institution, disciplines, staff and students. Staff involved in e-learning design and (re)development projects and initiatives need support and guidance in effectively applying the revised policies and strategies and ideally they, along with students, should be involved in the (re)development of the policies and strategies.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are e-learning programmes developed around a strategic plan or business plan? (Dim1)
2. Are there processes in place to ensure that staff understand the potential of e-learning? (Dim1)
3. At your level (project/school/faculty), is there a strategy to ensure the reliability of the delivery technology or do you rely on higher level strategy? (Dim1/Dim2/Dim3)
4. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim1/Dim2/Dim3)
5. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim1/Dim2)
6. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim1/Dim2)
7. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
8. Are there guidelines regarding minimum standards for course design and development? (Dim3)
9. Are there guidelines regarding minimum standards for course delivery? (Dim3)
10. Is e-learning developed around a recognised business model? (Dim3)
11. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
12. Are there processes in place for evaluating the impact of e-learning on staff? (Dim4)
13. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
14. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
15. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
16. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
17. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Learning and teaching, assessment, feedback, course approval, IT and e-learning strategies, policy and guidelines.

Dimension 2: Planning

Learning and teaching, assessment, feedback, course approval, IT and e-learning strategies, policy and guidelines. E–learning review procedures and guidelines.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Quality assurance procedures and guidelines. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E–learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

O2 Institutional learning and teaching policy and strategy explicitly address e-learning

	Assessment	Practices	Notes
5		**The outcomes of successful and unsuccessful e-learning initiatives are used to inform a programme of learning and teaching strategy and policy (re)development.**	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning projects and initiatives and changing staff requirements arising from e-learning technologies and pedagogies being used.	
		The institutional learning and teaching strategies and policies are re-evaluated using a formal process when any significant e-learning technology failure occurs to ensure any risks arising from or identified by the failure are explicitly addressed in current and future risk assessments.	
4		**Regular, formal reviews of institutional learning and teaching strategies and policies examine whether e-learning implications are appropriately covered.**	
		Feedback collected regularly from students regarding the effectiveness of the e-learning policies and strategies.	
		Feedback collected regularly from staff regarding the effectiveness of the e-learning policies and strategies.	
		Financial costs and benefits of teaching and learning policy and strategy regularly assessed and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed e-learning strategy and policy.	
		Course materials are regularly reviewed to ensure compliance with institutional learning and teaching strategies and policies.	
3		**Policy templates and guidelines include a requirement to consider implications of e-learning when (re)developing new and existing policy.**	
		Staff are provided with guidelines and training in effectively applying policies and strategies when designing and (re)developing e-learning projects and initiatives.	
		Staff are provided with training and support in the development of institutional and disciplinary strategies and policies that address the implications of e-learning effectively.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context and disciplines is maintained for use by staff engaged in e-learning strategy and policy (re)development.	
		Unit and discipline e-learning policies and strategies are coordinated across the institution.	
2		**E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning strategies and policies.**	
		Staff with experience in the design, (re)development and delivery of e-learning are formally involved in the (re)development of institutional learning and teaching strategies and policies.	
		Students are formally involved in the (re)development of institutional learning and teaching strategies and policies.	
		Inclusion of e-learning aspects in relevant institutional policies and strategies is formally endorsed by the institutional leadership.	
		Formal review programme for institutional learning and teaching strategies and policies includes requirement to consider implications of e-learning.	
		Procedures for implementing e-learning initiatives include examination of policy and strategy implications at both the institutional and disciplinary levels.	
1		**E–learning technologies and pedagogies explicitly addressed in relevant institutional learning and teaching strategies, policies, and associated documents.**	
		Contribution of e-learning technologies and pedagogies to the achieving of the goals of the institutional learning and teaching strategies and technology plans are formally communicated to all staff.	

Process O3.

A documented specification and plan guides technology decisions when designing and developing courses

Practices

A technology plan combines a strategic focus on the selection of technology with practical experience based on previous work in the institution to ensure that technological resources are chosen in ways that build capability rather than dilute it. A systemic approach to developing a coherent and timely technology implementation plan is advocated by Garrison and Anderson (2003). They refer to an infostructure, which includes the design of institutional connectivity, creation of a knowledge management system, provision of digital content, and creation of standards (p. 108). Technology planning must be embedded in a wider institutional strategy that generatively encompasses all teaching and learning, and servicing aspects (Elloumi, 2004).

Evidence of capability in this process is seen in the use of a formally documented technology plan that is used to guide the selection of technologies appropriate to the local context. Formal institutional standards are used where available to inform and guide the plan. This should include existing technologies that are defined as standard by the institution and for which there is clear evidence of effectiveness and ability to be supported. The plan, along with the associated standards and guidelines, is communicated widely to encourage wider adoption and compliance throughout the institution. Policy should mandate compliance with the technology plan and explicit reference to it should be made in processes for the resourcing and development of e-learning resources.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim1/Dim2/Dim3/Dim4/Dim5)
2. Are e-learning developments project managed? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim1/Dim2/Dim3/Dim4/Dim5)
4. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim1/Dim2/Dim3/Dim4)
5. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim1/Dim3/Dim4)
6. Is e-learning developed around a recognised business model? (Dim1/Dim2/Dim3)
7. Are e-learning programmes developed around a strategic plan or business plan? (Dim1/Dim2/Dim3)
8. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim1/Dim2/Dim3)
9. Are there systems in place (faculty and institution) to deal with issues arising from student use of electronically accessed data? (Dim1/Dim2)
10. At your level (project/organisation), is there a system for assisting teaching staff in the development of online courses or do you receive services from a higher level system? (Dim2)
11. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
12. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2/Dim4/Dim5)
13. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim3)
14. Are there guidelines regarding minimum standards for course design and development? (Dim3)
15. Are there guidelines regarding minimum standards for course delivery? (Dim3)
16. Is there a system in place to support re-use of learning materials? (Dim3)
17. Is there a strategy to ensure the reliability of the delivery technology? (Dim3/Dim4)
18. What percentage of assessment is online? (Dim4)
19. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4)
20. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
21. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
22. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
23. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
24. Is there a defined and operative planning-review cycle? Does this operate at school, faculty and instutution level? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

IT and e-learning strategies, policy and guidelines. Information systems technology plan.

Dimension 2: Planning

IT and e-learning strategies, policy and guidelines. Information systems technology plan. E–learning design and (re)development policies, guidelines, procedures and checklists.

Dimension 3: Definition

IT and e-learning strategies, policy and guidelines. Information systems technology plan. E-learning design and (re)development policies, standards, guidelines, procedures and checklists.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E-learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

	Assessment	Practices	Notes
5		**Information on compliance with institutional e-learning technology plans is used to determine support and resourcing for existing and future e-learning initiatives and projects.**	
		Institutional e-learning technology plans are re-evaluated using a formal process when any significant e-learning technology failure occurs to ensure any risks arising from or identified by the failure are explicitly addressed in current and future risk assessments.	
		Institutional technology plans are re-evaluated using a formal process when new technologies/innovations are considered.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning projects and initiatives and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Compliance with institutional e-learning technology plans are measured and reported on regularly along with information on how the plans have assisted or hindered the development of e-learning projects and initiatives.**	
		Feedback collected regularly from staff regarding the effectiveness of institutional e-learning technology plans as tools for informing the design and (re)development of courses and programmes.	
		Financial costs and benefits of institutional e-learning technology plans are regularly reviewed and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed institutional e-learning technology plans.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning technology plans.	
3		**Compliance with institutional e-learning technology plans is required of all courses and programmes being designed and (re)developed to use e-learning technologies and pedagogies.**	
		Staff are provided with templates, examples and professional development to assist with using institutional e-learning technology plans to guide e-learning decisions.	
		Resources for staff e-learning development and support are allocated with reference to institutional e-learning technology plans.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to institutional e-learning technology plans is maintained for use by staff engaged in e-learning design and (re)development.	
		Institutional e-learning technology plans include formal risk assessment and mitigation strategies.	
		Technology plans, associated policies and strategies are coordinated across the institution.	
2		**E–learning design and (re)development procedures explicitly reference institutional e-learning technology plans.**	
		Institutional e-learning technology plans have clearly defined and empirically measureable objectives and milestones.	
		E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning technology plans.	
		Institutional e-learning technology plans are formally endorsed and explicitly supported by the institutional leadership.	
		Course design and development plans include risk assessment and mitigation plans linked to the institutional e-learning technology plans and associated risk assessments.	
		Teaching staff are formally involved in the development and review of institutional e-learning technology plans.	
		Students are formally involved in the development and review of institutional e-learning technology plans.	
		E–learning design and development plans include explicit planning and resources for maintenance of e-learning technologies.	
1		**Institutional e-learning technology plans are followed for adoption of technology within individual courses and programmes.**	
		Institutional e-learning technology plans clearly describe the procedures for acquiring, deploying, supporting, maintaining and upgrading hardware and software for e-learning.	

Process O4.

A documented specification and plan ensures the reliability, integrity and validity of information collection, storage and retrieval

Practices

In addition to being reliable and failsafe, the technology infrastructure used to support e-learning should also ensure that, as much as possible, the information within systems is protected from corruption and loss. A technology plan considering aspects of information integrity can combine a strategic view of institutional e-learning directions with practical consideration of risks and the integration with other systems within the institution.

Evidence of capability in this process is seen in the use of a formally documented technology plan considering information integrity and reliability. This should include assessments of the security of information from intentional and unintentional loss, protection of privacy and student information, versioning and consistency with other systems such as student records or enrolments. Information provided by the institution, teaching staff and students should be included, as well as explicit consideration of copyright implications, including the rights of students, and the reporting required by licences. There should be policy and procedures in place to deal with potential failures or compromises. Standards and guidelines should be used to communicate which technologies have been proven reliable, and regular monitoring and reporting used to prove reliability and identify potential problems. Teaching staff are provided with templates, examples, training and support in maintaining course information to ensure its validity and reliability.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim1)
2. Is there a documented plan in place and operational to ensure the integrity and validity of information delivered- collected and stored? (Dim1/Dim2/Dim3/Dim4/Dim5)
3. Are there systems in place (faculty and institution) to deal with issues arising from student use of electronically accessed data? (Dim1/Dim2/Dim3/Dim4)
4. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim1/Dim2/Dim3/Dim4)
5. Is there a system in place to support re-use of learning materials? (Dim1/Dim2/Dim3)
6. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
7. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
8. Are there guidelines regarding minimum standards for course design and development? (Dim3)
9. Are there guidelines regarding minimum standards for course delivery? (Dim3)
10. At your level (project/school/faculty), is there a strategy to ensure the reliability of the delivery technology or do you rely on higher level strategy? (Dim3)
11. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim3)
12. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
13. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4)
14. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
15. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
16. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

IT and e-learning strategies, policy and guidelines. Information systems technology plan. E–learning design and (re)development policies, standards, guidelines, procedures and checklists. Service level agreements, monitoring reports and backup validation reports.

Dimension 2: Planning

IT, e-learning, archiving strategies, policy and guidelines. Information systems technology plan. E–learning design and (re)development policies, standards, guidelines, procedures and checklists. Service level agreements, monitoring reports and backup validation reports. Institutional risk assessments and disaster recovery plans.

Dimension 3: Definition

IT, e-learning, archiving strategies, policy and guidelines. Information systems technology plan. E–learning design and (re)development policies, standards, guidelines, procedures and checklists. Service level agreements, monitoring reports and backup validation reports. Institutional risk assessments and disaster recovery plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E-learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

O4 A documented specification and plan ensures the reliability, integrity and validity of information collection, storage and retrieval

	Assessment	Practices	Notes
5		**Institutional plans for ensuring the integrity and validity of information delivered, collected and stored are re-evaluated using a formal process when any significant e-learning technology failure occurs to ensure any risks arising from or identified by the failure are explicitly addressed in current and future risk assessments.**	
		Institutional plans for ensuring the integrity and validity of information are re-evaluated using a formal process when new e-learning technologies/ innovations are considered.	
		Reports on student and staff effectiveness in using electronic information in the context of e-learning are used to inform the process of reviewing and refining institutional information integrity plans.	
		Information integrity performance is used to determine support and resourcing for existing e-learning technology and used to support the (re)development of courses.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning design and development support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Compliance with institutional plans for ensuring the integrity and validity of e-learning information is measured and reported on regularly.**	
		Feedback collected regularly from staff regarding the effectiveness of the institutional information integrity plan as a tool for informing the design and (re)development of e-learning initiatives and projects.	
		The extent to which resources are being accessed and under what licensing terms is measured and reported on regularly.	
		Use of technical assistance relating to integrity and validity of e-learning information by teaching staff is measured and reported on regularly.	
		Financial costs and benefits of the institutional information plan are regularly assessed and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for changes to the institutional plan for ensuring the integrity and validity of information.	
3		**Institutional plans for ensuring the integrity and validity of information delivered, collected and stored are in place and operational.**	
		Institutional support standards for the use of electronically accessed information and associated resources are defined and complied with when (re)developing courses.	
		Clear guidelines and policy provided specifying what information is to be retained in institutional repositories, how it is to be stored, licenses used to control and authorise usage, and how it is accessed.	
		Teaching staff are provided with templates, examples, and support in the use of electronically accessed, created and stored information.	
		Teaching staff are provided with templates, examples, and support in the legal use of intellectual property.	
		Formal processes for course (re)development explicitly include consideration of the use of electronically accessed and stored information by staff and students.	
		Metadata formats and schemas defined for information storage and retrieval purposes.	
		Procedures for archiving and removing old or incorrect information are defined and operational.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		Information plans, associated policies and strategies are coordinated across the institution.	
2		**E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with institutional plans for ensuring the integrity and validity of information.**	
		Plans in place for each course to ensure that all information created, supplied or collected electronically is stored in a validated backup system.	
		Plans in place for each course to ensure that access to all course information is authenticated and authorised.	
		Institutional repositories provided for the storing of information created, delivered and collected.	
		Support in the student and staff use of electronically accessed information and associated resources is allocated as part of planning for (re)development of individual courses.	
		E–learning design and (re)development procedures explicitly consider the integrity and validity of information delivered, collected and stored.	
		Risk management plan for the institution formally considers the reliability, integrity and validity of information collection, storage and retrieval in the context of e-learning projects and initiatives.	
1		**Integrity and validity of information delivered, collected and stored is assessed and maintained formally within courses.**	

Process O5.

The rationale for e-learning is placed within an explicit plan

Practices

Learning is consistently placed first in the literature when considering educational technology. Many studies and synopses of e-learning principles commence with a review of pedagogical concepts. Bates and Poole (2003), for example, state that "choice and use of technology are absolutely dependent on beliefs and assumptions about the nature of knowledge, how our subject discipline should be taught, and how students learn" (p. 25). Many different pedagogical models have been proposed to guide the design and delivery of effective e-learning, the key aspect however is the need to have a clear intent to guide the selection of technologies and pedagogies.

Evidence of capability in this process is seen in definition and use of an explicit course or programme e-learning development plan. This plan should be formally developed and endorsed by the institutional leadership. Alignment with institutional strategies and plans is essential as is the consideration of business issues such as risk assessments and quality assurance. Teaching staff should be supported in both the development of plans and their application in specific contexts.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1)
2. Are the systems for supporting the e-learning infrastructure aligned (for example, by a strategic infrastructure management plan - this can be at local level or centralised)? (Dim1)
3. Do students have access to sufficient online resources (content rather than technology) to support their learning needs? (Dim1)
4. Does the organisation have adequate space and equipment to support e-learning? (Dim1)
5. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim1)
6. Are formal criteria used to determine access to funding and other resources which support course and programme (re)development? (Dim1/Dim2/Dim3)
7. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim3)
8. Is e-learning developed around a recognised business model? (Dim1/Dim2/Dim3)
9. Are e-learning programmes developed around a strategic plan or business plan? (Dim1/Dim2/Dim3)
10. In what proportion of modules is the e-learning component required in order to attain the intended learning outcomes? (Dim1/Dim2)
11. What percentage of assessment is online? (Dim1/Dim2)
12. Are you able to carry out as much online assessment as you would wish to design into the courses? (Dim1/Dim2)
13. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
14. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
15. Is there a process in place to capture and analyse user (teacher, student, school & institution) requirements? (Dim2/Dim4)
16. Are there guidelines regarding minimum standards for course delivery? (Dim3)
17. Are there guidelines regarding minimum standards for course design and development? (Dim3)
18. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim3)
19. Are there processes in place for evaluating the impact of e-learning on staff? (Dim4)
20. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
21. Is there a system in place to inform the institution of what use is being made of e-learning by all schools? (Dim4)
22. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
23. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
24. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
25. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4/Dim5)
26. Is there a defined and operative planning-review cycle? Does this operate at school, faculty and instutution level? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

E–learning design and (re)development business cases, planning and project documents, policies, guidelines, procedures and checklists.

Dimension 2: Planning

E–learning design and (re)development business cases, planning and project documents, policies, guidelines, procedures and checklists. Staff development and support materials. Teaching staff research and reflections including portfolios.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. e-learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

O5 The rationale for e-learning is placed within an explicit plan

	Assessment	Practices	Notes
5		**E–learning project and initiative development plans are regularly analysed for potential reuse or improvement in the light of experience with successful and unsuccessful e-learning initiatives.**	
		E–learning project and initiative development plans reviewed across all courses and programmes using similar technology or pedagogies to ensure consistency and effectiveness.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning design and development initiatives.	
		E–learning project and initiative development plans used to determine support and resourcing for the design and (re)development of courses and programmes.	
		E–learning project and initiative development plans are re-evaluated using a formal process when any significant e-learning technology failure occurs to ensure any risks arising from or identified by the failure are explicitly addressed in current and future risk assessments.	
4		**Measures are collected of the success or failure of e-learning project and initiative development plans.**	
		Feedback collected regularly from students regarding the effectiveness of the use of e-learning in the context of e-learning project and initiative development plans.	
		Feedback collected regularly from staff regarding the effectiveness of the use of e-learning in the context of e-learning project and initiative development plans.	
		Financial costs and benefits of e-learning project and initiative development plans are regularly assessed and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning project and initiative development plans.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional policy requires that all courses and programmes have e-learning project and initiative development plans linked to an overarching institutional plan.**	
		Templates and examples are used to communicate how to link e-learning project and initiative development plans with institutional strategic planning and decision making for the use of e-learning technologies and associated pedagogies.	
		Staff are provided with training and support in the development of e-learning project and initiative proposals and plans that reference institutional e-learning strategy and technology plans effectively.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in e-learning design and (re)development.	
		E–learning project and initiative plans, associated policies and strategies are coordinated across the institution.	
2		**Procedures for allocating resources and funding for all e-learning technologies and projects require alignment with course and programme e-learning development plans.**	
		Teaching staff are formally involved in the development and review of course and programme e-learning development plans.	
		Students are formally involved in the development and review of course and programme e-learning development plans.	
		Course and programme e-learning development plans formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning strategies and associated operational plans.	
		Course and programme e-learning development plans are subject to formal approval and endorsed by institutional leadership.	
		The allocation of resources for e-learning initiatives and projects includes a formal assessment of risks and strategies for mitigaton or removal of risk.	
1		**The selection of e-learning technologies and pedagogies for given courses is related to a course and programme e-learning development plan.**	

Process O6.

E–learning procedures and which technologies are used are communicated to students prior to starting courses

Practices

The use of e-learning is sufficiently unfamiliar to many students, and the range of possibilities so diverse, that it is important to warn students and provide them with opportunities to familiarise themselves with what to expect (Hillesheim, 1998). Many students will need to make particular arrangements so they get the most benefit from e-learning. Supplying them with the information in advance ensures that they will not be forced to withdraw at a later date, or struggle to raise their technology skills while trying to learn the course content (Fredericksen *et al*., 1999; Waterhouse and Rogers, 2004, Ragan, 1999). It cannot, however, be assumed that students will adopt new technologies without the availability of comprehensive training based on systematic planning that recognises required skill levels: "Students need to learn how to learn with the new technologies [and] Institutions should… articulate concrete IT learner competencies and literacy for students" (Kvavik and Caruso, 2005, p. 19).

Evidence of capability in this process is seen with the publishing of clear statements describing the use of various media and technologies and the requirements this will impose on students. This description should also provide access to any support information or documentation. All of this information should be provided for students in public course listings or catalogues prior to enrolment and also in enrolment packs. Policy should require that this information be provided and maintained. Institutional guidelines should set in place how teaching and administrative staff communicate standard technologies and media used in courses. Instructions for use, minimum requirements, and support of standard technologies should be provided and maintained through a central repository linked to the course requirements statement.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are students made aware of the expectations that are inherent in all forms of assessment? (Dim1/Dim2)
2. Are students provided with the training and technical assistance necessary to complete the course? (Dim1/Dim2)
3. Are there systems in place (faculty and institution) to deal with issues arising from student use of electronically accessed data? (Dim1/Dim2)
4. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
5. Are there procedures in place to coordinate central and devolved E–learning planning and operations? (Dim2)
6. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim2/Dim4)
7. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
8. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4)
9. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
10. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
11. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
12. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support and e-learning system websites and materials, guides for studying online.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support and e-learning system websites and materials, guides for studying online. Computer skills checklists.

Dimension 3: Definition

Communications and marketing policies and guidelines. Computer skills checklists and guidelines. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E-learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

O6 E–learning procedures and which technologies are used are communicated to students prior to starting courses

	Assessment	Practices	Notes
5		**Measures of student compliance with and effectiveness of institutional standards for providing students with instructions and requirements regarding electronic media are used to maintain and update the standards and the requirements for courses generally.**	
		Information on student preparedness for e-learning used to allocate support and staff development resourcing prior to new technology introduction.	
		Student and staff communication plans incorporated into any new e-learning technology rollout.	
		Compliance information on the abilities of the student population to meet required e-learning technology skill levels used to determine the support and resourcing for e-learning initiatives and projects.	
		Compliance information on the abilities of the student population to meet required technology skill levels used to determine the support and resourcing for services, such as the Library, that support the students independently of the courses and programmes.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of e-learning support and changing student and staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Measurements of student ability to comply with the technology and media expectations are collected and reported on regularly.**	
		Feedback collected regularly from students regarding their understanding of the supplied information.	
		Feedback collected regularly from students regarding problems with technology and media that are not addressed in the provided course descriptions.	
		Feedback collected regularly from staff regarding student understanding of the supplied information.	
		Feedback collected regularly from staff regarding problems with student use of technology and media that are not addressed in the provided course descriptions.	
		Compliance with institutional standards for providing students with preparation and practice opportunities for e-learning pedagogies and technology use is measured and reported on regularly.	
		Compliance with standards for advising students of technological requirements collected and reported on regularly.	
		Financial costs and benefits for students of e-learning technology use are regularly assessed and reported on.	
		Communication procedures are subject to formal quality assurance reviews.	
		Regular, formal, risk assessments undertaken of e-learning communication procedures so as to identify requirements for new or changed communication procedures.	
3		**Standards for collecting and displaying the instructions and requirements regarding electronic media and technologies are defined for use in all courses and the associated publicity and enrolment information.**	
		Templates and examples explaining to students how to make effective use of technologies and media are provided for teaching staff to use in course materials.	
		All course-related information regarding electronic media and technologies is subject to regular review to ensure consistency, accuracy and completeness.	
		Institutional standards for providing students with preparation and practice opportunities for all standard technologies and media are defined.	
		Teaching staff provided with training and materials to assist in supporting student's acquisition of skills in the use of particular technologies and media.	
		Formal plans for informing students of the technologies and media in use, associated policies and strategies are coordinated across the institution.	
2		**Course outlines contain a section covering the technologies and media which will be used, along with the procedures for their use that will be adopted in the particular course.**	
		E–learning technology practice sessions or tutorials organised and provided to all students as part of the course.	
		Formal plan for informing students of the technologies and media in use is in place within individual courses.	
		E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning strategies and associated operational plans.	
		E–learning design and (re)development activities reference the course learning objectives when selecting and implementing e-learning technologies and pedagogies.	
		Formal plans and strategies cover mechanisms for ensuring students have access to and/or ownership of necessary technologies for e-learning.	
		The institutional risk management plan covers risks arising from the communication of e-learning technologies and pedagogies to students.	
1		**Instructions and requirements describing e-learning technologies and pedagogies are listed in a formal and complete statement in the course and promotional materials available prior to enrolment.**	
		Opportunities for students to practice and prepare for technology use are explicitly identified in the course materials available prior to commencement of the course.	

Process O7.

Pedagogical rationale for e-learning approaches and technologies communicated to students prior to starting courses

Practices

The term 'e-learning' encompasses a wide range of applications and activities, making confusion a real possibility (Clarke, 2004). Because e-learning includes many different, and often new, technical and conceptual approaches, students need to be fully informed about why and how e-learning is being implemented and applied to their study programme, and what consequential benefits are available(Hillesheim, 1998). Students' approaches to learning and their perception of learning contexts are interconnected (Ramsden, 1998); it is therefore crucial to provide access to all relevant information about learning approaches and technologies to "[e]nsure that the logistics of the academic context allow students to study effectively and efficiently" (Laurillard, 2002, p. 208).

Such information should be made available at the earliest opportunity to ensure students are able to understand the competency and technical requirements of a programme before enrolling. Many students will need to make particular arrangements to ensure that they get the most benefit from e-learning, and supplying them with the information in advance ensures that they are not forced to withdraw at a later date or to struggle to raise their skills (Waterhouse and Rogers, 2004).

Evidence of capability in this process is seen in the incorporation of clear statements describing the use of various media and technologies and the requirements that this will impose on students. This description should also provide access to any support information or documentation. All of this should be provided publicly for students prior to enrolment and preferably also in enrolment packs. Policy should require that this information be provided and maintained along with guidelines that demonstrate how to communicate information on the standard technologies and media used in courses. Instructions for the use and support of standard technologies should be provided and maintained through a central repository.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Are students made aware of the expectations that are inherent in all forms of assessment? (Dim1/Dim2)
2. Are courses designed to support a diversity of learning styles and to ensure accessibility? (Dim1/Dim2)
3. Are students provided with the training and technical assistance necessary to complete the course? (Dim1/Dim2)
4. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
5. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
6. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim2/Dim4)
7. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
8. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4)
9. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
10. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
11. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
12. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support and e-learning system websites and materials, guides for studying online.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support and e-learning system websites and materials, guides for studying online.

Dimension 3: Definition

Communications and marketing policies and guidelines. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E-learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

	Assessment	Practices	Notes
5		**Compliance information on the abilities of the student population to use technology effectively for their learning is used to determine the support and resourcing for e-learning initiatives and projects.**	
		Information on student preparedness for e-learning used to allocate support and staff development resourcing prior to new technology introduction.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of pedagogical support and changing staff requirements arising from e-learning technologies and pedagogies being used.	
		Student and staff communication plans incorporated into any new e-learning technology rollout.	
4		**Compliance with standards for advising students of the pedagogical rationale for e-learning technology requirements of courses and programmes collected and reported on regularly.**	
		Compliance with institutional standards for providing students with preparation and practice opportunities for e-learning pedagogies and technology use is measured and reported on regularly.	
		Measurements of student ability to comply with the pedagogical expectations arising from e-learning are collected and reported on regularly.	
		Feedback collected regularly from students regarding the clarity and utility of the information provided.	
		Feedback collected regularly from staff regarding the clarity and utility of the information provided.	
		Abilities of the student population to meet requirements imposed by e-learning pedagogies and technologies regularly assessed and reported on.	
		Financial costs and benefits for students of e-learning pedagogies and technologies are regularly assessed and reported on.	
		Communication procedures are subject to formal quality assurance reviews.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed communication procedures.	
3		**Standards for collecting and displaying the pedagogical rationale for e-learning technology requirements of courses and programmes are defined for use in all courses.**	
		All course-related information regarding the pedagogical rationale for e-learning technology requirements is subject to regular review to ensure consistency, accuracy and completeness.	
		Templates and examples explaining to students how to make effective use of e-learning technologies are provided for teaching staff to use in course materials.	
		Teaching staff provided with training and materials to assist in supporting student's acquisition of skills in the use of e-learning technologies.	
		Institutional standards for providing students with preparation and practice opportunities for all standard e-learning technologies are defined.	
		E–learning design and (re)development plans, associated policies and strategies are coordinated across the institution.	
2		**Course outlines describe the technologies and media which will be used, along with the procedures for their use in the particular course.**	
		E–learning design and (re)development activities reference the course learning objectives when selecting and implementing e-learning technologies and pedagogies.	
		E–learning skills practice sessions or tutorials organised and provided to all students as part of the course.	
		E–learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning strategies and associated operational plans.	
		Plan for informing students of the pedagogical rationale for e-learning technology requirements in place within individual courses.	
		The institutional risk management plan covers risks arising from the communication of the pedagogical rationale for e-learning approaches and technologies to students.	
1		**Pedagogical rationale for e-learning approaches and technologies listed in a formal and complete statement in the course and promotional materials available prior to enrolment.**	
		Activities requiring the use of particular media and technologies clearly link the requirements with the stated learning outcomes of the course and activity.	
		Opportunities for students to practice and prepare for e-learning pedagogies and activities are explicitly identified in the course materials available prior to commencement of the course.	

Process O8.

Course administration information communicated to students prior to starting courses

Practices

The expanding integration of the institutional systems environment is increasing the pedagogical and operational complexity of e-learning. But it is also enabling the provision of accurate, consistent, complete, and timely administrative information for students. Levy and Ramim (2004) discuss the importance of institutional support for students that extends beyond online learning to include: "registration, financial aid, the library, the bookstore, advisors, student organizations and virtual communities" (p. 285). Consistent, clear information on the administrative aspects of courses ensures that staff are able to focus on teaching aspects rather than details of enrolment, and also ensures that students are clear on the focus and can ensure that they are properly prepared for study (Waterhouse and Rogers, 2004).

Evidence of capability in the process is seen in clear documentation, complying with a consistent institutional template, setting out the course and institution administrative information. Policy should require that this information be accurate, regularly reviewed and provided to students in advance of enrolment. Templates should be provided to ensure a consistent organisation and content. Elements that are standard to all courses should use wording prescribed by policy.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Do teaching staff manage response to student communications, explaining and aligning expectations for various types of communications, such as: learning related, admin related, personal/pastoral (Dim1)
2. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
3. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim2)
4. Is the programme's teaching/learning process formatively and summatively assessed with multiple standards based and independent evaluations? (evidence at school, faculty and institution level) (Dim2/Dim4)
5. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
6. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4)
7. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
8. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
9. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
10. Are the costs of developing and delivering e-learning known and monitored? (Dim4)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support and e-learning system websites and materials, guides for studying online.

Dimension 2: Planning

Course outlines and similar descriptive documents provided to students intending to enrol and after enrolment. Course materials, websites and the archives of communication channels. Student support and e-learning system websites and materials, guides for studying online.

Dimension 3: Definition

Communications and marketing policies and guidelines. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. E–learning quality assurance documents and institutional risk assessments.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E–learning design and (re)development policies and guidelines. Institutional e-learning risk assessments and mitigation strategies.

O8 Course administration information communicated to students prior to starting courses

	Assessment	Practices	Notes
5	■ □ □ ■ ■	**Feedback information used to inform allocation of resources for administrative services that support the students independently of the courses and programmes.**	
	■ □ □ ■ ■	**Student and staff communication plans incorporated into any new administration processes.**	
	■ □ □ ■ ■	Institutional risk assessments and mitigation strategies are regularly updated to reflect the effectiveness of administration information provision and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4	■ □ □ ■ ■	**Measurements of student ability to comply with the administrative requirements of the course and institution are collected and reported on regularly.**	
	■ □ □ ■ ■	**Feedback collected from students on the clarity and utility of the supplied administrative information.**	
	■ □ □ ■ ■	**Feedback collected from staff on the clarity and utility of the supplied administrative information.**	
	■ □ □ ■ ■	**Compliance with institutional standards for providing students with information on the administrative requirements of the course and institution is measured and reported on regularly.**	
	■ □ □ ■ ■	Communication procedures are subject to formal quality assurance reviews.	
	■ □ □ ■ ■	Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed communication procedures.	
3	■ □ □ ■ ■	**Standards for displaying the administrative requirements of the course and institution are defined for use in all courses and the associated publicity and enrolment information.**	
	■ □ □ ■ ■	**Staff are provided with training and materials to assist in supporting student's compliance with the administrative requirements of the course and institution.**	
	■ □ □ ■ ■	All course-related administrative information is subject to regular review to ensure consistency, accuracy and completeness.	
	■ □ □ ■ ■	Templates of administrative requirements of the course and institution are provided for teaching staff to use in course materials.	
	■ □ □ ■ ■	Formal plans for informing students of the administrative requirements, associated policies and strategies are coordinated across the institution.	
2	■ □ □ ■ ■	**Course outlines contain a section covering the administrative requirements of the course and institution.**	
	■ □ □ ■ ■	Formal plan for informing students of the administrative requirements of the course and institution is in place within individual courses.	
	■ □ □ ■ ■	E–learning design and (re)development activities formally link decisions regarding e-learning administration with the institutional e-learning strategies and associated operational plans.	
	■ □ □ ■ ■	The institutional risk management plan covers risks arising from the communication of administrative information to students.	
1	■ □ □ ■ ■	**Administrative information and requirements are listed in a formal and complete statement in the course and promotional materials available to students prior to enrolment.**	

Process O9.

The provision of e–learning is guided by formal business management and strategy

Practices

E–learning is an educational evolution, rather than an add-on. It requires a complementary approach to the integration of its manifold, complex, and dynamic elements and processes into institutional strategies and plans. The influence of information and communication technology (ICT) on the reconceptualisation of higher education organisation, administration, and teaching and learning, has been apparent for some time (Anderson and Elloumi, 2004; Bates, 1988, 1997; Duderstadt *et al*., 2003; Dutton and Loader, 2002; Laurillard, 2002; Ramsden, 2003). De Freitas and Oliver (2005) conclude that e-learning policy significantly affects institutional change beginning with "organizational redevelopment (whether formally through staffing structures or informally through locally negotiated changes in staff roles)" (p. 94). They add, however, that this process is dynamic and complex and needs to be subject to negotiation between all parties. Duderstadt *et al*. (2003) note that, to be sustainable, strategic e-learning decisions need to involve collaborative partnerships; within the institution, and beyond, to include commercial, government, and global relationships.

Evidence of capability in the process is seen through the alignment of e-learning investments with institutionally developed and endorsed e-learning strategies and technology plans. Important elements include a formal business development plan along with a detailed risk assessment and mitigation strategy. All staff involved in the design, (re)development and delivery of e-learning projects and initiatives need to be involved in the development of these plans and strategies and fully aware of the implications for their own work. The plans and strategies need to be dynamic documents building on a growing evidence base of locally relevant initiatives and projects linked with formal reviews, evaluations and quality assurance outcomes.

Sources of Information Providing Evidence of Capability

Questions for Eliciting Evidence of Capability

1. Is the design and development of e-learning courses informed by research into e-learning and pedagogy? (Dim1)
2. Does the institution and/or faculty have a technology plan that clearly describes the process of acquiring, maintaining, and upgrading hardware and software required for e-learning, and to what degree is it followed? (Dim1)
3. Are formal criteria used to determine access to funding and other resources which support course and programme (re)development? (Dim1)
4. Is e-learning developed around a recognised business model? (Dim1)
5. Are e-learning developments project managed? (Dim1/Dim2/Dim3/Dim4/Dim5)
6. Is there a documented plan in place and operational to ensure quality of delivery standards? (Dim1/Dim2)
7. Is there an operational plan based on the faculty/institution's e-learning strategy? (Dim1/Dim2)
8. Are there procedures in place to coordinate central and devolved e-learning planning and operations? (Dim2)
9. Are there processes in place to ensure that staff understand the potential of e-learning? (Dim2)
10. Are e-learning programmes developed around a strategic plan or business plan? (Dim2/Dim3)
11. Are there structured approaches to development (including, for example, (a) process steps charts or checklists; (b) workflow (activities and document flow) tools; (c) quality assurance checklists)? (Dim4)
12. Are instructional materials reviewed periodically to ensure they meet programme standards? (Dim4)
13. Is teaching staff capability for making the transition from classroom to online teaching formally assessed during training? (Dim4)
14. Are there mechanisms in place to allow real-time quality management of planning, design, development and delivery of e-learning modules, courses and programmes? (Dim4)
15. Are there processes in place for evaluating the impact of e-learning on staff? (Dim4)
16. Is the execution of the faculty/institution e-learning strategy plan monitored? (Dim4)
17. Is there a system in place to inform the institution of what use is being made of e-learning? (Dim4)
18. Are there processes in place to account for the full cost of e-learning (including staff time) and its relationship in forwarding strategic objectives (Dim4)
19. Are there processes for managing the risks associated with e-learning including obsolescence and the organisational impact of changes in practice (Dim4)
20. Are the costs of developing and delivering e-learning known and monitored? (Dim4)
21. Is there a defined and operative planning-review cycle? Does this operate at school, faculty and instutution level? (Dim4/Dim5)

Documentary Evidence

Evidence of capability in this process in each dimension can commonly be found in the following documents and sources.

Dimension 1: Delivery

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans.

Dimension 2: Planning

Course development and project planning documents, templates, development checklists and procedures. Course materials, outlines and similar descriptive documents. Institutional strategy, e-learning strategy, teaching and learning strategies and plans. Staff development and support materials.

Dimension 3: Definition

Course design and (re)development policies, guidelines, procedures and checklists. Formal process for obtaining funding and other resources for design and (re)development. Quality assurance procedures and guidelines. Staff development and support materials. E–learning standards, strategy and plans, teaching and learning strategies and plans.

Dimension 4: Management

Evaluation and review documents including student feedback as well as formal reviews. Design and development quality assurance documents.

Dimension 5: Optimisation

Institutional strategy, e-learning strategy, teaching and learning strategies and plans. E-learning design and (re)development policies and guidelines.

O9 The provision of e-learning is guided by formal business management and strategy

	Assessment	Practices	Notes
5		**Strategy and business management approaches and goals are regularly analysed for potential reuse or improvement in the light of experience with successful and unsuccessful e-learning initiatives.**	
		Reports summarising the outcomes of e-learning projects and initiatives are used when assessing the effectiveness of governance and management mechanisms.	
		Institutional risk assessments and mitigation strategies are regularly updated to reflect the strategy and business management approaches and goals and changing staff requirements arising from e-learning technologies and pedagogies being used.	
4		**Measures are collected of the success or failure of e-learning initiatives in supporting the achievement of strategy and business goals at programme and institution levels.**	
		Feedback collected regularly from students regarding the effectiveness of the use of e-learning in the context of the formal strategy and business management at programme and institution levels.	
		Feedback collected regularly from staff regarding the effectiveness of the use of e-learning in the context of the formal strategy and business management at programme and institution levels.	
		Financial costs and benefits of e-learning projects and initiatives regularly assessed and reported on.	
		E–learning design and (re)development activities are subject to formal quality assurance reviews and re-prioritisation of resources and objectives at key milestones.	
		Regular, formal, risk assessments undertaken of e-learning initiatives and projects so as to identify requirements for new or changed governance and management mechanisms.	
		Overlap and duplication of support and resources provided to staff engaged in e-learning design, (re)development and delivery is regularly reviewed and addressed in line with institutional e-learning strategy and technology plans.	
3		**Institutional policy requires that all courses and programmes link e-learning development to an overarching institutional strategy and business management approach.**	
		Staff are provided with training and support in the development of e-learning proposals and initiatives that effectively reference formal institutional strategy and business management.	
		Templates and examples are used to communicate how to incorporate formal strategy and business management when planning for the use of e-learning technologies and associated pedagogies.	
		Institutional strategy activities and documents formally consider the impact of e-learning on the institution.	
		A researched evidence base of e-learning projects and initiatives undertaken within or relevant to the local context is maintained for use by staff engaged in strategy (re)development and business management.	
		Business plans, associated policies, strategies and service level agreements are coordinated across the institution.	
2		**Staff are formally involved in the development and review of institutional e-learning strategies and associated operational plans.**	
		Staff are recognised, rewarded and supported in their engagement with innovative e-learning initiatives and experiments that support or enhance institutional and programme strategies and operational plans.	
		Students are formally involved in the development and review of institutional e-learning strategies and associated operational plans.	
		Support for e-learning projects and initiatives formally linked to strategic and governance outcomes.	
		Service level agreements formally linked to strategic and governance outcomes.	
		Risk assessments undertaken as part of governance and strategic planning include consideration of the impact of e-learning internally and externally.	
		Institutional e-learning strategies contain clear and empirically measureable objectives and milestones.	
		Course design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning strategies and associated operational plans.	
1		**The allocation of resources and funding for e-learning technologies and projects is aligned with, informed by and supportive of the institutional e-learning strategies and technology plans.**	
		Strategic impact and contribution of e-learning technologies and projects is evident in institutional governance activities.	
		Institutional e-learning strategies, vision address academic, staffing, student and financial implications of e-learning adoption and development.	
		E–learning strategies, vision and business plans are formally endorsed by the institutional leadership.	

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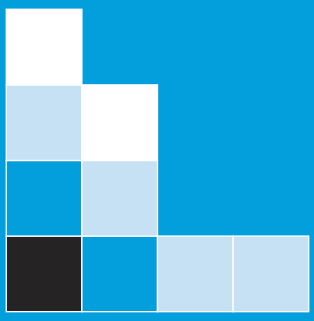

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