

# E-learning Maturity Model

## Process Assessment Workbook

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**DRAFT**

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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 2.3 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 Bacich, is greatly appreciated. Dr. Jim Petch and colleagues at the University of Manchester and the staff of Sero led by David Kay 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

The eMM and associated documentation is licensed under a Creative Commons Attribution-ShareAlike 2.5 License (<http://creativecommons.org/licenses/by-sa/2.5/>). Please cite this document as:

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# 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:

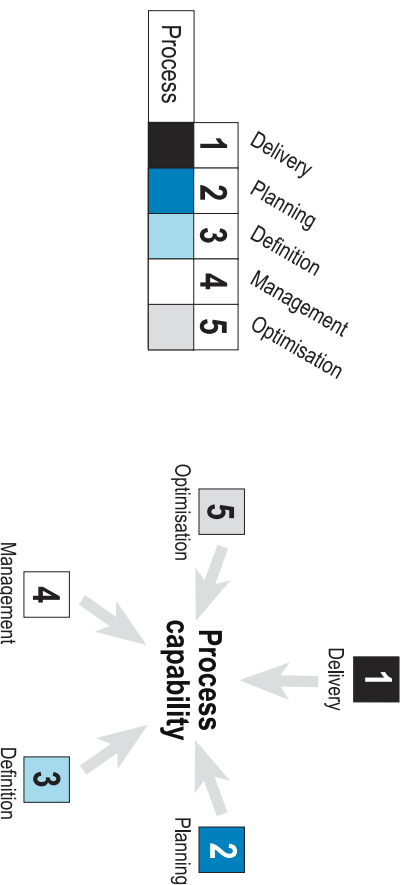
“are there common practices or ways of creating e-learning resources and learning environments that are accepted, useful and able to be described in a way that others can adopt them and improve their own e-learning capability?” (Marshall and Mitchell, 2003, page 4)

The processes used in version one of the eMM were developed from the ‘Seven Principles’ of Chickering and Gamsom (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.

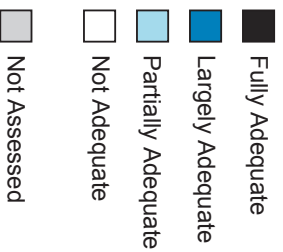
**Dimension 3** (Definition) covers the use of institutionally defined and documented standards, guidelines, templates and policies during the process implementation. An institution operating effectively within this dimension has clearly defined how a given process should be performed. This does not 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 knowledgeable insiders, although they should not influence the capability determination itself.

Process L1: Learning objectives guide the design and implementation of courses (Dimension 1)	
Assessment	Practices
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Course documentation includes a clear statement of learning objectives.</p> <p><b>Learning objectives are linked explicitly throughout learning and assessment activities using consistent language.</b> <small>See also L8(1), D3(2) &amp; O7(1)</small></p> <p>Learning objectives are linked explicitly to wider programme or institutional objectives.</p> <p>Learning objectives support student outcomes beyond the recall of information.</p> <p>Course workload expectations and assessment tasks are consistent with course learning objectives.</p>

**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.

#### Linked Processes

In Figure 3 the second practice shown from Process L1 is also found in other processes, as indicated by the “see also” comments on the right side. These provide links to the other processes where similar or identical practices may also be found and are provided as an aid to more efficient completion of an assessment. It is likely that similar or identical capability assessments will apply to these linked practices, although there may be some variation due to the process context.

#### 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.

The purpose of gathering evidence is to support the assessment of capability, to provide confidence in the assessment and to start the process of change to further build and develop that capability. When considering the evidence during assessment, an assessor must ask themselves two key questions: Is this evidence persuasive in supporting the assessment of capability being made? and; How does this evidence provide a starting point for change and improvement?

Collecting evidence provides a mechanism for identifying and documenting effective practice for celebrating, and also so that it can be replicated. Experience with eMM assessments has demonstrated that in many cases where poor capability was assessed, examples of how to achieve a higher level of capability were already present in the same institution. Demonstrating successful alternatives from within the same institution is much more compelling than constantly borrowing from others, if only because the internal examples have already demonstrated at least a degree of compatibility with the institution’s systems and culture.

The evidence which informs the assessment also demonstrates how and where improvements in capability can be made. By grounding the assessment of weaker areas with specific details of what is lacking, the means by which those same areas can be strengthened is automatically identified.

The exact mix of evidence gathered will depend on the institution, the formality of its systems and the process being assessed. While much of the evidence used should be documented either in paper or electronically, or evident from operational activities, it can also be oral. It is entirely appropriate for some of the evidence to consist of people with operational or managerial responsibilities describing what they do when engaging in particular tasks or making decisions. Where possible, this should be confirmed independently, but that is not always possible or realistic.

The evidence used to demonstrate capability for a given process will also vary depending on the dimension being assessed. Capability in the Delivery dimension is demonstrated primarily by the operational outputs of the process, the tangible examples of the process occurring. Capability in the Planning dimension will commonly be found in project documentation, minutes of meetings, plans, and the associated documentation of decisions and management oversight. Capability in the Definition dimension will be evidenced by standards, templates, policies, project documentation and plans, and the associated documentation of decisions and management control of process activities. Evidence of capability in the Management dimension will be found in formal reviews, evaluations, monitoring reports, unit reports and similar documentation and also through operational systems used to maintain systems and demonstrate compliance with service level agreements and contracts. Finally, evidence of capability in the Optimisation dimension will be found in budget planning documents, strategic and operational plans and associated documents, business cases, and the minutes of senior management strategy and planning meetings.

### **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 accommodated 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.

Process description	1	2	3	4	5
Institution A					
Institution B					
Institution C					
Institution D					
Institution E					

**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 guide 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Course documentation includes a clear statement of learning objectives.</b></p> <p><b>Learning objectives are linked explicitly throughout learning and assessment activities using consistent language.</b> <i>See also L8(1), D3(2) &amp; O7(1)</i></p> <p>Learning objectives are linked explicitly to wider programme or institutional objectives.</p> <p>Learning objectives support student outcomes beyond the recall of information.</p> <p>Course workload expectations and assessment tasks are consistent with course learning objectives.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Course documentation templates require the clear statement of learning objectives.</b></p> <p><b>Learning objectives guide e-learning design and (re)development decisions regarding content and activities.</b> <i>See also D3(2), O6(2) &amp; O7(2)</i></p> <p><b>Learning objectives guide e-learning design and (re)development decisions regarding technology and pedagogy.</b> <i>See also D3(2), O6(2) &amp; O7(2)</i></p> <p>Institutional reviews monitor the linkages between course learning objectives and wider programme or institutional objectives.</p> <p>Institutional reviews are guided by course learning objectives when assessing course structure, learning design and content.</p> <p>E-Learning design and (re)development is guided by a researched evidence base of effective learning objectives and associated e-learning activities.</p> <p>E-learning design and (re)development plans formally link learning objectives to institutional strategic and operational plans.</p> <p>Staff are provided with assistance when engaged in e-learning design and (re)development. <i>See also L7(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional policies require that a formal statement of learning objectives is part of all course documentation provided to students.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on developing learning objectives that address the full range of cognitive outcomes appropriate to the discipline, pedagogical approach and students.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on using learning objectives to guide e-learning design and (re)development.</b> <i>See also L6(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on assessing student achievement of learning objectives.</p> <p>Institutional e-learning policies are guided by institutional learning objectives for all students.</p> <p>Staff are provided with a researched evidence base of effective learning objectives and associated e-learning activities.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Compliance with policies, standards and guidelines governing the incorporation of learning objectives in e-learning design and development activities is regularly monitored.</b></p> <p><b>A variety of qualitative and quantitative metrics are used to assess student achievement of course learning objectives.</b></p> <p>Course learning objectives are regularly monitored to ensure that they address the full range of cognitive outcomes.</p> <p>Course learning objectives are regularly monitored to ensure that they are effective.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Financial costs and benefits of delivering course learning objectives are regularly monitored.</p> <p>Feedback collected regularly from students regarding the effectiveness of e-learning activities. <i>See also L7(4)</i></p> <p>Feedback collected regularly from staff regarding the effectiveness of e-learning activities. <i>See also L7(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Information on student achievement of learning objectives guides e-learning design and (re)development.</b></p> <p>Institutional learning objectives are guided by learning and teaching strategic plans.</p>	

## 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Courses provide a variety of mechanisms for interaction between staff and students.</b></p> <p>Students are provided with teaching staff email addresses.</p> <p>Students are provided with technical support for all of the communication channels in use.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Students are provided with course documentation describing all of the communication channels used.</b></p> <p><b>Students are provided with course documentation describing how different communication channels will support their learning.</b></p> <p><b>Course (re)development plans include a structured interaction design incorporating a variety of communication channels.</b> <i>See also L4(2) &amp; L5(2)</i></p> <p>Course activities require the use of the communication channels. <i>See also L4(2)</i></p> <p>Course documentation describes appropriate uses of different communication channels. <i>See also L4(1)</i></p> <p>Course delivery plans include regular monitoring of communication channels.</p> <p>E-Learning design and (re)development is guided by a researched evidence base of effective e-learning communication and interaction examples.</p> <p>Institutional reviews monitor the effectiveness of the interaction designs and communication channels.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Institutional policies define requirements for staff responsiveness to student communication.</b></p> <p><b>Institutional policies define requirements that staff support student engagement through a mix of different types of interaction.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on effective ways of using communication channels to support student learning.</b></p> <p>Standard communication channels are provided in all courses.</p> <p>Institutional policies define requirements for appropriate use of communication channels. <i>See also L4(3)</i></p> <p>Staff are provided with a researched evidence base of effective communication and interaction activities.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Student and staff use of communication channels is regularly monitored.</b> <i>See also L4(4)</i></p> <p><b>Feedback collected regularly from students regarding the effectiveness of different communication channels.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the communication channels.</b> <i>See also L4(4)</i></p> <p>The impact of the use of communication channels on student learning is regularly monitored.</p> <p>Financial costs and benefits of communication channels are regularly monitored. <i>See also L4(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on interaction between students and teaching staff guides resourcing of communication channels.</b> <i>See also L4(5) &amp; L5(5)</i></p> <p><b>Information on interaction between students and teaching staff guides training and support resourcing.</b> <i>See also L4(5) &amp; L5(5)</i></p> <p>Information on interaction between students and teaching staff guides the reuse of effective learning and teaching activities.</p> <p>Information on interaction between students and teaching staff guides e-learning strategic planning. <i>See also L4(5) &amp; L5(5)</i></p>	

## Process L3.

*Students are provided with e-learning skill development*

### 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Students are provided with explicit descriptions of the relationships between course components and activities.</p> <p>Courses include opportunities for students to practice with e-learning technologies and pedagogies. <i>See also O6(1) &amp; O7(1)</i></p> <p>Students are provided with e-learning skills support through a variety of communication channels.</p> <p>Course activities provide students with opportunities for substantive feedback on their e-learning skills.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Support staff provide students with assistance in developing e-learning skills.</p> <p>Early assessments of individual student capabilities guide activities and support during the remainder of the course.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional policies require that assessment tasks be designed to support incremental development of student skills and capabilities for learning. <i>See also L8(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) for developing learning activities that support incremental development of student e-learning skills.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) for assessing student e-learning skills.</p> <p>Institutional policies define the provision of student e-learning support.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Compliance with policies, standards and guidelines governing the use of learning activities that progressively build student capabilities in e-learning design and development activities is regularly monitored. <i>See also L8(4)</i></p> <p>Feedback collected regularly from students regarding the effectiveness of the support facilities.</p> <p>Feedback collected regularly from staff regarding the effectiveness of the support facilities.</p> <p>Student e-learning skills are regularly monitored.</p> <p>Student use of support facilities is regularly monitored.</p> <p>The impact of support facilities on student e-learning skills is regularly monitored.</p> <p>Financial costs and benefits of e-learning support facilities are regularly monitored. <i>See also D1(4) &amp; S1(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on the use of learning activities that progressively build student capabilities guides e-learning design and (re)development.</p> <p>Information on the use of learning activities that progressively build student capabilities guides the reuse of effective learning and teaching activities.</p> <p>Information on student e-learning skills guides e-learning strategic planning. <i>See also L8(5)</i></p> <p>Information on the use of learning activities that progressively build student capabilities guides e-learning support resourcing.</p>	

## Process L4.

*Students are provided with expected staff response times to student communications*

### 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 timeliness 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.



	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Course documentation provides the expected staff response times students can expect when using communication channels.</p> <p>Course documentation describes appropriate uses of different communication channels. <i>See also L2(2)</i></p> <p>Course documentation describes the types of responses teaching staff will provide via different communication channels.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Communication channels are monitored to ensure a timely response to students.</p> <p>Course (re)development plans include a structured interaction design incorporating a variety of communication channels. <i>See also L2(2) &amp; L5(2)</i></p> <p>Assessment tasks are explicitly linked to communication channels.</p> <p>Course documentation provides virtual 'office hours' for teaching staff.</p> <p>Course activities require the use of the communication channels. <i>See also L2(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional policies define expectations for staff responses to student communications.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on using communication channels to engage in effective and timely communication with students.</p> <p>Students are provided with support resources (including training, guidelines and examples) to assist them in making effective use of staff feedback in their learning. <i>See also L5(3), L8(3) &amp; E1(3)</i></p> <p>Institutional policies define requirements for appropriate use of communication channels. <i>See also L2(3)</i></p> <p>Institutional policies define requirements for protecting the privacy of digital information.</p> <p>Institutional policies define requirements for complying with intellectual property laws and contracts.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Student and staff use of communication channels is regularly monitored. <i>See also L2(4)</i></p> <p>Feedback collected regularly from students regarding the effectiveness of the teaching staff use of communication channels. <i>See also L2(4)</i></p> <p>Feedback collected regularly from staff regarding the effectiveness of the communication channels. <i>See also L2(4)</i></p> <p>Financial costs and benefits of communication channels are regularly monitored. <i>See also L2(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on interaction between students and teaching staff guides training and support resourcing. <i>See also L2(5) &amp; L5(5)</i></p> <p>Information on interaction between students and teaching staff used to identify effective communication strategies for reuse. <i>See also L5(5)</i></p> <p>Information on interaction between students and teaching staff guides resourcing of communication channels. <i>See also L2(5) &amp; L5(5)</i></p> <p>Information on interaction between students and teaching staff guides e-learning strategic planning. <i>See also L2(5) &amp; L5(5)</i></p>	

## 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' (Kulhavy 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Students are provided with feedback beyond the marks assigned for assessed work.</b></p> <p>Students are provided with feedback which addresses motivation.</p> <p>Students are provided with feedback which reinforces learning.</p> <p>Students are provided with feedback which corrects errors and supplies information in context.</p> <p>A variety of communication channels used to provide in-depth and contextual feedback.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Course (re)development plans include a structured interaction design incorporating a variety of communication channels.</b> <i>See also L2(2) &amp; L4(2)</i></p> <p><b>Courses include staged assessment tasks with structured opportunities for feedback and reflection.</b></p> <p>Students are provided with course documentation describing the feedback they can expect from staff.</p> <p>Students are provided with assessment marking rubrics prior to submitting work for marking.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Institutional policies define requirements for the quality and type of feedback to be provided to students.</b> <i>See also S3(3)</i></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on how to use feedback to improve student learning.</b> <i>See also L8(3)</i></p> <p><b>Students are provided with support resources (including training, guidelines and examples) to assist them in making effective use of staff feedback in their learning.</b> <i>See also L4(3), L8(3) &amp; E1(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on how to use formative and summative assessment feedback.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Feedback delivered in response to student work is regularly monitored.</b></p> <p><b>Feedback collected regularly from students regarding the effectiveness of the feedback provided.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the student feedback mechanisms and support.</b></p> <p>Financial costs and benefits of feedback mechanisms are regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on feedback type and quality, and student satisfaction with feedback, guides training and support resourcing.</b> <i>See also L2(5) &amp; L4(5)</i></p> <p><b>Information on feedback type and quality, and student satisfaction with feedback, used to identify effective feedback strategies for reuse.</b> <i>See also L4(5)</i></p> <p>Information on feedback type and quality, and student satisfaction with feedback, guides e-learning design and (re)development.</p> <p>Information on feedback type and quality, and student satisfaction with feedback, guides resourcing of communication channels. <i>See also L2(5) &amp; L4(5)</i></p> <p>Information on feedback type and quality, and student satisfaction with feedback, guides e-learning strategic planning. <i>See also L2(5) &amp; L4(5)</i></p>	

## Process L6.

*Students are provided with support in developing research and information literacy skills*

### 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Students are provided with a description of the range of available information sources.</b></p> <p>Students are provided with information on research skills support.</p> <p>Students are provided with information on accessing course content.</p> <p>Students are provided with lists of starting points for their own research and information collection activities.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Students are provided with formal information literacy and research skills development opportunities in all courses.</b></p> <p><b>Assessment marking rubrics include criteria reflecting the quality of student research and information use.</b></p> <p>Students are provided with designated library staff contact information. <i>See also S2(2)</i></p> <p>Summaries of useful library resources provided on a course or discipline basis. <i>See also S2(2)</i></p> <p>E-Learning design and (re)development is guided by a researched evidence base. <i>See also L7(2) &amp; D3(2)</i></p> <p>Course documentation provides students with guidance on intellectual property and plagiarism issues.</p> <p>Teaching staff are provided with plagiarism and collusion detection systems. <i>See also L8(2) &amp; S6(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional policies define expectations for student research skills and information literacy.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on using library facilities to support student research and information literacy skill development.</b></p> <p><b>Standard bibliography and citation formats defined and provided to students and staff along with examples and training in their use.</b></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on guiding student use of information to avoid plagiarism and misuse of intellectual property. <i>See also L8(3)</i></p> <p>Institutional policies define expectations that courses include research activities. <i>See also D7(3) &amp; O4(3)</i></p> <p>Institutional policies define how digital information is retained and accessed.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on using learning objectives to guide e-learning design and (re)development. <i>See also L1(3)</i></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L7(3), D1(3), D2(3), D3(3), D7(3), S5(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Students' abilities to conduct effective research are regularly monitored.</b></p> <p><b>Feedback collected regularly from students regarding the effectiveness of the information literacy and research facilities.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the information literacy and research facilities.</b></p> <p>Students' abilities to access digital content are regularly monitored.</p> <p>Student use of digital information facilities is monitored regularly.</p> <p>Financial costs and benefits of information literacy and research facilities are regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Information on the ability of students to access and assess content and conduct research guides training and support resourcing.</b></p> <p><b>Information on the effectiveness of information resources and tools guides e-learning design and (re)development.</b></p> <p>Information on the ability of students to use digital information facilities guides training and support resourcing.</p> <p>Information on the effectiveness of information resources and tools guides e-learning strategic planning.</p>	

## Process L7.

*Learning designs and activities actively engage 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Learning activities are designed to encourage analysis and skill development.</b></p> <p>Students are provided with opportunities to describe and reflect upon their own learning.</p> <p>Students are able to integrate previous experience and knowledge into course activities and tasks.</p> <p>Students are provided with opportunities for cooperative and collaborative learning tasks.</p> <p>Learning activities and tasks are placed within an authentic context for student learning.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Course documentation describes the e-learning pedagogies used.</b> <i>See also L7(2)</i></p> <p><b>The design of e-learning activities is guided by the need to build and develop student engagement.</b></p> <p>E-learning design and development is guided by the need to build an authentic context for student learning.</p> <p>E-Learning design and (re)development is guided by a researched evidence base. <i>See also L6(2) &amp; D3(2)</i></p> <p>Staff are provided with assistance when engaged in e-learning design and (re)development. <i>See also L1(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Teaching staff are provided with support resources (including training, guidelines and examples) for designing, developing, and delivering learning activities that actively engage students.</b></p> <p>Institutional policies require that courses be designed to build and develop student engagement.</p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), D1(3), D2(3), D3(3), D7(3), S5(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Compliance with policies, standards and guidelines governing the incorporation of learning activities that actively engage students in e-learning design and development is regularly monitored.</b></p> <p><b>Feedback collected regularly from students regarding the effectiveness of the e-learning activities.</b> <i>See also L1(4)</i></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the e-learning activities.</b> <i>See also L1(4)</i></p> <p>Students' engagement is regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Financial costs and benefits of e-learning activities are regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on the active engagement of students with course learning activities guides e-learning design and (re)development.</b></p> <p><b>Active engagement of students as learners guides e-learning strategic planning.</b></p>	

## Process L8.

*Assessment is designed to progressively build student 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Assessments are described in terms of course and programme objectives and requirements.</b> <a href="#">See also L1(1), D3(1) &amp; O7(1)</a></p> <p><b>Students are provided with opportunities to discuss assessment tasks with each other and the teaching staff before attempting marked work.</b></p> <p><b>Students are provided with opportunities to practice assessment tasks before attempting marked work.</b></p> <p>Students are provided with timely feedback while engaging in assessed work.</p> <p>A range of assessment formats are used in courses.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Course documentation provides students with a description of the programme of assessment and the relationship between the individual assessment tasks and other learning activities.</b></p> <p><b>The assessment programme is designed to make effective and consistent use of e-learning technologies used in other course activities.</b></p> <p>The assessment programme is designed to build on student skills and experience attained in previous work.</p> <p>There is an explicit relationship between the individual assessments and other timetabled activities.</p> <p>Assessment design and (re)development activities are guided by a researched evidence base.</p> <p>Assessment tasks provide guidance for students on intellectual property and plagiarism issues.</p> <p>Teaching staff are provided with plagiarism and collusion detection systems. <a href="#">See also L6(2) &amp; S6(2)</a></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional policies require that e-learning assessment programmes provide sufficient time for feedback from staff and reflection by students.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on designing effective assessment programmes.</b></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on guiding student use of information to avoid plagiarism and misuse of intellectual property. <a href="#">See also L6(3)</a></p> <p>Institutional policies require that assessment tasks be designed to support incremental development of student skills and capabilities for learning. <a href="#">See also L3(3)</a></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on how to use feedback to improve student learning. <a href="#">See also L5(3)</a></p> <p>Students are provided with support resources (including training, guidelines and examples) to assist them in making effective use of staff feedback in their learning. <a href="#">See also L4(3), L5(3) &amp; E1(3)</a></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning assessment activities.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Feedback collected regularly from students regarding the effectiveness of the assessment activities.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the assessment activities.</b></p> <p>Compliance with policies, standards and guidelines governing the inclusion of learning activities that progressively build student capabilities during e-learning design and development is regularly monitored. <a href="#">See also L3(4)</a></p> <p>Student workloads are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <a href="#">See also L1(4), L7(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</a></p> <p>Financial costs and benefits of assessment activities are regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Information on the use of assessment activities that progressively build student capabilities guides e-learning design and (re)development.</b></p> <p>Information on student e-learning skills guides e-learning strategic planning. <a href="#">See also L3(5)</a></p>	

## 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Students are provided prior to enrolment with details of the workload and time commitment required for course activities.</p> <p>Deadline and timing information provided as part of the descriptions of course activities.</p> <p>The relationships between course activities are explicit and logical.</p> <p>Deadline and timing information repeated throughout course documentation.</p> <p>Students are provided with regular reminders of upcoming deadlines.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Course documentation provides a timetable for key activities and associated deadlines.</p> <p>The extent and timing of e-learning activities is guided by student workload information.</p> <p>Course documentation provides an explicit process for negotiating variances to timetables and deadlines.</p> <p>Students are provided with support in developing time management skills.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Institutional policies define expectations for student workloads within courses.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on designing effective timetabling and workload schemes.</p> <p>Institutional policies require the clear communication to students of deadlines and timetables.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Student workload information is regularly monitored.</p> <p>Feedback collected regularly from students regarding the effectiveness of the timetables and deadlines.</p> <p>Feedback collected regularly from staff regarding the effectiveness of the timetables and deadlines.</p> <p>Compliance with policies, standards and guidelines governing the timetabling of learning activities is regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Information on the workload and timetabling implications of learning activities guides e-learning design and (re)development.</p> <p>Information on student workloads and timetable constraints guides e-learning strategic planning.</p>	

## 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Students told of diversity support mechanisms and encouraged to make use of the provided alternatives.</b></p> <p>Consistent use of a variety of teaching and learning activities in courses. <i>See also D4(1)</i></p> <p>Consistent use of a variety of media in courses. <i>See also D4(1)</i></p> <p>Course documentation and activities avoid inappropriate bias and stereotypes.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Course documentation provides the procedure to follow if course elements fail to meet individual student needs.</b> <i>See also D4(2)</i></p> <p><b>Teaching staff are provided with e-learning design and (re)development assistance that encourages and supports diversity.</b></p> <p><b>E-learning design and (re)development procedures include formal testing and review of diversity support with student participants.</b></p> <p>E-learning design and (re)development procedures require the use of a variety of media and activities.</p> <p>Institutional reviews monitor student diversity support.</p> <p>Students are provided with explicit diversity support facilities.</p> <p>E-learning design and (re)development activities are guided by a researched evidence base of diversity issues and requirements.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Diversity policies, standards and guidelines are provided to all staff and students.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on supporting student diversity when designing, (re)developing and delivering e-learning courses.</b></p> <p>Institutional policies prohibit the use of inappropriate cultural bias and stereotypes.</p> <p>Student diversity explicitly addressed in institutional e-learning strategies.</p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of diversity issues and requirements.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Compliance with policies, standards and guidelines governing diversity in e-learning courses is regularly monitored.</b></p> <p><b>Feedback collected regularly from students regarding the effectiveness of the e-learning tasks and activities in supporting diversity.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the e-learning tasks and activities in supporting diversity.</b></p> <p>Performance of students with diverse backgrounds and capabilities is regularly monitored.</p> <p>Financial costs and benefits of diversity support facilities are regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on the effectiveness of diversity support is used to guide e-learning initiative planning.</b></p> <p><b>Diversity requirements guide the selection and implementation of new technologies for e-learning.</b></p> <p>Information on the extent of diversity support is used to guide e-learning initiative planning.</p>	

## 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Technical design and development assistance available to staff designing and (re)developing courses.	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Technical design and development support is formally scheduled during e-learning design and development. <i>See also D2(2) &amp; S5(2)</i></p> <p>Teaching staff are recognised and rewarded for their engagement with innovative e-learning initiatives. <i>See also S5(2), E2(2) &amp; O9(2)</i></p> <p>Formal risk assessments of staff e-learning skills and mitigation planning are required by e-learning design and (re)development procedure. <i>See also D2(2) &amp; S5(2)</i></p> <p>Specialist staff support the use of e-learning design and (re)development procedures. <i>See also D2(2) &amp; S5(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Institutional policies define the support resources and assistance available to teaching staff for e-learning design and (re)development.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) for e-learning design and (re)development. <i>See also D2(3)</i></p> <p>Teaching staff are provided with project tools (including standard contracts and licenses, checklists and quality assurance procedures) for e-learning design and (re)development. <i>See also D2(3), D3(3), D6(3) &amp; S5(3)</i></p> <p>Support staff are provided with standards and guidelines covering technical and pedagogical aspects of e-learning design and (re)development. <i>See also D2(3) &amp; S5(3)</i></p> <p>Formal allocation of e-learning technical support is addressed in e-learning design and (re)development procedures. <i>See also D2(3)</i></p> <p>Pedagogical issues are formally addressed in e-learning design and (re)development procedures. <i>See also D2(3) &amp; S5(3)</i></p> <p>Licensing and use of intellectual property is formally addressed in e-learning design and (re)development procedures.</p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D2(3), D3(3), D7(3), S5(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>Staff technical support requirements are formally addressed in e-learning technology purchase procedures. <i>See also D2(3), S5(3) &amp; S6(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Staff use of templates, project supporting materials and quality assurance procedures during e-learning design and (re)development is regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Feedback collected regularly from staff regarding the effectiveness of the e-learning design and development support.</p> <p>Teaching staff use of e-learning technical support is regularly monitored. <i>See also S5(4) &amp; S6(4)</i></p> <p>Teaching staff use of pedagogical support and assistance is regularly monitored.</p> <p>Effectiveness of e-learning pedagogies is regularly monitored. <i>See also L3(4) &amp; S1(4)</i></p> <p>Financial costs and benefits of e-learning support facilities are regularly monitored. <i>See also D2(4), S5(4), S6(4), O1(4), O3(4), O5(4) &amp; O9(4)</i></p> <p>Overlap and duplication of e-learning support is regularly assessed.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information on the effectiveness of design and development support guides the strategic and operational planning of e-learning. <i>See also D3(5) &amp; S5(5)</i></p> <p>Formal assessment of teaching staff e-learning skills guides the resourcing of e-learning support. <i>See also D3(5)</i></p> <p>Information on the effectiveness of e-learning technologies and pedagogies guides the resourcing of e-learning support. <i>See also D3(5)</i></p> <p>E-learning technology deployment procedures formally address the resourcing of e-learning support. <i>See also D3(5) &amp; S5(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing staff e-learning technology use and support needs. <i>See also D3(5), S5(5) &amp; O4(5)</i></p>	

## Process D2.

*Course development, design and delivery are guided by 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Teaching staff are provided with e-learning design and (re)development standards.	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Standards and procedures for changing pedagogies guide e-learning design and (re)development.</p> <p>Technical design and development support is formally scheduled during e-learning design and development. <i>See also D1(2) &amp; S5(2)</i></p> <p>Specialist staff support the use of e-learning design and (re)development procedures. <i>See also D1(2) &amp; S5(2)</i></p> <p>Formal risk assessments of staff e-learning skills and mitigation planning are required by e-learning design and (re)development procedure. <i>See also D1(2) &amp; S5(2)</i></p> <p>Formal agreements covering intellectual property ownership are addressed in e-learning design and (re)development procedures.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Support staff are provided with standards and guidelines covering technical and pedagogical aspects of e-learning design and (re)development. <i>See also D1(3) &amp; S5(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) for e-learning design and (re)development. <i>See also D1(3)</i></p> <p>Teaching staff are provided with project tools (including standard contracts and licenses, checklists and quality assurance procedures) for e-learning design and (re)development. <i>See also D1(3), D3(3), D6(3) &amp; S5(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on developing e-learning resources that discourage student plagiarism and misuse of intellectual property.</p> <p>Formal allocation of e-learning technical support is addressed in e-learning design and (re)development procedures. <i>See also D1(3)</i></p> <p>Pedagogical issues are formally addressed in e-learning design and (re)development procedures. <i>See also D1(3) &amp; S5(3)</i></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D3(3), D7(3), S5(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>Staff technical support requirements are formally addressed in e-learning technology purchase procedures. <i>See also D1(3) &amp; S5(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Staff use of e-learning procedures and standards during e-learning design and (re)development is regularly monitored.</p> <p>Feedback collected regularly from staff regarding the effectiveness of the e-learning procedures and standards.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Financial costs and benefits of e-learning procedures and standards are regularly monitored.</p> <p>Overlap and duplication of e-learning support is regularly assessed. <i>See also D1(4), S5(4), S6(4), O1(4), O3(4) &amp; O5(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information on the effectiveness of e-learning procedures and standards is used to guide strategic and operational planning of e-learning.</p> <p>Information on the e-learning skills of teaching staff guides the content of institutional e-learning standards and procedures</p> <p>E-learning technology deployment procedures formally address changes to e-learning procedures and standards.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing e-learning procedures and standards.</p>	

## Process D3.

*An explicit plan links e-learning technology, pedagogy and content used in courses*

### 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Activities, content and assessment used in the course design are linked with common learning outcome statements. <i>See also L1(1), L8(1) &amp; O7(1)</i></p> <p>An explicit plan covers pedagogical and technological decisions taken during the design and (re)development process.</p> <p>An explicit plan guides the communication to students of the relationships between course elements.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Learning objectives guide e-learning design and (re)development decisions regarding content and activities. <i>See also L1(2)</i></p> <p>Institutional reviews monitor e-learning design and development documents.</p> <p>Learning objectives guide e-learning design and (re)development decisions regarding technology and pedagogy. <i>See also L1(2), O6(2) &amp; O7(2)</i></p> <p>Formal e-learning procedures and standards guide e-learning design and (re)development.</p> <p>Student feedback guides e-learning design and (re)development.</p> <p>Learning objectives are defined prior to e-learning design and (re)development.</p> <p>E-Learning design and (re)development is guided by a researched evidence base. <i>See also L6(2) &amp; L7(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Institutional policies require that a description of the explicit relationships between course elements is part of all course documentation provided to students.</p> <p>Institutional policies require that a formal statement of learning objectives is used as the starting point for e-learning design and (re)development.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) for creating design rationales that effectively link learning outcomes with the pedagogies, content and technologies used.</p> <p>Teaching staff are provided with project tools (including standard contracts and licenses, checklists and quality assurance procedures) for e-learning design and (re)development. <i>See also D1(3), D2(3), D6(3) &amp; S5(3)</i></p> <p>Staff are provided with information on how e-learning technologies support a range of student cognitive outcomes.</p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D7(3), S5(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) for creating design rationales that are aligned with institutional e-learning strategies.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Compliance with policies, standards and guidelines governing explicit linkages between pedagogies, content and technologies in e-learning design and development activities is regularly monitored.</p> <p>Students' awareness of the relationships between course elements and learning objectives is regularly monitored.</p> <p>E-learning design and (re)development procedures include a formal post-delivery review.</p> <p>Feedback collected regularly from staff regarding the effectiveness of any formal design and (re)development procedures.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones.</p> <p>Financial costs and benefits of e-learning technologies and pedagogies are regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information on changes in the student population is used to guide e-learning initiative planning activities.</p> <p>Information on the effectiveness of design and development support guides the strategic and operational planning of e-learning. <i>See also D1(5) &amp; S5(5)</i></p> <p>Information on the effectiveness of design and development support guides the allocation of resources for support.</p> <p>Formal assessment of teaching staff e-learning skills guides the resourcing of e-learning support. <i>See also D1(5)</i></p> <p>Information on the effectiveness of e-learning technologies and pedagogies guides the resourcing of e-learning support. <i>See also D1(5)</i></p> <p>E-learning technology deployment procedures formally address the resourcing of e-learning support. <i>See also D1(5) &amp; S5(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing staff e-learning technology use and support needs. <i>See also D1(5), S5(5) &amp; O4(5)</i></p>	

## 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Students told of accessibility support mechanisms and encouraged to make use of the alternatives provided.</b></p> <p>Consistent use of a variety of teaching and learning activities in courses. <i>See also L10(1)</i></p> <p>Consistent use of a variety of media in courses. <i>See also L10(1)</i></p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>E-learning design and development is guided by the need to ensure that learning activities are accessible.</b></p> <p><b>Course documentation provides the procedure to follow if course elements fail to meet individual student needs.</b> <i>See also L10(2)</i></p> <p><b>E-learning design and (re)development procedures include formal testing and review of accessibility support with student participants.</b></p> <p>Institutional reviews monitor student accessibility support.</p> <p>Students are provided with explicit accessibility support facilities.</p> <p>Formal risk assessments of student accessibility support and mitigation planning are required by e-learning design and (re)development procedure.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Institutional policies defines requirements for supporting accessibility during e-learning design, (re)development and delivery.</b></p> <p><b>Accessibility policies are provided to all staff and students.</b></p> <p><b>Teaching staff are provided with support resources (including training, guidelines and examples) on supporting accessibility when engaged in e-learning design and (re)development.</b></p> <p>Staff are provided with a researched evidence base of effective accessibility initiatives and associated e-learning activities.</p> <p>Accessibility support requirements are formally addressed in e-learning technology purchase procedures.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Effectiveness of e-learning templates, project supporting materials and quality assurance procedures in ensuring courses are accessible is regularly monitored.</b></p> <p><b>Feedback collected regularly from students regarding accessibility support and resources.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the support for assisting disabled students.</b></p> <p>Compliance with policies, standards and guidelines governing accessibility is regularly monitored.</p> <p>Financial costs and benefits of accessibility support are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on the effectiveness of accessibility support guides e-learning strategic planning.</b></p> <p><b>Accessibility requirements guide the selection and implementation of e-learning technologies.</b></p> <p>Information on the extent of accessibility support is used to guide e-learning initiative planning.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing staff accessibility support needs.</p>	

## 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 practices (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
1	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Technology performance, reliability and support issues explicitly addressed when implementing the physical e-learning infrastructure.</b></p> <p><b>All user digital information is stored in a validated backup system.</b> <i>See also S6(2) &amp; O4(2)</i></p> <p>Decisions to add new e-learning infrastructure elements are guided by the ability of the new technology to integrate with the pre-existing infrastructure.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Formal risk assessments of the e-learning infrastructure and mitigation planning are required by e-learning design and (re)development procedures</b></p> <p><b>All elements of the e-learning infrastructure are regularly audited to ensure the validity of backups and disaster recovery procedures.</b></p> <p><b>Selection of technologies used in the physical e-learning infrastructure is guided by reliability information.</b></p> <p>Formal assessment of technology reliability and support is required by e-learning design and (re)development procedures.</p> <p>Selection of technologies used in the physical e-learning infrastructure is guided by an institutional plan.</p> <p>Selection of technologies used in the physical e-learning infrastructure is guided by formal support of innovation and experimentation.</p> <p>The deployment of new e-learning infrastructure elements is guided by the interoperability of the new technology with the pre-existing infrastructure.</p> <p>Modifications to the physical e-learning infrastructure are guided by a formal risk assessment and mitigation strategy.</p> <p>Regular and systematic upgrading and maintenance undertaken of all elements of the e-learning infrastructure.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Technologies used in the physical e-learning infrastructure are subject to regularly revised service level agreements that explicitly consider the impact of the technology on student learning.</b></p> <p>Modifications to the physical e-learning infrastructure are guided by institutional e-learning strategies and technology plans.</p> <p>Reliability and support requirements are formally addressed in e-learning technology purchase procedures.</p> <p>Service level agreements are used to define support and performance requirements for e-learning technologies.</p> <p>Modifications to the physical e-learning infrastructure are guided by interoperability standards.</p> <p>Staff are provided with a researched evidence base of effective e-learning infrastructure initiatives.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Performance of technologies used in the physical e-learning infrastructure is automatically monitored.</b></p> <p><b>Formal e-learning infrastructure risk assessments and mitigation strategy reviews are undertaken with the results endorsed by institutional leadership.</b> <i>See also D6(4)</i></p> <p><b>Feedback collected regularly from staff on the effectiveness, robustness and reliability of the e-learning infrastructure.</b> <i>See also D6(4)</i></p> <p><b>Feedback collected regularly from students on the effectiveness, robustness and reliability of the e-learning infrastructure.</b> <i>See also D6(4)</i></p> <p>Compliance of the physical e-learning infrastructure with service level agreements is regularly monitored.</p> <p>E-learning infrastructure (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Financial costs and benefits of the e-learning infrastructure are regularly monitored.</p> <p>E-learning infrastructure (re)development activities are guided by staff and student user testing.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on performance and reliability guides the deployment and ongoing use of e-learning technologies.</b></p> <p><b>Information on the effectiveness of the physical e-learning infrastructure guides e-learning strategic planning.</b></p> <p>E-learning infrastructure service level agreements are regularly reviewed.</p> <p>Information on performance and interoperability guides the (re)development of institutional e-learning standards.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing e-learning technology reliability and robustness.</p>	

## 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.



	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>The physical e-learning infrastructure is integrated with key institutional administrative systems.</p> <p>Reference is made to appropriate standards when designing and (re)developing the physical e-learning infrastructure.</p> <p>E-learning infrastructure standards are defined for all technologies used in the design, (re)development and delivery of courses.</p> <p>Students and staff are informed of the use of standards to guide e-learning technology deployment.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>A searchable repository of standards for the physical e-learning infrastructure is provided.</p> <p>Institutional reviews monitor the use of standards for the physical e-learning infrastructure.</p> <p>Institutional reviews monitor risks associated with the use of standards for the physical e-learning infrastructure.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional policies require the use of defined standards when designing, (re)developing or using the physical e-learning infrastructure.</p> <p>Staff are provided with support resources (including training, guidelines and examples) for working with institutional standards for the physical e-learning infrastructure.</p> <p>Staff are provided with project tools (including standard contracts and licenses, checklists and quality assurance procedures) for e-learning design and (re)development. <i>See also D1(3), D2(3) &amp; S5(3)</i></p> <p>Staff are provided with a researched evidence base of effective e-learning standards.</p> <p>Institutional decisions to add or modify e-learning standards are guided by institutional e-learning strategies and technology plans.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Compliance with and use of defined institutional standards is measured and enforced through regular review of the physical e-learning infrastructure and individual courses.</p> <p>Feedback collected regularly from staff on the effectiveness, robustness and reliability of the e-learning infrastructure. <i>See also D5(4)</i></p> <p>Feedback collected regularly from students on the effectiveness, robustness and reliability of the e-learning infrastructure. <i>See also D5(4)</i></p> <p>The impact of standards on the physical e-learning infrastructure is regularly monitored.</p> <p>Financial costs and benefits of e-learning standards are regularly monitored.</p> <p>E-learning infrastructure (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Formal e-learning infrastructure risk assessments and mitigation strategy reviews are undertaken with the results endorsed by institutional leadership. <i>See also D5(4)</i></p> <p>E-learning standards (re)development activities are guided by staff and student user testing.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on the impact of institutional e-learning standards on student outcomes guides the content of those standards.</p> <p>Information on the performance and integration of the e-learning infrastructure guides the content of institutional e-learning standards.</p> <p>E-learning standards are regularly reviewed.</p> <p>A formal procedure guides the adoption of new standards.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect e-learning initiative outcomes. <i>See also O1(5), O2(5), O3(5) &amp; O5(5)</i></p>	

## Process D7.

*E-learning resources 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 reuse 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>E-learning resources are packaged and stored for reuse.</b></p> <p>Metadata is provided for all e-learning resources.</p> <p>Ownership and licensing information is provided for all e-learning resources.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>A searchable repository of reusable e-learning resources is provided.</b></p> <p><b>E-learning design and (re)development procedures include explicit consideration of reusing pre-existing resources before new resources are created.</b></p> <p><b>Incentives provided to teaching staff who create reusable e-learning resources.</b></p> <p>Incentives provided to teaching staff who reuse e-learning resources.</p> <p>E-learning resources are explicitly designed to support ongoing maintenance and adaptation.</p> <p>Metadata templates are used during e-learning design and (re)development activities.</p> <p>Ownership and licensing information is formally stored during e-learning design and (re)development activities.</p> <p>E-learning resources are designed to support reuse by students.</p> <p>Formal risk assessments of reuse and mitigation planning are required by e-learning reuse procedures.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Intellectual property agreements negotiated with all staff involved in the design, and (re)development of course resources.</b></p> <p><b>Staff are provided with support resources (including training, guidelines and examples) on creating and adapting reusable e-learning resources.</b></p> <p><b>Institutional policies encourage the reuse of e-learning resources.</b></p> <p>Metadata templates and schemas are defined for use at a disciplinary and institutional level. <a href="#">See also O4(3)</a></p> <p>Staff are provided with support resources (including training, guidelines and examples) on creating metadata.</p> <p>Institutional standards and templates provide pre-defined intellectual property licences for use with e-learning resources.</p> <p>Institutional policies require that e-learning resources be created in a manner that supports reuse.</p> <p>Institutional policies define how digital information is retained and accessed. <a href="#">See also L6(3) &amp; O4(3)</a></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <a href="#">See also L6(3), L7(3), D1(3), D2(3), D3(3), S5(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</a></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>E-learning resources intended for reuse are tested and reviewed by staff and student users.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of systems and procedures for encouraging and supporting reuse of course resources.</b></p> <p>The extent to which resources are being reused is monitored regularly.</p> <p>The extent to which resources are being created for reuse is monitored regularly.</p> <p>Compliance with standards for metadata creation is monitored regularly.</p> <p>Financial costs and benefits of reuse are regularly monitored.</p> <p>Formal e-learning reuse risk assessments and mitigation strategy reviews are undertaken with the results endorsed by institutional leadership.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Deployment and use of e-learning technologies is guided by information on its support of reuse.</b></p> <p><b>Information on the effectiveness of attempts to encourage reuse guides e-learning strategic planning.</b></p> <p>Information on the extent of e-learning resource reuse guides e-learning initiative planning.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing staff e-learning reuse support needs.</p>	

## 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Students are provided with e-learning technical support through a variety of communication channels.</b></p> <p>Students are provided with technical support materials linked to specific e-learning facilities.</p> <p>Students are provided with technical support materials linked to administrative facilities.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>E-learning design and (re)development plans are guided by technology support costs to the organisation, staff and students.</b> <i>See also S4(2)</i></p> <p><b>Students are provided with information describing e-learning support facilities prior to enrolment.</b> <i>See also S4(2)</i></p> <p><b>Students are provided with information describing the institutional distribution of responsibility for student support services.</b> <i>See also S2(2) &amp; S4(2)</i></p> <p><b>E-learning design and (re)development plans are guided by the available support facilities.</b> <i>See also S2(2)</i></p> <p>Formal risk assessments of student e-learning activities and mitigation planning are required by e-learning design and (re)development procedures.</p> <p>Course documentation describes the available support facilities.</p> <p>Students are provided with documentation of the formal procedures used to resolve any concerns or complaints they raise. <i>See also S3(2)</i></p> <p>Students are provided with technical support during the hours that they are engaging in e-learning activities.</p> <p>Records of students' technical support requests and their resolution are retained in a designated repository.</p> <p>Service level agreements are used to define performance requirements for support providers.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Institutional standards define requirements for student technical support that are explicitly linked to institutional e-learning strategies and technical plans.</b></p> <p><b>Institutional procedures for acquiring and maintaining e-learning technologies include the explicit consideration of student support implications.</b></p> <p>Technical support staff are provided with support resources (including training, guidelines and examples) for assisting students.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Demand for and effectiveness of the technical support provided to students is monitored regularly.</b></p> <p><b>Feedback collected regularly from students regarding the clarity and effectiveness of the technical support provided.</b></p> <p><b>Feedback collected regularly from staff regarding the clarity and effectiveness of the technical support provided to students.</b></p> <p>Performance of student support facilities are regularly monitored.</p> <p>Compliance of e-learning technical support with defined student support service level agreements is regularly monitored.</p> <p>Compliance of e-learning technical support with institutional e-learning strategies and technology plans is regularly monitored.</p> <p>Financial costs and benefits of e-learning support facilities are regularly monitored. <i>See also L3(4) &amp; D1(4)</i></p> <p>Student e-learning support is subject to formal quality assurance reviews and re-prioritisation of resources and objectives.</p> <p>E-learning technical support provided to disabled students is regularly monitored.</p> <p>Overlap and duplication of student e-learning support is regularly assessed. <i>See also S2(4), S3(4) &amp; S4(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on the types and content of student requests for e-learning technical support guides the deployment and support of e-learning technologies.</b></p> <p><b>Information on the types and content of student requests for e-learning technical support guides the assessment and management of e-learning initiative risks.</b></p> <p>Information on the performance of e-learning support guides the allocation of resources for support.</p> <p>Information on when students access e-learning facilities guide the allocation of resources and hours of operation of support. <i>See also S4(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student e-learning technology use and support needs. <i>See also O6(5), O7(5) &amp; O8(5)</i></p> <p>Formal risk assessments of e-learning initiatives guide planning for technical support facilities.</p>	

## Process S2.

*Students are provided with library facilities 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	
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Students are provided with library facilities.</b></p> <p><b>Course documentation describes the available library facilities.</b></p> <p>Students are provided with information on how to access the full range of library facilities.</p> <p>Students are provided with lists of starting points for using library facilities rather than pre-defined and complete reading lists.</p>		
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Summaries of useful library resources are provided on a course or discipline basis.</b></p> <p><b>Library staff are involved in e-learning design and (re)development initiatives.</b></p> <p><b>E-learning design and (re)development plans are guided by the available library services and appropriately licensed resources.</b></p> <p><b>Students are provided with information describing the institutional distribution of responsibility for student support services.</b></p> <p>Students are provided with information on library facilities for e-learning prior to enrolment.</p> <p>Individual courses have a designated librarian assigned on a course or discipline basis.</p> <p>Students are provided with designated library staff contact information.</p> <p>Students are provided with a variety of mechanisms to access physical library resources.</p> <p>Students are provided with support resources (including training, guidelines and examples) on using library facilities.</p> <p>Students are provided with library facilities during the hours that they are engaging in e-learning activities.</p> <p>Library staff are involved in the (re)development of institutional e-learning strategies and policies.</p>	<p><i>See also L6(2)</i></p> <p><i>See also S1(2)</i></p> <p><i>See also S1(2) &amp; S4(2)</i></p> <p><i>See also L6(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Institutional policies require that students have access to a full range of library facilities when engaged in e-learning.</b></p> <p>Institutional standards define requirements for student library support that are explicitly linked to institutional e-learning strategies and technical plans.</p> <p>Course documentation templates are provided that describe the library facilities.</p> <p>Staff are provided with support resources (including training, guidelines and examples) on how to use library services to support student learning.</p>		
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Student use of library facilities is monitored regularly.</b></p> <p><b>Feedback collected regularly from students regarding the effectiveness of the library facilities.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of the library facilities.</b></p> <p>Library support provided to disabled students is regularly monitored.</p> <p>Compliance of library support with institutional e-learning strategies and technology plans is regularly monitored.</p> <p>Financial costs and benefits of library facilities are regularly monitored.</p> <p>Library support is subject to formal quality assurance reviews and re-prioritisation of resources and objectives.</p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed library services and support.</p> <p>Overlap and duplication of student e-learning support is regularly assessed.</p>	<p><i>See also S1(4), S3(4) &amp; S4(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>Information on the effectiveness of library facilities in supporting student learning guides e-learning strategic planning.</b></p> <p><b>Information on the effectiveness of library facilities in supporting student learning guides e-learning design and (re)development.</b></p> <p>Information on when students access library facilities guide the allocation of resources and hours of operation of library facilities.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student library use and support needs.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect the performance of library support facilities.</p>		

## Process S3.

*Student enquiries, questions and complaints are collected and managed formally*

### 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Students are provided with a mechanism for raising concerns or complaints.</p> <p>Teaching staff are provided with an opportunity to address e-learning student concerns and complaints.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Students are provided with a formally documented procedure for making complaints.</p> <p>Students are provided with documentation of the formal procedures used to resolve any concerns or complaints they raise. <i>See also S1(2)</i></p> <p>Students are provided with information on the timeframes for receiving responses to concerns and complaints.</p> <p>Records of students complaints and their resolution are retained in a designated repository.</p> <p>Facilities for collecting and resolving student concerns and complaints operate over the same hours as e-learning activities.</p> <p>Formal risk assessments of student complaints and mitigation planning are required by student communication planning procedures.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional policies define requirements and procedures for the handling of student complaints.</p> <p>Teaching and support staff are provided with support resources (including training, guidelines and examples) on handling student complaints.</p> <p>Institutional policies define requirements for the quality and type of feedback to be provided to students. <i>See also L5(3)</i></p> <p>Institutional policies for the handling of student complaints are aligned with e-learning strategies and technology plans.</p> <p>A single repository for collecting student concerns and complaints is provided</p> <p>Teaching staff role descriptions include information on staff responsibilities for handling student complaints.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on the type and resolution of student complaints and concerns is monitored regularly.</p> <p>Feedback collected regularly from students regarding the effectiveness of the collecting and resolution of student concerns and complaints.</p> <p>Feedback collected regularly from staff regarding the effectiveness of the collecting and resolution of student concerns and complaints.</p> <p>Financial costs and benefits of student complaint facilities are regularly monitored.</p> <p>Collection and resolution of student concerns and complaints is subject to formal quality assurance reviews and re-prioritisation of resources and objectives.</p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed student complaint facilities.</p> <p>Compliance of the collection and resolution of student concerns and complaints with institutional e-learning strategies and technology plans is regularly monitored.</p> <p>Overlap and duplication of student e-learning support is regularly assessed. <i>See also S1(4), S2(4) &amp; S4(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information from student concerns and complaints guides e-learning strategic planning.</p> <p>Information from student concerns and complaints guides the allocation of staff e-learning development and training resources.</p> <p>Information from student concerns and complaints guides the selection of new e-learning technologies.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect student complaints and support needs.</p>	

## Process S4.

*Students are provided with personal and learning support services 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Course documentation describes the available student personal and learning support services.</b> Institutional webpages describe the available student personal and learning support services.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>E-learning design and (re)development plans are guided by technology support costs to the organisation, staff and students.</b> <i>See also S1(2)</i>  <b>Students are provided with information describing the institutional distribution of responsibility for student support services.</b> <i>See also S1(2) &amp; S2(2)</i>  <b>Students are provided with information describing personal and learning support facilities prior to enrolment.</b> <i>See also S1(2)</i>  Students are provided with documentation of the formal procedures used to address their personal and learning support needs.  Records of students' personal and learning support requests and their resolution are retained in a designated repository.  Students are provided with documentation of the formal procedures to follow if responses to personal and learning support queries are unsatisfactory.  Students are provided with documentation 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.  Students are provided with information describing the institutional distribution of responsibility for student support services. <i>See also S1(2) &amp; S2(2)</i>  Formal risk assessments of student e-learning activities and mitigation planning are required by personal and learning support planning procedures.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional standards define requirements for student personal and learning support that are explicitly linked to institutional e-learning strategies.</b>  Support staff are provided with support resources (including training, guidelines and examples) for assisting students. <i>See also O6(3)</i>  Course documentation templates are provided that describe the personal and learning support facilities.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Student use of personal and learning support monitored regularly.</b>  <b>Feedback collected regularly from students regarding the clarity and utility of the personal and learning support provided.</b>  <b>Feedback collected regularly from staff regarding the clarity and utility of the personal and learning support provided to students.</b>  Performance of personal and learning support facilities is regularly monitored.  Personal and learning support provided to disabled students is regularly monitored.  Compliance of personal and learning support with institutional e-learning strategies and technology plans is regularly monitored.  Financial costs and benefits of personal and learning support facilities are regularly monitored.  Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed student personal and learning support facilities.  Overlap and duplication of student e-learning support is regularly assessed. <i>See also S1(4), S2(4) &amp; S3(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Information on the performance of personal and learning support services guides the resources allocated to support students.</b>  <b>Information on student requests for personal and learning support guides the selection and deployment of e-learning technologies.</b>  Information on when students access e-learning facilities guide the allocation of resources and hours of operation of support. <i>See also S1(5)</i>  Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student personal and learning support needs.</p>	

## Process S5.

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

### 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Teaching staff are provided with support resources (including training, guidelines and examples) on the pedagogical aspects of e-learning technologies.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on researching and reflecting upon their own practice with e-learning technologies and pedagogies.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on how to assist students in developing e-learning skills.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>E-learning design and (re)development procedures include a formal assessment of teaching staff e-learning skills.</p> <p>E-learning design and (re)development procedures include assistance for teaching staff in changing pedagogies.</p> <p>Teaching staff are recognised and rewarded for their engagement with innovative e-learning initiatives. <i>See also D1(2), E2(2) &amp; O9(2)</i></p> <p>E-Learning support is guided by a researched evidence base.</p> <p>Technical design and development support is formally scheduled during e-learning design and development. <i>See also D1(2) &amp; D2(2)</i></p> <p>E-learning support is provided during the hours teaching staff are engaged in e-learning activities.</p> <p>Formal risk assessments of staff e-learning skills and mitigation planning are required by e-learning design and (re)development procedures. <i>See also D1(2) &amp; D2(2)</i></p> <p>Teaching staff employment and promotion criteria address e-learning skills.</p> <p>Specialist staff support the use of e-learning design and (re)development procedures. <i>See also D1(2) &amp; D2(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Institutional standards are defined for the assessment of teaching staff e-learning skills.</p> <p>Pedagogical issues are formally addressed in e-learning design and (re)development procedures. <i>See also D1(3) &amp; D2(3)</i></p> <p>Support staff are provided with standards and guidelines covering technical and pedagogical aspects of e-learning design and (re)development. <i>See also D1(3) &amp; D2(3)</i></p> <p>Teaching staff are provided with project tools (including standard contracts and licenses, checklists and quality assurance procedures) for e-learning design and (re)development. <i>See also D1(3), D2(3), D3(3) &amp; D6(3)</i></p> <p>Allocation of support resources is guided by institutional e-learning strategies and technology plans. <i>See also S6(3)</i></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D3(3), D7(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>Staff technical support requirements are formally addressed in e-learning technology purchase procedures. <i>See also D1(3), D2(3) &amp; S6(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Teaching staff use of pedagogical support and assistance is regularly monitored. <i>See also D1(4) &amp; S6(4)</i></p> <p>Teaching staff capability to use e-learning technology and pedagogies effectively is regularly monitored. <i>See also S6(4)</i></p> <p>Feedback collected regularly from staff regarding the effectiveness of the pedagogical support and training provided.</p> <p>Feedback collected regularly from students regarding the effectiveness of teaching staff in using e-learning technologies and pedagogies.</p> <p>Compliance of e-learning support with institutional e-learning strategies and technology plans is regularly monitored.</p> <p>Financial costs and benefits of staff e-learning support facilities are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed staff pedagogical support.</p> <p>Overlap and duplication of e-learning support is regularly assessed. <i>See also D1(4), D2(4), S6(4), O1(4), O3(4) &amp; O5(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Information on the e-learning technology and pedagogy skills of teaching staff guides the resources allocated for support.</p> <p>Pedagogical support implications explicitly addressed when deploying e-learning technologies.</p> <p>E-learning technology deployment procedures formally address the resourcing of e-learning support. <i>See also D1(5) &amp; D3(5)</i></p> <p>Information on the effectiveness of design and development support guides the resourcing of e-learning support.</p> <p>Information on the effectiveness of design and development support guides the strategic and operational planning of e-learning. <i>See also D1(5) &amp; D3(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing staff e-learning technology use and support needs. <i>See also D1(5), D3(5) &amp; O4(5)</i></p>	

## Process S6.

*Teaching staff are provided with technical support in using digital information 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Teaching staff are provided with support resources (including training, guidelines and examples) on the use of digital information by students.</p> <p>Student use of digital information is supported in all courses.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>All student digital information is stored in a validated backup system. <i>See also D5(1) &amp; O4(2)</i></p> <p>Access to all student digital information is authenticated and authorised. <i>See also O4(2)</i></p> <p>E-learning design and (re)development procedures address the use of digital information by students.</p> <p>E-learning design and (re)development procedures include a formal assessment of teaching staff digital information skills.</p> <p>Formal risk assessments of the use of digital information by students and mitigation planning are required by e-learning design and (re)development procedures.</p> <p>Teaching staff are provided with plagiarism and collusion detection systems. <i>See also L6(2) &amp; L8(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Teaching staff are provided with resources (including training, guidelines and examples) on supporting the use of digital information by students, including intellectual property, plagiarism and assessment aspects.</p> <p>Formal procedures for e-learning design and (re)development explicitly include consideration of the use, protection and privacy of digital information by students.</p> <p>Staff technical support requirements are formally addressed in e-learning technology purchase procedures. <i>See also D1(3), D2(3) &amp; S5(3)</i></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D3(3), D7(3), S6(3), O1(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>Allocation of support resources is guided by institutional e-learning strategies and technology plans. <i>See also S5(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Teaching staff use of support resources for developing student digital information skills is monitored regularly.</p> <p>Feedback collected regularly from students regarding the effectiveness of the digital information skills support provided.</p> <p>Feedback collected regularly from staff regarding their effectiveness in supporting student digital information skills development.</p> <p>Teaching staff capability to use e-learning technology and pedagogies effectively is regularly monitored. <i>See also S5(4)</i></p> <p>Teaching staff use of pedagogical support and assistance is regularly monitored. <i>See also D1(4) &amp; S5(4)</i></p> <p>Financial costs and benefits of student digital information skills support facilities are regularly monitored.</p> <p>Digital information support facilities are subject to formal quality assurance reviews at key milestones.</p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed technical support.</p> <p>Overlap and duplication of e-learning support is regularly assessed. <i>See also D1(4), D2(4), S5(4), O1(4), O3(4) &amp; O5(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on teaching staff skills in supporting digital information use by students guides e-learning design and (re)development.</p> <p>Information on the effectiveness of digital information support guides the resourcing of support facilities.</p> <p>Information on the effectiveness of digital information support guides selection of new e-learning technologies.</p> <p>Information on the effectiveness of digital information support guides the strategic and operational planning of e-learning.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student digital information use and support needs.</p>	

## Process E1.

*Students are able to provide regular 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.



	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Summative feedback collected regularly from students regarding the quality and effectiveness of their e-learning experience.</p> <p>Formative feedback collected regularly from students regarding the quality and effectiveness of their e-learning experience.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Students are provided with information on how feedback information has been and will be used to modify and improve their e-learning experience.</p> <p>E-learning design and (re)development procedures include explicit evaluation phases assessing the quality and effectiveness of e-learning. <i>See also E2(2)</i></p> <p>E-learning design and (re)development procedures include opportunities for user testing by students.</p> <p>E-learning design and (re)development procedures include collection of student information prior to project implementation.</p> <p>Consistent evaluation procedures are used. <i>See also E2(2)</i></p> <p>A searchable repository of e-learning feedback information is provided. <i>See also E2(2) &amp; E3(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Institutional policies define requirements for student evaluations of the educational effectiveness of e-learning initiatives.</p> <p>Institutional policies define requirements for the quality and type of evaluation feedback to be provided to students.</p> <p>Expert support provided for evaluations of student feedback on the quality and effectiveness of e-learning initiatives.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on using evaluation and feedback information to improve student learning outcomes.</p> <p>Students are provided with support resources (including training, guidelines and examples) to assist them in making effective use of staff feedback in their learning. <i>See also L4(3), L5(3) &amp; L8(3)</i></p> <p>Institutional policies require that student e-learning evaluations are performed independently according to a standard timetable and defined procedures.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Evaluation results are reported regularly in a manner that allows for comparison of the educational effectiveness of e-learning initiatives. <i>See also E2(4) &amp; E3(4)</i></p> <p>Financial costs and benefits of student evaluations are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed evaluation procedures. <i>See also E2(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Information from student evaluations of e-learning guides which pedagogical and technological changes are sustained.</p> <p>Information from student evaluations of e-learning guides the allocation of resources for teaching staff support.</p> <p>All new e-learning technologies or pedagogies are subject to formal evaluation. <i>See also E2(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect student evaluations of e-learning.</p>	

## Process E2.

*Teaching staff are able to provide regular 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Summative feedback collected regularly from teaching staff regarding the quality and effectiveness of their e-learning experience.</b></p> <p><b>Formative feedback collected regularly from teaching staff regarding the quality and effectiveness of their e-learning experience.</b></p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Staff are provided with information on how feedback information has been and will be used to modify and improve their e-learning experience.</b></p> <p><b>E-learning design and (re)development procedures include explicit evaluation phases assessing the quality and effectiveness of e-learning.</b> <i>See also E1(2)</i></p> <p><b>E-learning design and (re)development procedures include opportunities for user testing by staff.</b></p> <p>Teaching staff are recognised and rewarded for their engagement with innovative e-learning initiatives. <i>See also D1(2), S5(2) &amp; O9(2)</i></p> <p>Consistent evaluation procedures are used. <i>See also E1(2)</i></p> <p>E-learning design and (re)development procedures include collection of staff information prior to project implementation.</p> <p>A searchable repository of e-learning feedback information is provided. <i>See also E1(2) &amp; E3(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional policies define requirements for staff evaluations of the educational effectiveness of e-learning initiatives.</b></p> <p><b>Expert support provided for evaluations of staff feedback on the quality and effectiveness of e-learning initiatives.</b></p> <p>Support staff are provided with support resources (including training, guidelines and examples) on using evaluation and feedback information to improve teaching staff support.</p> <p>Institutional policies require that staff e-learning evaluations are performed independently according to a standard timetable and defined procedures.</p> <p>Teaching staff are supported in researching and reflecting on their own practice and experiences of e-learning.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Evaluation results are reported regularly in a manner that allows for comparison of the educational effectiveness of e-learning initiatives.</b> <i>See also E1(4) &amp; E3(4)</i></p> <p>Financial costs and benefits of staff evaluations are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed evaluation procedures. <i>See also E1(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Information from staff evaluations of e-learning guides which pedagogical and technological changes are sustained.</b></p> <p><b>Information from staff evaluations of e-learning guides the allocation of resources for teaching staff support.</b></p> <p>All new e-learning technologies or pedagogies are subject to formal evaluation. <i>See also E1(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect staff evaluations of e-learning.</p>	

## Process E3.

*Regular reviews of the 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 institution 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Reviews of course e-learning materials are conducted regularly.</p> <p>Reviews of course e-learning teaching activities are conducted regularly.</p> <p>Reviews of student outcomes from courses are conducted regularly.</p> <p>Reviews of course e-learning assessment activities are conducted regularly.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Students and staff are provided with information on how reviews have been and will be used to modify and improve their e-learning experiences.</p> <p>Regular reviews are conducted formally as part of the normal procedures for delivering courses using e-learning technologies and pedagogies.</p> <p>E-learning design and (re)development procedures include formal plan for assessing the success of new technologies or pedagogies..</p> <p>A searchable repository of e-learning feedback information is provided. <i>See also E1(2) E2(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional standards are defined for the regular review of the e-learning aspects of courses.</p> <p>Staff are provided with support resources (including training, guidelines and examples) in the analysis and use of review and evaluation information.</p> <p>Institutional standards are defined for assessing new e-learning technologies and pedagogies.</p> <p>Institutional policies require that e-learning reviews are performed independently according to a standard timetable and defined procedures.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Reviews are reported regularly in a manner that allows for comparison of e-learning initiatives. <i>See also E1(4) &amp; E2(4)</i></p> <p>Information on the success or failure of e-learning initiatives is regularly monitored. <i>See also O1(4)</i></p> <p>Financial costs and benefits of formal reviews are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), O1(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed e-learning review procedures.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information from e-learning reviews guides e-learning strategic planning.</p> <p>Information on the success or failure of e-learning technologies guides the allocation of support and resources for technology use.</p> <p>Information from e-learning reviews guides e-learning initiative planning.</p> <p>Risk assessments of failed e-learning initiatives are formally reviewed to identify factors for inclusion in the risk analysis and mitigation plans of existing and future e-learning initiatives.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect e-learning review outcomes.</p>	

## Process O1.

*Formal criteria guide the allocation of 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 institution 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Resources for all e-learning initiatives are allocated according to formally defined criteria.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Resources for e-learning initiatives are allocated at designated times during the budget cycle.</p> <p>E-learning initiative plans formally link decisions with the institutional criteria used to allocate resources.</p> <p>Institutional e-learning resource allocation criteria include ongoing maintenance costs.</p> <p>Formal risk assessments of e-learning initiatives and mitigation planning are required by e-learning resource allocation procedures. <i>See also O5(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>E-learning initiative resource allocation criteria are explicitly linked to the institutional e-learning strategies and technology plans. <i>See also O9(1)</i></p> <p>Staff are provided with support resources (including training, guidelines and examples) on the development of e-learning proposals using the resource allocation criteria.</p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D3(3), D7(3), S5(3), S6(3), O3(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>E-learning resource allocation is coordinated throughout the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information on the success or failure of e-learning initiatives is regularly monitored.</p> <p>Feedback collected regularly from students regarding the impact of e-learning initiatives on their learning.</p> <p>Feedback collected regularly from staff regarding the impact of e-learning initiatives on student learning.</p> <p>Strategic impact of the e-learning resource allocation criteria is regularly monitored. <i>See also E3(4)</i></p> <p>Financial costs and benefits of e-learning resource allocation criteria are regularly monitored.</p> <p>E-learning initiatives are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O2(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>E-learning resource allocation decisions are regularly reported.</p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed resource allocation criteria. <i>See also D1(4), D2(4), S5(4), O3(4) &amp; O5(4)</i></p> <p>Overlap and duplication of e-learning support is regularly assessed.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information from pilot e-learning initiatives guides the allocation of support and resources for the use of piloted e-learning technologies and pedagogies.</p> <p>Information on the strategic impact of e-learning resource allocation criteria guides e-learning strategic planning.</p> <p>Successful e-learning projects and initiatives are documented as case studies linked to e-learning resource allocation criteria.</p> <p>Applications for e-learning resource allocation are analysed for reuse.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect e-learning initiative outcomes. <i>See also D6(5), O2(5), O3(5) &amp; O5(5)</i></p> <p>E-learning initiative resource allocation criteria reviewed as part of reviews of institutional e-learning strategies and technology plans.</p>	

## 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 assessment 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.



	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	E-learning technologies and pedagogies explicitly addressed in relevant institutional learning and teaching policies and strategies.	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Staff with experience in e-learning are formally involved in the (re)development of institutional learning and teaching strategies and policies. <i>See also O9(2)</i></p> <p>Students are formally involved in the (re)development of institutional strategies and policies involving e-learning. <i>See also O9(2)</i></p> <p>Inclusion of e-learning aspects in relevant institutional policies and strategies is formally endorsed by the institutional leadership.</p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O3(2), O5(2), O6(2), O7(2), O8(2) &amp; O9(2)</i></p> <p>Learning and teaching policy and strategy reviews are guided by the implications of e-learning.</p> <p>E-learning initiative development plans formally address policy and strategy implications.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional policies require that the implications of e-learning are included when (re)developing new and existing policies.</p> <p>Staff are provided with support resources (including training, guidelines and examples) on how to link e-learning initiative development plans with institutional e-learning strategic plans. <i>See also O5(3) &amp; O9(3)</i></p> <p>Staff are provided with support resources (including training, guidelines and examples) on how to address e-learning during policy and strategy development.</p> <p>Staff engaged in e-learning strategy and policy (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also O9(3)</i></p> <p>E-learning strategies and plans are coordinated throughout the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional learning and teaching strategies and policies are regularly and formally reviewed to ensure e-learning aspects are addressed.</p> <p>Feedback collected regularly from students regarding the effectiveness of the e-learning policies and strategies.</p> <p>Feedback collected regularly from staff regarding the effectiveness of the e-learning policies and strategies.</p> <p>Financial costs and benefits of learning and teaching policies and strategies are regularly monitored.</p> <p>E-learning initiatives are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O3(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed e-learning strategies and policies.</p> <p>Compliance with learning and teaching strategies and policies is regularly monitored.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on the outcomes of e-learning initiatives guides learning and teaching strategy and policy (re)development.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect e-learning initiative outcomes. <i>See also D6(5), O1(5), O3(5) &amp; O5(5)</i></p> <p>Institutional learning and teaching strategies and policies undergo a formal (re)assessment of risk when any significant e-learning technology failure occurs.</p>	

## Process O3.

*E-learning technology decisions are guided by an explicit plan*

### 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 institution 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional e-learning technology plans guide the adoption of technology during e-learning initiatives.</b></p> <p>Institutional e-learning technology plans describe the procedures for acquiring, deploying, supporting, maintaining and upgrading hardware and software for e-learning.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>E-learning design and (re)development activities formally link decisions regarding e-learning technologies and pedagogies with the institutional e-learning technology plans.</b></p> <p><b>Institutional e-learning technology plans have clearly defined and empirically measureable objectives and milestones.</b></p> <p><b>Institutional e-learning technology plans are formally endorsed and explicitly supported by the institutional leadership.</b></p> <p><b>E-learning initiative plans include risk assessment and mitigation plans linked to the institutional e-learning technology plans and associated risk assessments.</b></p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O2(2), O5(2), O6(2), O7(2), O8(2) &amp; O9(2)</i></p> <p>Teaching staff are formally involved in the development and review of institutional e-learning technology plans.</p> <p>Students are formally involved in the development and review of institutional e-learning technology plans.</p> <p>E-learning initiative plans address maintenance of e-learning technologies.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional policies require that all e-learning initiatives comply with institutional e-learning technology plans.</b></p> <p><b>Staff are provided with support resources (including training, guidelines and examples) on the use of e-learning technology plans as part of e-learning design and (re)development.</b></p> <p><b>Resources for staff e-learning development and support are allocated with reference to institutional e-learning technology plans.</b></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D3(3), D7(3), S5(3), S6(3), O1(3), O4(3), O5(3) &amp; O9(3)</i></p> <p>Formal risk assessment and mitigation strategies are included in institutional e-learning technology plans.</p> <p>E-learning technology plans are coordinated throughout the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Compliance with institutional e-learning technology plans during e-learning design and development activities is regularly monitored.</b></p> <p><b>Feedback collected regularly from staff regarding the effectiveness of institutional e-learning technology plans as tools for guiding the design and (re)development of courses and programmes.</b></p> <p>Financial costs and benefits of e-learning technology plans are regularly monitored.</p> <p>E-learning initiatives are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O4(4), O5(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed institutional e-learning technology plans.</p> <p>Overlap and duplication of e-learning support is regularly assessed. <i>See also D1(4), D2(4), S5(4), S6(4), O1(4) &amp; O5(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Information on compliance with institutional e-learning technology plans guides e-learning initiative support and resourcing.</b></p> <p><b>Institutional e-learning technology plans undergo a formal (re)assessment of risk when any significant e-learning technology failure occurs.</b></p> <p>Institutional e-learning technology plans undergo a formal re-evaluation as part of e-learning initiatives.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect e-learning initiative outcomes. <i>See also D6(5), O1(5), O2(5) &amp; O5(5)</i></p>	

## Process O4.

*Digital information use is guided by an institutional information integrity plan*

### 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Integrity and validity of digital information is regularly monitored.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>E-learning design and (re)development activities formally link decisions with institutional digital information integrity plans.                  All course digital information is stored in a validated backup system. <i>See also D5(1) &amp; S6(2)</i>                  Access to all course digital information is authenticated and authorised. <i>See also S6(2)</i>                  Institutional repositories provided for digital information.                  E-learning initiative plans address digital information support requirements.                  E-learning design and (re)development procedures address the integrity and validity of digital information.                  Institutional risk assessments and mitigation strategies address the risks associated with digital information use in e-learning initiatives.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Institutional digital information integrity plans are defined.                  Institutional support standards are defined for the use of digital information in e-learning design and (re)development.                  Institutional policies define how digital information is retained and accessed. <i>See also L6(3) &amp; D7(3)</i>                  Teaching staff are provided with resources (including training, guidelines and examples) on using of digital information.                  Teaching staff are provided with resources (including training, guidelines and examples) on intellectual property law and licences.                  Formal procedures for e-learning design and (re)development explicitly include consideration of the use, protection and privacy of digital information.                  Metadata templates and schemas are defined for use at a disciplinary and institutional level. <i>See also D7(3)</i>                  Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D3(3), D7(3), S5(3), S6(3), O1(3), O3(3), O5(3) &amp; O9(3)</i>                  Information integrity plans are coordinated throughout the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Compliance with institutional information integrity plans is regularly monitored.                  Feedback collected regularly from staff regarding the effectiveness of the institutional information integrity plan as a tool for guiding e-learning design and (re)development.                  Digital information strategies and plans are coordinated throughout the institution.                  Digital information support facilities are regularly monitored.                  Financial costs and benefits of institutional information integrity plans are regularly monitored.                  E-learning initiatives are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O5(4) &amp; O9(4)</i>                  Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed institutional information integrity plans.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Institutional information integrity plans undergo a formal (re)assessment of risk when any significant e-learning technology failure occurs.                  Institutional information integrity plans are formally re-evaluated when new e-learning initiatives are considered.                  Information on student and staff use of digital information guides institutional information integrity plan (re)development.                  Information on the integrity and validity of digital information guides resourcing for e-learning initiatives.                  Institutional risk assessments and mitigation strategies are regularly updated to reflect changing staff e-learning technology use and support needs. <i>See also D1(5), D3(5) &amp; S5(5)</i></p>	

## Process O5.

*E-learning initiatives are guided by explicit development plans*

### 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 institution 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	E-learning technology and pedagogy decisions are guided by an explicit e-learning development plan.	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Allocation of resources for e-learning design and (re)development is aligned with course and programme e-learning development plans.</p> <p>Teaching staff are formally involved in the creation and review of e-learning initiative development plans.</p> <p>Students are formally involved in the creation and review of e-learning initiative development plans.</p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O2(2), O3(2), O6(2), O7(2), O8(2) &amp; O9(2)</i></p> <p>E-learning initiative development plans are formally endorsed by the institutional leadership.</p> <p>Formal risk assessments of e-learning initiatives and mitigation planning are required by e-learning resource allocation procedures. <i>See also O1(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Institutional policy requires formal linkages between e-learning initiative plans and an overarching institutional plan. <i>See also O9(3)</i></p> <p>Staff are provided with support resources (including training, guidelines and examples) on how to link e-learning initiative development plans with institutional e-learning strategic plans. <i>See also O2(3) &amp; O9(3)</i></p> <p>Staff engaged in e-learning design and (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also L6(3), L7(3), D1(3), D2(3), D3(3), D7(3), S5(3), S6(3), O1(3), O3(3), O4(3) &amp; O9(3)</i></p> <p>E-learning initiative plans are coordinated throughout the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information on the success or failure of e-learning initiative development plans is regularly monitored.</p> <p>Feedback collected regularly from students regarding e-learning initiative development plans.</p> <p>Feedback collected regularly from staff regarding e-learning initiative development plans.</p> <p>Financial costs and benefits of e-learning development plans are regularly monitored.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4) &amp; O9(4)</i></p> <p>Risk assessments of e-learning initiative development plans undertaken regularly.</p> <p>Overlap and duplication of e-learning support is regularly assessed. <i>See also D1(4), D2(4), S5(4), S6(4), O1(4) &amp; O3(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>E-learning initiative plans are analysed for potential reuse.</p> <p>E-learning initiative plans are regularly reviewed across all courses and programmes using similar technology or pedagogies to ensure consistency and effectiveness.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect e-learning initiative outcomes. <i>See also D6(5), O1(5), O2(5) &amp; O3(5)</i></p> <p>E-learning initiative development plans guide resourcing for e-learning design and (re)development.</p> <p>E-learning initiative development plans are formally re-evaluated when significant e-learning technology failures occur.</p>	

## Process O6.

*Students are provided with information on e-learning technologies 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.



	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Promotional materials available to students prior to enrolment list e-learning instructions and requirements.</p> <p>Courses include opportunities for students to practice with e-learning technologies and pedagogies. <i>See also L3(1) &amp; O7(1)</i></p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Course documentation describes the e-learning technologies used.</p> <p>E-learning technology practice sessions or tutorials organised and provided to all students as part of the course. <i>See also L3(1) &amp; O7(2)</i></p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O2(2), O3(2), O5(2), O7(2), O8(2) &amp; O9(2)</i></p> <p>Learning objectives guide e-learning design and (re)development decisions regarding technology and pedagogy. <i>See also L1(2), D3(2) &amp; O7(2)</i></p> <p>Institutional e-learning strategies address student access to e-learning technologies. <i>See also O7(2)</i></p> <p>Institutional risk assessments and mitigation strategies address the risks associated with communicating e-learning information to students. <i>See also O7(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Standards for communicating e-learning technology requirements are defined for use in all course documentation.</p> <p>Teaching staff are provided with course documentation templates and examples explaining to students how to make effective use of e-learning technologies. <i>See also O7(3)</i></p> <p>Institutional policies require students be provided opportunities to prepare and practice with e-learning technologies. <i>See also O7(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on how to assist students in developing e-learning skills. <i>See also S4(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Students' abilities to comply with e-learning technology and media expectations are regularly monitored. <i>See also O7(4)</i></p> <p>Feedback collected regularly from students regarding problems with technology and media that are not addressed in the provided course descriptions.</p> <p>Feedback collected regularly from staff regarding problems with student use of technology and media that are not addressed in the provided course descriptions.</p> <p>Compliance with policies requiring students be provided opportunities to prepare and practice with e-learning technologies is regularly monitored. <i>See also O7(4)</i></p> <p>Financial costs and benefits to students of e-learning technologies and pedagogies are regularly monitored. <i>See also O7(4)</i></p> <p>Communication procedures are subject to formal quality assurance reviews. <i>See also O7(4) &amp; O8(4)</i></p> <p>Risk assessments of e-learning communication procedures undertaken regularly to identify requirements for new or changed procedures.</p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on the effectiveness of institutional standards for providing students with technology and media expectations guides the (re)development of those standards.</p> <p>Information on student preparedness for e-learning guides the allocation of support resources for e-learning initiatives. <i>See also O7(5)</i></p> <p>Student and staff communication plans incorporated into any new e-learning technology deployment. <i>See also O7(5)</i></p> <p>Information on student preparedness for e-learning guides the allocation of support resources. <i>See also O7(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student e-learning technology use and support needs. <i>See also S1(5), O7(5) &amp; O8(5)</i></p>	

## Process O7.

*Students are provided with information on e-learning pedagogies 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
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Promotional materials available to students prior to enrolment describe e-learning pedagogies.</p> <p>Activities requiring the use of particular media and technologies clearly link the requirements with the stated learning outcomes of the course and activity. <i>See also L1(1), L8(1) &amp; D3(2)</i></p> <p>Courses include opportunities for students to practice with e-learning technologies and pedagogies. <i>See also L3(1) &amp; O6(1)</i></p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Course documentation describes the e-learning pedagogies used. <i>See also L7(2)</i></p> <p>Learning objectives guide e-learning design and (re)development decisions regarding technology and pedagogy. <i>See also L1(2), D3(2) &amp; O6(2)</i></p> <p>E-learning skills practice sessions or tutorials organised and provided to all students as part of the course. <i>See also L3(1) &amp; O6(2)</i></p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O2(2), O3(2), O5(2), O6(2), O8(2) &amp; O9(2)</i></p> <p>Institutional risk assessments and mitigation strategies address the risks associated with communicating e-learning information to students. <i>See also O6(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Standards for communicating the pedagogical rationale for e-learning technology requirements are defined for use in all course documentation.</p> <p>Teaching staff are provided with course documentation templates and examples explaining to students how to make effective use of e-learning technologies. <i>See also O6(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on supporting student e-learning skill acquisition.</p> <p>Institutional policies require students be provided opportunities to prepare and practice with e-learning technologies. <i>See also O6(3)</i></p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Students' compliance with the pedagogical expectations arising from e-learning is regularly monitored.</p> <p>Feedback collected regularly from students regarding the clarity and utility of the information provided.</p> <p>Feedback collected regularly from staff regarding the clarity and utility of the information provided.</p> <p>Compliance with policies requiring students be provided opportunities to prepare and practice with e-learning technologies is regularly monitored. <i>See also O6(4)</i></p> <p>Students' abilities to comply with e-learning technology and pedagogy expectations are regularly monitored. <i>See also O6(4)</i></p> <p>Financial costs and benefits to students of e-learning technologies and pedagogies are regularly monitored. <i>See also O6(4)</i></p> <p>Communication procedures are subject to formal quality assurance reviews. <i>See also O6(4) &amp; O8(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed communication procedures. <i>See also O8(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on student preparedness for e-learning guides allocation of support resources for e-learning initiatives. <i>See also O6(5)</i></p> <p>Information on student preparedness for e-learning guides the allocation of support resources. <i>See also O6(5)</i></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student e-learning technology use and support needs. <i>See also S1(5), O6(5) &amp; O8(5)</i></p> <p>Student and staff communication plans incorporated into any new e-learning technology deployment. <i>See also O6(5)</i></p>	

## Process O8.

*Students are provided with administration information 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Promotional materials available to students prior to enrolment list administrative requirements.	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Course documentation provides the administrative requirements of the course and institution.</p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O2(2), O3(2), O5(2), O6(2), O7(2) &amp; O9(2)</i></p> <p>Institutional risk assessments and mitigation strategies address the risks associated with communicating administrative information to students.</p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Standards for communicating the administrative requirements of the course and institution are defined for use in all course documentation.</p> <p>Staff are provided with support resources (including training, guidelines and examples) in supporting student compliance with administrative requirements.</p> <p>Teaching staff are provided with course documentation templates and examples explaining administrative requirements.</p> <p>Plans for informing students of the administrative requirements, associated policies and strategies are coordinated across the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Students' compliance with the administrative requirements of the course and institution is regularly monitored.</p> <p>Feedback collected from students on the clarity and utility of the supplied administrative information.</p> <p>Feedback collected from staff on the clarity and utility of the supplied administrative information.</p> <p>Compliance with policies requiring students be provided with administrative requirements is regularly monitored.</p> <p>Communication procedures are subject to formal quality assurance reviews. <i>See also O6(4) &amp; O7(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed communication procedures. <i>See also O7(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Information from student feedback guides allocation of resources for administrative support services.</p> <p>Student and staff communication plans incorporated into any new administration procedures.</p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing student e-learning technology use and support needs. <i>See also S1(5), O6(5) &amp; O7(5)</i></p>	

## Process O9.

*E-learning initiatives are guided by institutional strategies and operational plans*

### 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 institution 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.

	Assessment	Practices	Notes
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>E-learning initiative resource allocation is explicitly linked to the institutional e-learning strategies and technology plans.</b> <i>See also O1(3)</i></p> <p><b>Strategic impact and contribution of e-learning technologies and projects is evident in institutional governance activities.</b></p> <p>Institutional e-learning strategies address academic, staffing, student and financial implications of e-learning.</p> <p>E-learning strategies are formally endorsed by the institutional leadership.</p>	
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Staff with experience in e-learning are formally involved in the (re)development of institutional learning and teaching strategies and policies.</b> <i>See also O2(2)</i></p> <p><b>Staff are recognised and rewarded for their engagement with innovative e-learning initiatives.</b> <i>See also D1(2), S5(2) &amp; E2(2)</i></p> <p><b>Students are formally involved in the (re)development of institutional strategies and policies involving e-learning.</b> <i>See also O2(2)</i></p> <p><b>Support for e-learning projects and initiatives is formally linked to strategic and operational outcomes.</b></p> <p>Service level agreements used to define support and performance requirements for e-learning are formally linked to institutional e-learning strategies.</p> <p>Risk assessments undertaken as part of institutional strategic planning address e-learning.</p> <p>Institutional e-learning strategies have empirically measurable objectives and milestones.</p> <p>E-learning initiative development plans formally link decisions with the institutional e-learning strategies and associated operational plans. <i>See also O2(2), O3(2), O5(2), O6(2), O7(2) &amp; O8(2)</i></p>	
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Institutional policy requires formal linkages between e-learning initiative plans and an overarching institutional plan.</b> <i>See also O5(3)</i></p> <p><b>Staff are provided with support resources (including training, guidelines and examples) on how to link e-learning initiative development plans with institutional e-learning strategic plans.</b> <i>See also O2(3) &amp; O5(3)</i></p> <p>Institutional strategic planning activities address e-learning.</p> <p>Staff engaged in e-learning strategy and policy (re)development are provided with a researched evidence base of e-learning initiatives. <i>See also O2(3)</i></p> <p>Business plans, associated policies, strategies and service level agreements are coordinated across the institution.</p>	
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Success or failure of e-learning initiatives in supporting the achievement of strategy and business goals is regularly monitored.</b></p> <p><b>Feedback collected regularly from students regarding the strategic and operational e-learning goals of the institution.</b></p> <p><b>Feedback collected regularly from staff regarding the strategic and operational e-learning goals of the institution.</b></p> <p><b>Financial costs and benefits of e-learning projects and initiatives regularly monitored.</b></p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L1(4), L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4) &amp; O5(4)</i></p> <p>Risk assessments of e-learning initiatives undertaken regularly to identify requirements for new or changed governance and management mechanisms.</p> <p>Overlap and duplication of e-learning support is regularly assessed. <i>See also D1(4), D2(4), S5(4), S6(4), O1(4), O3(4) &amp; O5(4)</i></p>	
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>Information on the outcomes of e-learning initiatives guides reuse of e-learning strategic planning and management documents.</b></p> <p><b>Information on the outcomes of e-learning initiatives guides regular (re)assessment of the effectiveness of governance and management mechanisms.</b></p> <p>Institutional risk assessments and mitigation strategies are regularly updated to reflect changing e-learning strategies and plans.</p>	

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