ACODE benchmarks for e-learning in universities and guidelines for use

We encourage you to use these benchmarks and provide us with feedback. In any report please refer to them as the 'ACODE benchmarks for e-learning in universities'.

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1. Overview

"Benchmarking is a business excellence tool for finding, adapting and implementing outstanding practices in order to achieve superior performance. Benchmarking comprises measurement (the what) and practices (the how). And it tells us how well we are performing, defines how good we need to be (a practical vision), how to get there (a road map) and it needs to link to our mission, vision and values".

Anton Benc, Business Excellence Australia (2003)

Benc identifies the key elements of a benchmarking exercise. Further background about benchmarking can be found in Attachment 1. The ACODE benchmarks have been developed for the use of technology to support learning and teaching (e-learning is used for convenience while recognizing that some institutions refer to their practice with terms such as flexible learning). The purpose of benchmarking, and these benchmarks, is to support continuous quality improvement in e-learning. The approach reflects an enterprise perspective, integrating the key issue of pedagogy with institutional dimensions such as planning, staff development and infrastructure provision. The benchmarks have been developed for use at the enterprise level or by the organisational areas responsible for the provision of leadership and services in this area.

Each benchmark area is discrete; for example, staff support for the use of technology in learning and teaching, and can be used alone or in combination with others. Benchmarks can be used for self assessment purposes (in one or several areas), or as part of a collaborative, comparative exercise. Because benchmarks might be used individually there is some duplication across the benchmarking topics. It is expected that any benchmarking exercise would take place over a period of years and in any given year no more than two to three would be addressed, the areas selected reflecting institutional priorities for quality improvement.

The benchmarks were developed as part of an ACODE funded project, initiated by Christine Goodacre and Angela Bridgland. They were developed collaboratively by representatives of a number of universities [1] and have been independently reviewed by Professor Paul Bacsich, a UK consultant specializing in benchmarking, costing, and historical aspects of e-learning.

The benchmarks cover the following eight topic areas.
- o   Institution policy and governance for technology supported learning and teaching;
- o   Planning for, and quality improvement of the integration of technologies for learning and teaching;
- o   Information technology infrastructure to support learning and teaching;
- o   Pedagogical application of information and communication technology;
- o   Professional/staff development for the effective use of technologies for learning and teaching;
- o   Staff support for the use of technologies for learning and teaching;
- o   Student training for the effective use of technologies for learning; and
- o   Student support for the use of technologies for learning.

Each includes a Scoping Statement, a Good Practice Statement and a summary list of general Performance Indicators (PIs). Institutions can customise the benchmarks by replacing or adding to these Local Performance Indicators (LPIs).

Each Performance Indicator then comprises Performance Measures. Each measure is rated on a 5 point scale (where level 5 indicates good practice). There are five statements that represent progress toward good practice (as represented by an indicator), with some represented as a matrix. Service areas/ or units within universities can complete a self-assessment of current practice using these indicators, noting that it is not necessary to aspire to best practice on all.

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[1] Participating universities were Edith Cowan University, Flinders University, La Trobe University, Massey University, the universities of Melbourne, Queensland, Southern Queensland and Tasmania and the Royal Melbourne Institute of Technology.

This set of guidelines is designed to assist you complete these benchmarks and comprises:

- o An introduction to the benchmarks and a step-by-step guide for using them
- o Context and background information on benchmarking (Attachment 1).
- o A complete set of the benchmarks (Attachment 2).
- o Master Templates for use at the various stages of the process (Attachment 3)
- o Case study based on the use of benchmarks 1 and 5 by IRUA universities [2] (Attachment 4)

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[2] Flinders University, Griffith University, La Trobe University, Macquarie University, Murdoch University, University of Newcastle

2. Purpose and structure of the ACODE benchmarks for e-learning in universities

Why undertake a benchmarking exercise

The ACODE benchmarks are designed to be used for continuous improvement and quality assurance purposes. Their focus is e-learning in universities, an emerging area and one that is mission critical for many universities. Use of the benchmarks can provide a basis for research for improving practice, resulting in a better understanding of operational systems and processes and contributing to accountability requirements. Use of the benchmarks can also provide a tool for learning and can also be helpful in breaking down beliefs that "we are different".

Benefits for institutions using the ACODE benchmarks for e-learning might include the following.

- o   Identification of strengths and weaknesses - for planning and priority setting;
- o   An improved understanding of strategic and operational requirements;
- o   A framework for quality assurance purposes;
- o   Recognition of areas of achievement;
- o   Generation of ideas and a reinvigoration of practice,; for example, the development of strategies for improvement in areas of need;
- o   Collaboration is facilitated - across areas within the institution and with partners; and
- o   Communities of practice can develop, provide opportunities for staff professional development, project work, staff exchanges and secondments.

Structure of the benchmarks

Each benchmark has the following format:
    Scoping statement
    Good Practice Statement
    Performance Indicators
    Performance Measures - on a 5 point scale

Scoping statement
This describes what is considered in this benchmark, and sometimes what is out of scope. An example (Figure 1) from benchmark 3 (see Attachment 2) illustrates the purpose of the scoping statement, providing a detailed explanation of what is addressed and what is not. This reduces the potential for ambiguity and confusion.

Figure 1 – Scoping statement

'**Benchmark 3. Information technology infrastructure to support learning and teaching**

Scoping Statement: Information technology (IT) infrastructure describes a range of information and communication technologies that are used to support learning and teaching. This can include the use of: productivity software; learning management systems; library systems; the World Wide Web; mobile technologies. It also includes hardware (computers, telecommunications and ancillary equipment) and networks, both internal (LANS and WANS) and external (eg AARNet) which are used for the purposes of learning and teaching. These technologies support learning on and off campus.

The topic can also include audio visual equipment*. Also included is support and training in the use of the technology by students and staff, individually and in groups, both on and off campus, noting that these issues are dealt with in more detail in Topics 5-8.

Decisions about the selection of IT infrastructure for learning should refer to directional/ policy statement(s) about the learning and teaching environment of an institution (for example distance education, or blended approaches). Once a technology is selected it is important that an institution has robust and accepted processes for trialling and rolling out a new technology, that involves all key stakeholders.

* In order to keep the exercise manageable, it is recommended that the focus be on either infrastructure that is part of the IP network or not (for example audio-visual infrastructure).

Out of scope
The pedagogical issues relating to the use of infrastructure is the domain of other benchmarks.'

Good Practice Statement

This statement indicates what practice would look like if it is being done well, noting that this level of practice is achievable. An example from benchmark 3 is provided in Figure 2.

Figure 2 – Good practice statement

'Technical infrastructure is aligned with institutional learning goals and the technologies are resourced, support staff are trained and the infrastructure is implemented, maintained, administered and supported efficiently and effectively. '

Performance indicators

These identify the key performance areas that would indicate realisation of the good practice statement. There is some duplication of performance indicators across the benchmarks; for example, in the area of resourcing, in support of the use of one or several benchmarks in a particular benchmarking exercise. Figure 3 provides an example from benchmark 3.

Figure 3 – Performance indicators, benchmark 3

1.   Evaluation processes are in place to generate data to support decision making.
2.   Evaluation processes are comprehensive.
3.   Responsibilities and processes for maintenance and administration are effective and efficient.
4.   Responsibilities and processes for support and training are effective and efficient.
5.   Project management processes are in place, responsibilities defined and processes applied.
6.   Resources are allocated for maintenance and upgrades of existing equipment.
7.   Implementation is well planned.
8.   Implementation is resourced.
9.   Professional development occurs for staff managing infrastructure (including new and emerging technologies).

Performance measures

Statements, or a matrix in the case of an indicator with more than one component, represent progress toward good practice (as represented by an indicator). A five point scale is used and these are used for self-assessment and comparison purposes. Examples of the two types of measure are provided in Figure 4, from benchmark 5. Level 5 represents best practice and is achievable. A summary scale should be completed and a rationale provided for placement on the scale, with evidence supporting that placement. Evidence might comprise planning documents, report etc.

Figure 4 – Performance measures

(Level 5 indicates good practice)

Performance Indicator 1 – 'All of the organisation's obligations to learning and teaching technologies are clearly stated in its strategies, policies and practice.'

Level	Obligations Covered	Clarity	Communication
1	none	none	none
2	limited	minimal	limited
3	moderate	partial	moderate
4	extensive	substantial	substantial
5	full	complete	full

HOW DO YOU RATE?   1_____2_____3_____4_____5

Performance Indicator 4 – 'Educational and technical expertise is available to develop and support quality programs and resources which address staff needs, including those with special needs.'

(Level 5 indicates good practice)

1.   No expertise
2.   Limited expertise
3.   Moderate expertise
4.   Considerable expertise
5.   Comprehensive expertise

HOW DO YOU RATE?   1_____2_____3_____4_____5

3.   Using the benchmarks: step-by-step guidelines

Benchmarking e-learning is not a trivial undertaking and would normally be considered as part of an enterprise commitment to using benchmarking for quality improvement purposes. It requires planning and resources if outcomes are to be fully realized and the commitment of staff involved is to be assured.

One, several or all benchmarks could be used in a benchmarking exercise. In recognition of this there is some duplication of performance indicators across the benchmarks. The benchmarks can also be used within an institution, for self assessment purposes only, or they might be used with others to develop comparative data for the purpose of identifying improvement strategies based on the practice of colleagues. The focus of the benchmarking exercise might be the institutional level or that of an organizational unit such as a faculty or teaching and learning unit.

A guide is provided here for using the benchmarks.

1.   Commitment to benchmarking e-learning at the level of the institution and organisational unit.
   1.1. Secure commitment for the exercise. An discussion and commitment to benchmarking should occur, reflected in an allocation of resources for the exercise. This commitment might also be reflected in planning and performance management documents.
   1.2. Senior staff should be selected to participate in the exercise: those with an institutional perspective and experience in the development of policy, strategy and quality assurance. Refer here to the section below on tips for developing a benchmarking team (Section 4).
   1.3. A preliminary discussion with relevant colleagues about institutional priorities is useful at this stage so that priority areas for improvement can be identified.

2.   Self assessment for chosen benchmarks using template 1 (Attachment 3).
   2.1. This process would typically include consultation about performance with other key stakeholders. A preliminary self-assessment of practice should be conducted against the performance indicators using the five point scale in the performance measures.

    2.2. In the "Rationale" section, a short statement justifying the choice of ranking should be included. *This section plays an important role in the peer review.*

    2.3. The "Evidence" section may contain links, excerpts, etc. that support the rating.

It not partnering with other institutions it is possible to move to steps 6, 10 – 11.

3. Share complete assessments with the benchmarking group (in a confidential arrangement if required). This should be complemented with an overview of the place of e-learning within the institution to provide context for partners. The benchmarking group should be selected for commonalities; for example membership of a grouping of universities (eg Group of Eight GO8, IRUA, the Russell Group), a similar context or mission (eg multi-campus, high engagement in teaching offshore.

4. Develop a summary of institutional assessments using the comparative matrix template (2) (Attachment 3).

5. Peer review assessments. This needs to be handled sensitively and should assist partners to moderate self assessments. This might be managed by sharing detailed self assessments with members, feeding back comments on ratings based on experience and the placement of others for the particular indicator. Feedback can be provided to the group where there is a level of trust to support this. The facilitator plays an important role in this part of the exercise and at times participants will offer to amend their self assessment as a result of discussion.

6. Identify priority areas for improvement, again with reference to institutional colleagues

7. Select partners for improvement purposes with reference to those who have performed well against those indicators.

8. Share information via email, document sharing, teleconferences, and perhaps site visits.

9. Develop strategies for improvement based on the partnering process.

10. Prepare action plans for self improvement using template 3 (Attachment 3). A sample action plan is provided below in Figure 5.

11. Report back to your institution and the larger group about outcomes, having agreed the level of detail to be documented in the report. It is recommended that six monthly and annual reports are made against action plans. Template 4 (Attachment 3) provides a guide for making individual report summaries to the group.

Note: Steps 3-5 are most usefully completed through a face-to-face meeting facilitated by an independent person.

Figure 5 - Sample partner action plan using benchmark 5 (staff development)

PARTNER	PI	GOAL	STRATEGIES
University 1	6	To define strategies and approaches for the provision of more flexible training and professional development for e-Learning at University 1; and more specifically, for the mainstream adoption of our Learning Management System (LMS).	• Work with other units, ITS and Faculty representatives to actualise outcomes above. • Strengthen our faculty presence. • Expand the specific LMS training role of the e-Learning Team to incorporate academic development on online learning.
University 2	2	To establish strategies and approaches to better identify organisational and individual requirements for staff development in the use of e-learning, and to view other instruments for assessing satisfaction with PD, so as to provide more organisationally and individually effective staff PD.	• Develop process for obtaining estimates of training requirements for professional development, based on estimates of e-learning development activity. • Develop instrument to assess individual staff capability and needs.
University 3	4	The overall goal was to seek to improve practice as a result of partnering with institutions that have encountered similar issues by sharing strategies and contextualising them for use in our institution.	Where applicable, a mechanism is in place for the coordination of staff development programs with other service units.
University 4	3	To identify strategies for overcoming the problems experienced by Unit when the demand for educational and technical expertise exceeds supply.	To do a detailed comparison of the ways in which partner units are resourced to satisfy Performance Indicator 3. if it is found that the Unit is under-resourced in comparison with similar units within the partner university then a submission will be prepared to redress the differences.

4.   General tips for maximising outcomes

From the work to date in developing and using these benchmarks the following additional guidelines are provided.

Confirming the process

Before commencing the exercise it is important to be clear about objectives and outcomes sought. It is also important to agree on the process and responsibilities; for example, will participants in the benchmarking exercise also be responsible for implementation and disseminating outcomes or will these responsibilities be divided?

Choosing the benchmarking team

Members of the team will need to be able to do the following.

- o   Relate the exercise to the broader objectives of the parent institution;
- o   Understand specific services or processes being benchmarked;
- o   Document and analyse processes;
- o   Assess current performance against indicators;
- o   Liaise and communicate about the exercise; and
- o   Ensure ownership of the process.

Follow upon

Staff with responsibility for the benchmark area will need to implement outcomes of the exercise. These might be stakeholders consulted as part of the exercise but they might not be on the institutional benchmarking team. Reports on the exercise will also need to be developed and disseminated.

Common pitfalls

From our experience and the literature on benchmarking the following issues might prejudice the benchmarking exercise. Most of these are addressed in Section 3 but it is useful to reflect on this list as the process progresses.

- o   The benchmarking group might not be the most appropriate for the purpose of the exercise. It is important to share information with the group at a very early stage, about objectives and institutional profiles, to ensure an appropriate group has been established.
- o   The benchmarking exercise does not relate to other initiatives at the institutional level. Commitment and support can be difficult to achieve in this circumstance.
- o   Lack of sponsorship from senior management and a disengaged process owner.
- o   Institutional processes are not documented, thus making it difficult to share good practice.
- o   Overemphasizing measures. The five point scale (refer to figure 4 for an example) is a guide for summary purposes and should not be used without reference to the information that is provided with it in the self assessment.
- o   Tackling too much – heed advice about limiting exercises to two-three benchmarks
- o   Not accepting findings. This relates to institutional support and sponsorship for the exercise.
- o   Assuming a site visit is needed. This might not be necessary - policy and strategy documentation commonly provides the most useful information for developing strategies.
- o   Time and resources are overlooked.

Before you commence a benchmarking exercise it is recommended that you read Attachment 1 for further context about benchmarking, particularly if this area is new to you.

Attachment 1   Benchmarking in higher education

Benchmarking is used as a part of the process of quality assurance, for the purpose of continuous improvement. Fielden (1997: 1) defines it as 'a means of comparing one's performance with ones' peers.' This involves the systematic collection of information about performance, over time, and comparison of data with that of past performance.

It includes a self assessment against internal and external reference points, often in collaboration with select partners. The purpose of benchmarking exercises is to improve the performance of the area or service unit being benchmarked via internal and external points of reference. Benchmarking contributes to accountability, provides a tool for learning, provides a basis for research for improving practice, allows for better understanding of operational systems and processes, and energises the need for change. Perhaps most important of all, however, is that benchmarking helps to establish priorities for change and resource allocation and it contributes to goal setting.

Jackson and Lund (2000:6-7) identify the following features of benchmarking activity:
  o Implicit or explicit. The former is a by-product of other information gathering exercises)
  o Independent or collaborative, the latter being most common
  o Focussed on the whole process or organisation (vertical benchmarking) or part of a process as it manifests itself across different functional units (horizontal benchmarking)
  o Focussed on inputs, process or outputs, or a combination
  o Based on quantitative or qualitative methods.

Benchmarking as a tool for learning and improvement in higher education

Benchmarking first became popular in the early 1990s along with an increased interest in quality assurance.   This coincided with the work of the Committee for Quality Assurance in Higher Education (CQAHE) (established in 1991) and more recently the Australian Universities Quality Agency (AUQA). The Commonwealth Government department responsible for higher education, DEST and its antecedents, have an interest in evaluating and improving performance and they have refined performance indicators for biennial and annual performance reports for publicly funded universities. In Australia, the Australian University Quality Agency (AUQA) has also identified benchmarking as an important strategy for quality assurance purposes.

Other earlier developments included the NACUBO (National Association of College and University Business Officers) group, which began in the early 1990s, taking statistical and financial approach to benchmarking. While there was a lot of initial interest in participating in this project, interest fell away because of the amount of resource required within institutions. Another significant initiative was that of the CHEMS group, begun in 1994 as a Commonwealth benchmarking club, using the Baldridge technique. The paper by Fielden (1997) provides a useful summary of these initiatives.

It is only at the turn of the 21st century that the use of benchmarking as a tool in continuous improvement has been used more formally in higher education and the literature on it blossomed. Use of frameworks such as that developed by the Business Excellence Australia, or joining a benchmarking club such as CHEMS, have been seen as useful ways of identifying strengths and weaknesses, improving performance and demonstrating how the unit/department adds value to the organisation.

Where to find industry standards and frameworks

In the university sector there are two key references. One is the McKinnon Walker, Davis (2000) manual; the other is the approach offered by the Business Excellence Framework.

Overview of the Business Excellence Framework (Business Excellence Australia
www.businessexcellenceaustralia.com.au)

As can be seen from the model above, the Framework is an integrated leadership and management system that describes elements essential to organisational excellence. It provides a useful quality assurance framework in which to use benchmarking and is based on widely accepted principles of leadership and management. It is designed to:

- provide managers with a guide to improvement and success;
- enable employees to better understand operational systems and processes;
- benchmark where you stand in terms of your sector and competitors; and
- develop an understanding of the concepts and principles behind the Business Excellence Philosophy.

The model represents a system approach to management – each of the 7 categories is integrally linked. The 7 categories create a specific structure or context in which organisations can review, question and analyse their leadership and management system. The arrangement of the categories from left to right in the model diagram also implies overall relationships between the categories. If change is required in any single category, then work is required in the other 6 to achieve the desired results. Each category comprises a number of specific items, for example, in the category, Knowledge and Information, there are 3 items: collection and interpretation of data and information; integration and use of knowledge in decision-making and creation and management of knowledge.

An organisation's performance against items in each category can be assessed on four dimensions: Approach, Deployment, Results and Improvement known collectively as ADRI. (In earlier versions of the model this was known as Plan, Do, Check, Act.) The Framework reflects the interconnected nature of all parts of the management system of an organisation. It provides both a design and a diagnostic tool. The Framework can be used to assess and improve any aspect of your unit's systems, including service delivery and product quality. Results of self-assessment can inform strategic and operational planning processes with a view to improving performance.

The Framework links to a number of other systems including ISO 9000, Investors in People, Balanced Scorecard, Business Process Re-engineering and Organisational Performance Measurement. The Framework is updated regularly to reflect current management thinking and practice.

Integrating benchmarking into the planning process

These standards and frameworks are useful starting points but in most cases they do not provide a template which can be adopted for local benchmarking practice. An investment in time will be

required to develop a process for identifying just what it is you want to benchmark – processes or performance for instance – identifying priorities, performance indicators, methods for self assessment, identification of partners and timelines. The literature provides input for all parts of this process but the individual Teaching and Learning unit will need to devote time and commitment to an analysis of purpose, development of process and conduct of the benchmarking exercise. This is not a trivial undertaking and it must be incorporated in the planning process. It will, therefore, require a strong organisational commitment to the process and to implementing changes which might be recommended as an outcome.

Critical to the investment in benchmarking is the ability to decide what to benchmark and then how to go about it. First, it is important to be working within an environment where factors critical to your success are clearly understood and regularly reviewed. This is fairly common practice in universities these days.

Creating a benchmarking team

The first, and obvious step, is to establish a benchmarking team or group within the individual organisation. This will need to be a small group who are familiar with each other and have responsibility for at least some of the areas to be benchmarked. Members of the team will need to be able to relate the exercise to the broader objectives of the unit/department and to those of the parent institution, document and analyse processes, identify key performance or performance indicators, assess current performance against them, include others in their area as appropriate, liaise and communicate about the benchmarking exercise to ensure ownership of the process and its outcomes and implement outcomes. Because of the importance of senior management commitment, a sponsor from management is also advised.

Defining the scope of the project

It is important to remember the example of some past ambitious approaches and ensure that the scale of effort is sustainable (ref. the NACUBO experience). Be realistic. Beware of collecting too much information – remain focussed on collecting data about issues and measure which determine performance and avoid collecting information for the sake of it, or because you can! It is a dynamic process so a commitment over time is important if it is to contribute to the improvement of performance.

With this in mind it is important to decide whether the benchmarking exercise will be conducted as a self-assessment exercise, referring only to institutional practice, or whether a group of universities will be involved.

Selecting and working with benchmarking partners

If working with a group partners can be selected from a range of sources. It might be appropriate to benchmark with other units in your organisation or with competitive partners if in industry. Professional groups such as ACODE provide useful partners but it can also be useful to select at least some partners from other sectors, e.g., benchmark customer service functions against corporate organisations that have a reputation for doing this well. Some organisations are members of benchmarking clubs or groups and you might want to look both nationally and internationally. You could even advertise in professional journals or list serves for partners.

It is important to select partners carefully – looking at the big institutions might not necessarily be most helpful as 'big is not necessarily better'. A lot can be learned from small organisations and from non-sector operations. Peers are important, nevertheless, and identifying those with performance, who are willing to share and discuss outcomes is critical to success.

Be careful to understand the distinction between best practice and best performance. Best practice does not necessarily result in best performance.

Outcomes – what to do with them

It is obviously important to act on findings. Implementation strategies will need to be developed and perhaps staged, depending on resource implications. Failure to follow up will mean that the

resources invested in the process have been wasted. The support of senior management will need to be obtained and a commitment to recommendations secured from operational staff. If appropriately involved in the process this should not be a challenge.

The outputs – documented performance information, externally validated, will need to be used as input to the planning process, as part of quality assurance processes. An implementation plan will need to be developed and the process of change begins, including an evaluation of the impact of changes against performance indicators.

Disseminating information about your findings and outcomes

Too often when projects are undertaken and outcomes implemented we are already planning the next undertaking and preparing to move on. What we often neglect to do is to document our findings with key stakeholders and ensure that implementation strategies are understood and acted on.

It is also important to report on outcomes once strategies have been implemented. Accountability for time and resources invested in projects is required in most organisations, but more important is to demonstrate how the project has added value, whether by improving service, avoiding cost or increasing revenue. Disseminating information does take time and effort, however, it is critical and the vehicle for most effective dissemination merits considerable thought. We are all familiar with print publishing routes, but today we have many other choices – e-lists, weblogs, e-print repositories and the like.

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Attachment 2   ACODE Benchmarks for e-learning

Benchmark 1: Institution policy and governance for technology supported learning and teaching

Scoping Statement: This applies to institution level planning, policy development and implementation in relation to the application of technologies for learning and teaching. It includes the delegation of authority and responsibility for developing, implementing, evaluating and responding to results of policies and strategic and operational/functional plans.

Good Practice Statement

The institution has established, well understood governance mechanisms and policies that guide the selection, implementation, utilisation/deployment, and evaluation of technologies to support learning and teaching.

Performance Indicators

1. Institution strategic and operational plans recognise and support the use of technologies to facilitate learning and teaching.
2. Specific plans relating to the use of learning and teaching technologies are aligned with the institution's strategic and operational plans.
3. Planning for learning and teaching technologies is aligned with the budget process.
4. Institution policies specify the use of technologies to support learning and teaching covering all aspects and stakeholder perspectives.
5. Policies are well disseminated and applied.
6. The institution has established governance mechanisms for learning and teaching with technologies that include representation from key stakeholders.
7. Clear management structures identify responsibilities and authority.
8. Decisions regarding new technology adoption are made within current policy frameworks.

Performance Measures

1. **Institution strategic and operational plans recognise and support the use of technologies to facilitate learning and teaching**.

    1. No current strategic or operational plans
    2. Strategic or operational plan but no recognition of use of technologies
    3. Strategic or operational plan includes some recognition of use of technologies
    4. Strategic and operational plans both have some recognition of use of technologies
    5. Strategic and operational plans both have clear recognition of use of technologies

2. **Specific plans relating to the use of learning and teaching technologies are aligned with the institution's strategic and operational plans.**

Existence	Alignment
1. No specific plans	Not aligned to institution strategic and operational plans
2. Immature plans	Aligned with either institution strategic or operational plans
3. Some specific plans	Aligned with both institution strategic and operational plans
4. Numerous specific plans	Aligned with either institution strategic or operational plans
5. Comprehensive suite of plans	Aligned with both institution strategic and operational plans

3. **Planning for learning and teaching technologies is aligned with the budget process.**

   1. No alignment
   2. Limited alignment
   3. Moderate alignment
   4. Considerable alignment
   5. Complete alignment

4. **Institution policies specify the use of technologies to support learning and teaching covering all aspects and stakeholder perspectives.**

   1. No institution policies
   2. Limited range of policies
   3. Some policies are comprehensive
   4. Most policies are comprehensive
   5. All policies are comprehensive

5. **Policies are well disseminated, and applied.**

Dissemination	Application
1. No dissemination	Not applied
2. Poorly disseminated	Limited application
3. Moderate dissemination	Partial application
4. Substantial dissemination	Moderate application
5. Widely disseminated	Full application

6. **The institution has established governance mechanisms for learning and teaching with technologies that include representation from key stakeholders**.

Governance	Stakeholder representation
1. No governance	None
2. Planning for governance	Limited
3. Immature	Moderate
4. Developing	Substantial
5. Well established and mature	Comprehensive

7. **Clear management structures identify responsibilities and authority.**

Management structures	Responsibilities and authority identified
1. No formal management structures	None
2. Limited	Limited
3. Partial but unclear	Moderate
4. Partial and clear	Extensive
5. Comprehensive and clear	Comprehensive

8. **Decisions regarding new technology adoption are made within current policy frameworks.**

   1. No reference
   2. Limited reference
   3. Moderate reference
   4. Substantial reference
   5. Comprehensive reference

Benchmark 2: Planning for, and quality improvement of the integration of technologies for learning and teaching

Scoping Statement: There is a need for institution wide quality assurance processes to ensure the appropriate use of technologies in learning and teaching. This will include planning, implementation, evaluation and feedback loops.

Good Practice Statement

Institutions support and encourage the appropriate use of technology in learning and teaching through strategic planning processes at all levels of the institution. The focus is continuous improvement through systematic and regular evaluation of implementation strategies and outcomes. Such evaluation will in turn inform future planning.

Performance Indicators

1. Institution wide processes for quality assurance are in place and in use to integrate technologies in learning and teaching.
2. Institution and Faculty plans are aligned with institution policy for the use of technology in learning and teaching.
3. Operationalisation is planned and evaluated.
4. Planning and quality improvement is resourced.
5. Collaboration for integrating technology in learning and teaching occurs across key functional areas.
6. Evaluation cycles are in place to measure key performance indicators for all key stakeholders.
7. Outcomes are reported to all levels of the institution.
8. Evaluation feedback is integrated in planning for continuous improvement purposes.

Performance Measures

1. Institution wide processes for quality assurance are in place and in use to integrate technologies in learning and teaching.

Process in place	Usage
1. None	None
2. Limited	Occasional/infrequent
3. Moderate	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

1. Institution and faculty plans are aligned with institution policy for the use of technology in learning and teaching.

Institution plans	Faculty plans
1. No alignment	No alignment
2. Limited	Limited
3. Moderate	Moderate
4. Considerable	Considerable
5. Optimal	Optimal

3. **Operationalisation is planned and evaluated.**

Planned	Evaluated
1. None	1. None
2. Limited	2. Limited
3. Moderate	3. Moderate
4. Substantial	4. Substantial
5. Optimal	5. Optimal

4. **Planning and quality improvement is resourced.**

   1. No resources
   2. Inadequate resources
   3. Moderate resources
   4. Substantial resources
   5. Comprehensive resources

5. **Collaboration for integrating technology in learning and teaching occurs across key functional areas.**

   1. No collaboration
   2. Infrequent collaboration
   3. Occasional collaboration
   4. Frequent collaboration
   5. Comprehensive collaboration

6. **Evaluation cycles are in place to measure key performance indicators for all key stakeholders.**

   1. No evaluation cycles
   2. Limited evaluation cycles for some key stakeholders
   3. Evaluation cycles for some key stakeholders
   4. Evaluation cycles for all key stakeholders
   5. Comprehensive evaluation cycles for all key stakeholders

7. **Outcomes are reported to all levels of the institution.**

   1. No outcomes are reported
   2. Some outcomes are reported to some levels
   3. Outcomes are reported to the majority of levels
   4. Outcomes are reported to all levels
   5. Comprehensive outcomes are reported to all levels

8. **Evaluation feedback is integrated in planning for continuous improvement purposes.**

   1. No integration
   2. Limited integration
   3. Moderate integration
   4. Extensive integration
   5. Comprehensive integration

Benchmark 3: Information technology infrastructure to support learning and teaching

Scoping Statement: Information technology (IT) infrastructure describes a range of information and communication technologies that are used to support learning and teaching. This can include the use of: productivity software; learning management systems; library systems; the World Wide Web; mobile technologies.   It also includes hardware (computers, telecommunications and ancillary equipment) and networks, both internal (LANS and WANS) and external (eg AARNet) which are used for the purposes of learning and teaching. These technologies support learning on and off campus.

The topic can also include audio visual equipment*. Also included is support and training in the use of the technology by students and staff, individually and in groups, both on and off campus, noting that these issues are dealt with in more detail in Topics 5-8.

Decisions about the selection of IT infrastructure for learning should refer to directional/ policy statement(s) about the learning and teaching environment of an institution (for example distance education, or blended approaches). Once a technology is selected it is important that an institution has robust and accepted processes for trialling and rolling out a new technology, that involves all key stakeholders.

* In order to keep the exercise manageable, it is recommended that the focus be on either infrastructure that is part of the IP network or not (for example audio-visual infrastructure).

Out of scope

The pedagogical issues relating to the use of infrastructure is the domain of other benchmarks.

Good Practice Statement

Technical infrastructure is aligned with institutional learning goals and the technologies are resourced, support staff are trained and the infrastructure is implemented, maintained, administered and supported efficiently and effectively.

Performance Indicators

1. Evaluation processes are in place to generate data to support decision making.
2. Evaluation processes are comprehensive.
3. Responsibilities and processes for maintenance and administration are effective and efficient.
4. Responsibilities and processes for support and training are effective and efficient.
5. Project management processes are in place, responsibilities defined and processes applied.
6. Resources are allocated for maintenance and upgrades of existing equipment.
7. Implementation is well planned.
8. Implementation is resourced.
9. Professional development occurs for staff managing infrastructure (including new and emerging technologies).

Performance Measures

1. Evaluation processes are in place to generate data to support decision making.

1. No evaluation processes
2. Some processes generating limited data
3. Processes generate some useful decision making data
4. Processes generate comprehensive data
5. Processes generate regular, timely and comprehensive data

2. **Evaluation processes are comprehensive**

   1. No processes
   2. Limited processes
   3. Some integration of complementary processes
   4. Substantial processes
   5. Comprehensive, integrated processes

3. **Responsibilities and processes for maintenance and administration are effective and efficient.**

Responsibilities	Effective and efficient
1. Nobody identified/allocated	Not at all
2. Ad hoc	Marginally
3. Allocated but unclear	Somewhat
4. Sound practice emerging	Generally
5. Clearly defined	Extremely

4. **Responsibilities and processes for support and training are effective and efficient.**

Responsibilities	Effective and efficient
1. Nobody identified/allocated	Not at all
2. Ad hoc	Marginally
3. Allocated but unclear	Somewhat
4. Sound practice emerging	Generally
5. Clearly defined	Extremely

5. **Project management processes are in place, responsibilities clearly defined and processes applied.**

Processes in place	Responsibilities defined	Processes applied
1. Absent	Absent	Not applied
2. Ad hoc	Ill-defined	Unevenly applied
3. Limited	Somewhat defined	Limited
4. Extensive	Substantially defined	Generally
5. Comprehensive	Clearly defined	Systematic

6. **Resources are allocated for maintenance and upgrades of existing equipment.**

Maintenance	Upgrades
1. No resources	No resources
2. Inadequate resourcing	Inadequate resourcing
3. Moderate resourcing	Moderate resourcing
4. Substantial resourcing	Substantial resourcing
5. Comprehensive resourcing	Comprehensive resourcing

7.   Implementation is well planned.

1.   No planning
2.   Limited planning
3.   Moderate planning
4.   Extensive planning
5.   Comprehensive planning

8.   Implementation is resourced.

1.   No resources
2.   Inadequate resources
3.   Moderate resources
4.   Substantial resources
5.   Comprehensive resources

9.   Professional development occurs for staff managing infrastructure (including new and emerging technologies).

Existing infrastructure	New and emerging technologies
1. Does not occur	Does not occur
2. Occasionally	Occasionally
3. Sometimes	Sometimes
4. Usually	Usually
5. Systematic	Systematic

Benchmark 4: Pedagogical application of information and communication technology

Scoping Statement: This topic addresses the effective application of information and communication technology (ICT) to support institution learning and teaching. It encompasses the underlying rationale and strategic intent, how it is embedded in institution teaching, how it is resourced and how it is evaluated. The pedagogical application of ICT is a developing area that has the potential to impact on every student and staff member, and failure to apply ICT in pedagogically sound ways will reduce the value of infrastructure investment, and may detract from the ability of the institution to meet its teaching and learning goals.

Out of scope

Technological, policy and administrative issues relating to the pedagogical application of ICT are the domain of other benchmarks.

Good Practice Statement

Pedagogical application should be:
1. **aligned** to institution strategy;
2. **informed** by good practice and research;
3. **supported** adequately;
4. **deployed** and promoted effectively; and
5. **evaluated** from a number of perspectives.

Performance indicators are organised to reflect these aspects of pedagogical application.

Performance Indicators

Aligned
1. Pedagogical applications are grounded in the context of the institution's learning and teaching strategy.
2. The intent of pedagogical applications of ICT is readily available to all teaching and teaching support staff.

Informed
3. Pedagogical application is based on sound educational research and good practice.
4. Guidelines (including compliance with legal requirements, accessibility, and learning designs) for the pedagogical application of ICT are readily available to all teaching and teaching support staff and in use.
5. Examples of good practice are available and in use.

Supported
6. Communities of practice exist for communicating and promoting the innovative use of pedagogical applications in learning and teaching.
7. Professional development covering e-learning pedagogy is available for all teaching staff and used.
8. Tools for the pedagogical application of ICT are available for all teaching staff and in use.

Deployed
9. Resources are allocated for developing e-learning projects.
10. The pedagogical application of ICT is sustainable.

Evaluated
11. Deployment of pedagogical applications of ICT is evaluated at the unit of study level including students' learning outcomes.
12. Overall, pedagogical application of ICT is evaluated.
13. Evaluation of feedback is integrated in planning for continuous improvement of pedagogical application.

Performance Measures

Aligned
1. Pedagogical applications are grounded in the context of the institution's learning and teaching strategy.

1. Pedagogical application has no links to institution learning and teaching strategy or no learning and teaching strategy exists
2. Isolated instances of links to institution learning and teaching strategy
3. Some elements are covered by pedagogical applications
4. The majority of elements are covered by pedagogical applications
5. The vast majority of pedagogical applications are the complete realisation of an existing institutional learning and teaching strategy

2. The intent of pedagogical applications of ICT is readily available to all teaching and teaching support staff.

1. Pedagogical application has no declared intent or guidelines
2. Few statements of intent exist and are not readily available
3. Incomplete statements of intent are evident and available
4. Some clear statements of intent and guidelines are evident and available.
5. There are many clear statements of intent and guidelines are readily available

Informed
3. Pedagogical application is based on sound educational research and good practice.

1. Pedagogical application has no basis in sound educational research or good practice
2. Pedagogical application has a limited base in either sound educational research or good practice
3. Pedagogical application is partially informed by both sound educational research and good practice
4. Pedagogical application is substantially based on either sound educational research or good practice
5. Pedagogical application is comprehensively based on both sound educational research and good practice

4. Guidelines (including compliance with legal requirements, accessibility and learning designs) for the pedagogical application of ICT are readily available to all teaching and teaching support staff and in use.

Guidelines available	Usage
1. None	None
2. Limited	Occasional/infrequent
3. Some	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

5. Examples of good practice are available and in use.

Examples available	Usage
1. None	None
2. Limited	Occasional/infrequent
3. Some	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

Supported

6. Communities of practice exist for communicating and promoting the innovative use of pedagogical applications in learning and teaching.

1. No communities of practice exist
2. Isolated communities of practice exist in a limited number of disciplines
3. Communities of practice exist but do little to promote innovative use
4. Many communities of practice exist but do little to promote innovative use
5. Communities of practice exist and promote innovative use

7. Professional development covering e-learning pedagogy is available for all teaching staff and used.

Professional development available	Usage
1. None	None
2. Limited	Occasional/infrequent
3. Some	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

8. Tools for the pedagogical application of ICT are available for all teaching staff and in use.

Tools available	Usage
1. None	Not
2. Limited	Occasional/infrequent
3. Some	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

Deployed

9. Resources are allocated for developing e-learning projects.

1. No resources
2. Inadequate resources
3. Moderate resources
4. Substantial resources
5. Comprehensive resources

10. The pedagogical application of ICT is sustainable.

1. No specific consideration given to sustainability
2. Limited consideration given to sustainability
3. Some pedagogical applications are sustainable
4. Many pedagogical applications are sustainable
5. Sustainability is built in to all pedagogical applications

Evaluated
11. Deployment of pedagogical applications of ICT is evaluated at the unit of study level including students' learning outcomes.

1. Not evaluated
2. Limited evaluation
3. Regularly evaluated
4. Extensively evaluated
5. Systematic evaluation

12. Overall, pedagogical application of ICT is evaluated.

1. Not evaluated
2. Limited evaluation
3. Regularly evaluated
4. Extensively evaluated
5. Systematic evaluation

13. Evaluation of feedback is integrated in planning for continuous improvement purposes.

1. No integration
2. Limited integration
3. Regular integration
4. Extensive integration
5. Systematic integration

<u>Benchmark 5</u>: Professional/staff development for the effective use of technologies for learning and teaching

Scoping Statement: The key focus is on developing teaching staff to make effective use of technologies for learning and teaching. Professional and staff development activities encompass individual and group delivery, face-to-face as well as online. Self-directed learning activities/resources are also included.

Some professional development will be designed and delivered to meet the strategic needs of the organisation whilst other activities will be provided to meet the demands of teaching staff as they arise.

Good Practice Statement

Quality learning and teaching is brought about where people are expert, enthusiastic, skilled and well supported and learning experiences are designed to engage the learner and to employ multi-modal approaches.

Engagement in project development should not be limited by factors of physical location, equity or technological skills. This means that professional staff development is offered flexibly, accommodates a range of entry points, is evaluated and is informed by the work of related units.

A good practice approach to learning and teaching technologies reflects an understanding of learners' characteristics and needs as required by different discipline contexts, for example, problem-based learning in medicine.

Performance Indicators

1. All of the institution's obligations to learning and teaching technologies are clearly communicated in its strategies, policies and practices.
2. Processes are in place and in use to identify staff development needs for the institution's strategic development.
3. Processes are in place and in use to identify individual staff development needs.
4. Educational and technical expertise is available to develop and support quality programs and resources which address staff needs, including those with special needs.
5. Staff development programs are coordinated with other service units.
6. Staff development is resourced.
7. Professional/staff development programs can be delivered flexibly and address differing skill levels.
8. Evaluation of feedback is integrated in planning for continuous improvement of professionals/staff development processes.

Performance Measures

1. **All of the institution's obligations to learning and teaching technologies are clearly communicated in its strategies, policies and practices.**

Obligations covered	Clarity	Communication
1. None	None	None
2. Limited	Minimal	Limited
3. Moderate	Partial	Moderate
4. Extensive	Substantial	Substantial
5. Full	Complete	Full

2. **Processes are in place and in use to identify staff development needs for the institution's strategic development.**

Process in place	Usage
1. None	None
2. Limited	Occasional/infrequent
3. Moderate	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

3. **Processes are in place and in use to identify individual staff development needs.**

Process in place	Usage
1. None	None
2. Limited	Occasional/infrequent
3. Moderate	Moderate
4. Extensive	Frequent
5. Comprehensive	Systematic

4. **Educational and technical expertise is available to develop and support quality programs and resources which address staff needs, including those with special needs.**

1. No expertise
2. Limited expertise
3. Moderate expertise
4. Considerable expertise
5. Comprehensive expertise

5. **Staff development programs are coordinated with other service units.**

1. No coordination
2. Occasional coordination
3. Moderate coordination
4. Frequent coordination
5. Comprehensive coordination

6. **Staff development is resourced.**

1. No resources
2. Inadequate resources
3. Moderate resources
4. Substantial resources
5. Comprehensive resources

7. **Professional/staff development programs can be delivered flexibly and address differing skill levels.**

Flexibility	Tailoring
1. Not at all	Not at all
2. Limited	Limited
3. Moderate	Moderate
4. Substantial	Substantial
5. Full	Full

8. Evaluation of feedback is integrated in planning for continuous improvement of professional/staff development processes.

1. No integration
2. Limited integration
3. Regular integration
4. Extensive integration
5. Systematic integration

Benchmark 6: Staff support for the use of technologies for learning and teaching

Scoping Statement: This benchmark is restricted to the support of staff for the use of technologies in their teaching. It deals with staff who want to use technologies and/or encounter difficulties while using them, and who need to be able to get ready access to technical or educational assistance.

Technical support is required to deal with problems or needs related to the technological environment, including hardware and software, communications and connections, and performance.

Educational support addresses the needs of staff who want to maximise student learning outcomes.

Out of scope

This benchmark does not include staff development which forms part of the more formal professional development framework – see Benchmark 5.

Good Practice Statement

Staff are aware of and have access to comprehensive technical and educational support for the use of the technologies in learning and teaching: prior to the implementation of the technology, in formal training sessions, on a just-in-time basis, and for troubleshooting purposes.

Performance Indicators

1. Technical and/or educational support is aligned with the current and emerging technologies for learning and teaching in use at the institution.
2. Support needs are identified for individuals, work groups and the institution.
3. Support services for staff are evaluated for materials, procedures and systems.
4. Coordination occurs between areas providing staff support services.
5. Support provided is available, accessible and used by staff.
6. Support services are adequately resourced.
7. Support services are promoted to staff.
8. New technologies are analysed for staff support implications.
9. Evaluation of feedback is integrated in planning for continuous improvement purposes.

Performance Measures

1. **Technical and/or educational support is aligned with the current and emerging technologies for learning and teaching in use at the institution.**

Technical	Educational
1. No alignment	No alignment
2. Limited alignment	Limited alignment
3. Moderate alignment	Moderate alignment
4. Considerable alignment	Considerable alignment
5. Full alignment	Full alignment

2. **Support needs are identified for individuals, work groups and the institution.**

Individual	Work group	Institution
1. Not identified	Not identified	Not identified
2. Limited identification	Limited identification	Limited identification
3. Some identification	Some identification	Some identification
4. Regular identification	Regular identification	Regular identification
5. Systematic identification	Systematic identification	Systematic identification

3. **Support services for staff are evaluated for materials, procedures and systems.**

Materials	Procedures	Systems
1. Not evaluated	Not evaluated	Not evaluated
2. Limited evaluation	Limited evaluation	Limited evaluation
3. Regularly evaluated	Regularly evaluated	Regularly evaluated
4. Extensively evaluated	Extensively evaluated	Extensively evaluated
5. Systematic evaluation	Systematic evaluation	Systematic evaluation

4. **Coordination occurs between areas providing staff support services.**

   1. No coordination
   2. Infrequent coordination
   3. Some coordination
   4. Frequent coordination
   5. Comprehensive coordination

5. **Support provided is available, accessible and used by staff.**

Support available	Support accessible	Usage
1. None	Not at all	Not all
2. Limited	Restricted	Limited
3. Moderate	Working hours	Moderate
4. Considerable	Extended hours	Considerable
5. Comprehensive	24 x 7	Comprehensive

6. **Support services are resourced.**

   1. No resources
   2. Inadequate resources
   3. Moderate resources
   4. Substantial resources
   5. Comprehensive resources

7. **Support services are promoted to staff.**

   1. No promotion
   2. Limited promotion
   3. Moderate promotion
   4. Substantial promotion

5. Systematic promotion

8. New technologies are analysed for staff support implications.

1. No analysis
2. Limited analysis
3. Partial analysis
4. Extensive analysis
5. Complete analysis

9. Evaluation of feedback is integrated in planning for continuous improvement purposes.

1. No integration
2. Limited integration
3. Regular integration
4. Extensive integration
5. Systematic integration

Benchmark 7: Student training for the effective use of technologies for learning

Scoping Statement: 'Technologies for learning' describes a range of information and communication technologies that are used to support learning and teaching. These can include the use of: computers and productivity software; learning management systems; library systems; the World Wide Web; mobile technologies. This includes technologies used on and off campus. Aspects of an ethical approach to the use of learning technologies are included.

Student training refers to the applied use of such technologies in a learning context. It can take many forms and be provided by many people, for example through: specific training classes; self-study; or as part of a unit of study. Staff providing the training need appropriate skills which require alignment to the professional/staff development benchmark.

Out of Scope

Student training does not encompass training in other aspects of learning development (i.e. general study skills).

Good Practice Statement

The provision of student training for the effective use of learning and teaching technologies is aligned with the technologies and teaching approaches in use at the institution; is adequately resourced; is coordinated with student support; is flexible; is focused on the needs of students; covers a range of current technologies and reflects good practice in the use of technology.

Performance Indicators

1. Student training is aligned with the use of technologies and teaching approaches in use at the institution.
2. Student training is resourced.
3. Processes are in place to determine student needs and maintain alignment with those needs.
4. Processes are in place to evaluate student satisfaction with their training.
5. Coordination occurs between areas providing student training.
6. Student training is delivered flexibly and tailored to address differing needs.
7. Student training promotes an ethical approach to the use of technologies for learning.
8. Materials used in student training and student support are complementary.
9. Evaluation of feedback is integrated in planning for continuous improvement purposes.

Performance Measures

1. **Student training is aligned with the technologies and teaching approaches in use at the institution.**

    1. No alignment
    2. Limited alignment
    3. Moderate alignment
    4. Considerable alignment
    5. Full alignment

2. **Student training is resourced.**

    1. No resources
    2. Inadequate resources
    3. Moderate resources
    4. Substantial resources
    5. Comprehensive resources

3. Processes are in place to determine student needs and maintain alignment with those needs.

Identification	Alignment
1. None	None
2. Limited	Limited
3. Moderate	Moderate
4. Extensive	Extensive
5. Comprehensive	Comprehensive

4. Processes are in place to evaluate student satisfaction with their training.

1. No processes
2. Limited processes
3. Moderate processes
4. Extensive processes
5. Comprehensive processes

5. Coordination occurs between areas providing student training.

1. No coordination
2. Occasional coordination
3. Some coordination
4. Frequent coordination
5. Comprehensive coordination

6. Student training is delivered flexibly and tailored to address differing needs.

Flexibility	Tailoring
1. Not at all	Not at all
2. Limited	Limited
3. Moderate	Moderate
4. Substantial	Substantial
5. Full	Full

7. Student training promotes an ethical approach to the use of technologies for learning.

1. No promotion
2. Limited promotion
3. Moderate promotion
4. Substantial promotion
5. Systematic promotion

8. Materials used in student training and student support are complementary.

1. Not at all complementary
2. Partially complementary
3. Somewhat complementary
4. Generally complementary
5. Extensively complementary

9. Evaluation of feedback is integrated in planning for continuous improvement purposes.

1. No integration
2. Limited integration
3. Regular integration
4. Extensive integration
5. Systematic integration

Benchmark 8: Student support for the use of technologies for learning

Scoping Statement: Support for students in the use of technologies for learning is defined as primarily technical, but the learning context should be considered. Support should be considered in terms of the use of on-campus student computer facilities and the use of technologies from a distance. The term can include the use of: computers and productivity software; learning management systems; library systems; the World Wide Web; and mobile technologies.

Good Practice Statement

Students are aware of and have access to effective and well resourced support for the learning technologies in use at the institution. Student support is responsive to student needs; is coordinated with student training; and is constantly developing in response to changing technology.

Performance Indicators

1. The provision of support for students is integrated with current and emerging technologies for learning that are in use at the institution.
2. Support services are resourced.
3. Support services are promoted to the student body.
4. Support is available and accessible to students and used.
5. Support services for students are evaluated – for materials, procedures and systems.
6. Coordination occurs between areas providing student support.
7. Processes are in place to determine the ongoing support needs of students.
8. Evaluation of feedback is integrated in planning for continuous improvement purposes.
9. New learning technology initiatives are analysed for student support implications.
10. Materials used in student training and student support are complementary.

Performance Measures

1. **The provision of support for students is integrated with current and emerging technologies for learning that are in use at the institution.**

    1. No integration
    2. Limited integration
    3. Regular integration
    4. Extensive integration
    5. Systematic integration

2. **Support services are resourced.**

    1. No resources
    2. Inadequate resources
    3. Moderate resources
    4. Substantial resources
    5. Comprehensive resources

3. **Support services are promoted to the student body.**

    1. No promotion
    2. Limited promotion
    3. Moderate promotion
    4. Substantial promotion
    5. Systematic promotion

4. Support is available and accessible and used by students.

Support available	Support accessible	Usage
1. None	Not at all	Not at all
2. Limited	Restricted	Limited
3. Moderate	Working hours	Moderate
4. Considerable	Extended hours	Considerable
5. Comprehensive	24 x 7	Comprehensive

5. Support services for students are evaluated for materials, procedures and systems.

Support materials	Support procedures	Support systems
1. Not evaluated	Not evaluated	Not evaluated
2. Limited evaluation	Limited evaluation	Limited evaluation
3. Regularly evaluated	Regularly evaluated	Regularly evaluated
4. Extensively evaluated	Extensively evaluated	Extensively evaluated
5. Systematic evaluation	Systematic evaluation	Systematic evaluation

6. Coordination occurs between areas providing student support.

1. No coordination
2. Infrequent coordination
3. Some coordination
4. Frequent coordination
5. Comprehensive coordination

7. Processes are in place to determine the ongoing support needs of students.

1. No processes
2. Limited processes
3. Some processes
4. Extensive processes
5. Comprehensive processes

8. Evaluation of feedback is integrated in planning for continuous improvement purposes.

1. No integration
2. Limited integration
3. Regular integration
4. Extensive integration
5. Systematic integration

9. New learning technology initiatives are analysed for student support implications.

1. No analysis
2. Limited analysis
3. Partial analysis
4. Extensive analysis
5. Complete analysis

10. Materials used in student training and student support are complementary.

1. Not at all complementary
2. Partially complementary
3. Somewhat complementary
4. Generally complementary
5. Extensively complementary

Attachment 3   Master Templates

Template #1

Self assessment

BENCHMARK 5
XX

GOOD PRACTICE STATEMENT
Xxx

PERFORMANCE INDICATOR 8

XX.

PERFORMANCE MEASURES

(Level 5 indicates good practice)

1. xx
2. xx
3. xx
4. xx
5. xx

HOW DO YOU RATE?   **1_____2_____3_____4_____5**

RATIONALE:

EXAMPLES OF EVIDENCE :

Template #2: comparative index

Benchmarking Comparative Matrix

Benchmark	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
Institution								

Template #3: Partnering Action Plan
(For use by Action Plan partners)

PARTNER	Benchmark	Performance Indicator	GOAL	STRATEGIES
University 1				
University 2				
University 3				
University 4				
University 5				
University 6				
University 7				

Template #4: Partnering Response Summary
(For use by Action Plan partners)

Name of institution	
Partner/s originally selected	
Partner worked with	
Indicator(s) chosen	
Goal	
Outcome(s) • **intended** • **actual**	
Strategies chosen	
Describe procedures: (how you gathered information.) **Were the procedures adequate?**	
What action will you take as a result of the exercise?	
How useful was the partnering process?	
Any other comments?	

Attachment 4   The Innovative Research Universities of Australia (IRUA) Case Study

The benchmarking exercise

The Innovative Research Universities of Australia (IRUA) group meet regularly for strategic purposes. Benchmarking is a strategic priority for the IRUA universities – for quality enhancement purposes - and has been identified by the Australian University Quality Agency (AUQA) as a focus for the second round of audits.   At an early 2006 meeting of the IRUA Deputy Vice-Chancellor's/Pro Vice-Chancellors (Academic) there was agreement that benchmarking e-learning was a common priority and a decision was made to use the ACODE e-learning benchmarks. Vice-Chancellors agreed to support the exercise, which was planned for 2007 using benchmark topics 1 and 5 (policy and governance and staff development for the use of technology in learning and teaching).

The benchmarking process

Institutional representative were nominated, all staff with senior management experience in teaching and learning and the development of strategic frameworks and services for the use of technology in teaching and learning. Not all used the term e-learning within their institutions.   LaTrobe University facilitated a teleconference between the representatives and a facilitator for a workshop, held in March 2007, to complete the self assessment, share and review these assessments, identify priority areas for self improvement and potential benchmarking partners. The group developed a preliminary report on outcomes for the group of Deputy/Pro Vice-Chancellors (Academic) and during the remainder of 2007 worked to complete action plans and report on outcomes according to the process described in the ACODE guide to using the e-learning benchmarks. The IRUA process is summarised here.

Preliminary work
1. An institutional discussion and commitment was made to benchmarking e-learning as described above. The IRUA DVC/PVC (Academic) group nominated priority areas for benchmarking - benchmarks 1 and 5.
2. Institutional representatives were selected to participate in the exercise – all with an enterprise perspective. A facilitator was identified for a workshop - where institutional representatives were provided with an overview of the structure of the benchmarks and worked together to complete their self assessments, peer review them and complete a comparative matrix summarise the assessments.
3. The benchmarking documents were consulted by the institutional representatives who familiarised themselves with institutional practice in the nominated areas through consultation with other key stakeholders.
4. A preliminary self assessment was undertaken with institutional stakeholders using the ACODE template – for discussion at the workshop.

Workshop
5. Institutional representatives attended a facilitated workshop – described in 2 above. From this they identified areas for improvement and institutions they might work with in the development of an action plan of improvement strategies.
6. The preliminary self assessments were reviewed at this workshop and shared with the benchmarking group on a confidential basis.
7. A summary of institutional assessments was developed using the comparative matrix template
8. Assessments were peer reviewed by institutional representatives and self assessments amended in light of feedback.
9. Priority areas for improvement were identified and potential benchmarking partners identified.

Post workshop

10. Following the workshop institutional representatives reviewed assessments and workshop outcomes with institutional colleagues.
11. Final versions of self assessments and the comparative matrix were circulated with other institutional representatives.
12. A progress report was developed for the DVC/PVC (Academic) group.
13. Action plans were developed and are to be implemented according to timelines.
14. Evidence and further information shared with benchmarking partners according to agreed strategies
15. Six monthly and annual report on outcomes to be developed.

Steps 13-15 are in progress at the time of writing.

Outcomes

All participants became familiar with the benchmarking process during this exercise and agree it was a useful tool for self improvement purposes. They also agreed that the process had given them a much deeper understanding of institutional practice, particularly those who were relatively new to their positions. Policy and governance was identified as an area requiring attention in most institutions, with more diverse scores in the staff development area. All institutions identified areas for self improvement and potential partners to work with for improvement purposes.

Participants consulted with institutional stakeholders in different ways; for example, some convened meetings to conduct the preliminary self assessment as a group while others asked key stakeholders to submit their self assessment and then convened a meeting of the group to discuss areas of difference.

Institutional self assessments sometimes varied across members within an institution. This was not a surprise as each came to the exercise with a different perspective; for example, a person working in policy might be more inclined to perceive policy being well disseminated than someone in another area. While this is understandable the group agreed it would require attention during subsequent discussions within institutions. The time taken to undertake this exercise also varied, depending to some extent on the familiarity of the participant with institutional practice. In some cases this took a day, distributed over time, while for others it was a more like half a day.

Related to this, most institutions identified a need for improved collaboration and communication across heads of service areas with responsibility for the nominated benchmarks topics.   This 'disconnect' is common in universities and is important for other groups using these benchmarking. The group posed this as a challenge for senior executive; that is, how to facilitate coordination and collaboration across section heads in the areas of decision making, service delivery and evaluation.

The group agreed that the commitment of the senior executive was an important success factor for an exercise of this kind; not only in terms of resources but also their commitment to implement outcomes.

The group agreed it would be desirable to have a 6 month-hence progress report on implementation – for themselves and the Deputy vice-Chancellor (DVC) group. Participants also felt well placed to work together for other purposes following this exercise; in other words they felt they had established a useful collegial network.

There were some indicators where no institution was particularly strong and for these areas, if identified as priorities for improvement, additional work might be required by the group to develop strategies for quality improvement. The group also felt it would be useful to conduct a complementary benchmarking exercise, collecting more quantitative data for indicators about resourcing.

Participants felt it would be valuable to repeat the process for the other 6 benchmarks.

IRUA universities

Flinders University
Griffith University
La Trobe University
Macquarie University
Murdoch University
University of Newcastle