MACQUARIE UNIVERSITY

LEARNING AND TEACHING CENTRE

TECHNOLOGIES IN LEARNING AND TEACHING

Guidelines for Good Practice

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Guidelines for Good Practice

The learning and teaching context at Macquarie presents the opportunities and also the challenges of an increasingly diverse learning environment, with its complex mix of on-campus and off-campus, local and international, undergraduate and postgraduate programs.

Macquarie's vision is for current and emerging technologies to be used wisely and effectively to enable and enhance the student experience and cater for diversity through:

- seamless connections between people and places across the globe;
- efficient and effective access to information and resources;
- new ways to participate, interact, communicate and collaborate; and
- creative opportunities to generate, present and disseminate knowledge.

Technologies have the potential to enhance learning and teaching when they are fully and seamlessly integrated into the curriculum and the environment in which they are situated. Which technologies are selected and how they are integrated into learning and teaching are important decisions which will impact the design of the whole learning experience, the way we teach and the way students learn.

These Guidelines for Good Practice are designed to be used by academics to assist in the design of technology-rich learning experiences and to support the University's quality enhancement processes for programs and units.

The development of the Guidelines has drawn on research at Macquarie and across the higher education sector as well as previous work undertaken by the AVCC, ACODE and the Institute for Higher Education Policy. This work suggests that there are six areas for attention in making technology decisions for learning and teaching – curriculum design, resource design, assessment and feedback, staff support, student support, and quality enhancement. For each, we have used the format of the ACODE Benchmarks and developed a statement of good practice, followed by a checklist of criteria to reflect that practice. The good practice statements and criteria are aligned with the broader principles underpinning learning and teaching, but specifically address issues relating to technologies. In addition, resources are available through the Learning and Teaching Centre to support each of the areas.

For further information about the guidelines and support available for integrating technologies into your curriculum, contact:

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References:

ACODE (2006). Benchmarks for the use of Technology in the Learning and Teaching in Universities.

Available at:
http://www.acode.edu.au/projects_resources.php

AVCC Guidelines (2005). Universities and their students: principles for the provision of education by Australian universities. Available at:
http://www.universitiesaustralia.edu.au/documents/publications/policy/statements/Principles_final_Aug2005.pdf

Institute for Higher Education Policy, (2000). Benchmarks for success in internet-based distance education. Available at:
http://www2.nea.org/he/abouthe/images/Quality.pdf

Good practice statement 1 Curriculum design with technologies

Technologies are used to support learning and teaching processes and the achievement of the University's graduate capabilities.

The integration of technologies into the curriculum brings unique challenges which will impact on the learning and teaching process as a system. Taking a 'whole of curriculum' approach requires that the technologies must be effective in supporting the processes of learning and teaching, and the development of graduate capabilities. They must be easy to use and efficient, they must serve to support the provision of a high quality experience of engaged and active learning, and they must enable equitable participation in learning by the increasingly diverse range of students.

Guiding principles checklist

1.1	Technologies are aligned with the philosophy of the program.
1.2	Technologies are integrated into a curriculum whose aims and learning outcomes are aligned through appropriate learning activities and assessment tasks.
1.3	Students have online access to clear statements of unit aims and learning outcomes.
1.4	Appropriate selections of technologies are made to foster students' active and productive engagement in learning and assessment activities.
1.5	Learning and teaching processes incorporate technologies appropriately to take account of the diversity of student needs including accessibility, equity and flexibility of participation in learning.

Good practice statement 2 Assessment and feedback using technologies

Curriculum alignment underpins the choice of technologies to support assessment.

As students become more strategic, assessment increasingly drives their learning and determines how they will spend their time. Emerging technologies provide opportunities to reconsider assessment and feedback strategies; to increase efficiency and transparency in learning and teaching; to enhance the quality of students' learning through assessment experiences; and to explore new forms of assessment. In making choices about the way that assessment can be supported through technologies, the quality of the learning experience and outcomes, as well as adherence to policy frameworks need to be considered.

Guiding principles checklist

3.1	Technologies are chosen to support the assessment of learning outcomes
3.2	Enhancing the quality or efficiency of feedback to students is considered when choosing technologies to support assessment
3.3	Students are not disadvantaged when assessment tasks entail the use of specific materials, software programs and internet resources
3.4	Technologies to support assessment are chosen and implemented to comply with MQ policy requirements (eg assessment, accessibility, student privacy, information management,)

Good practice statement 3 Learning resource design and development

Learning resources are integrated with other elements of the curriculum to support student learning.

Learning resources are integral to the learning and teaching process. Resources include pre-packaged content (such as textbooks, web-sites and readings), unit information (such as unit guides, lecture notes, laboratory manuals), and learning activities (such as data-bases, simulations models, blogs, portfolios, discussion forums, quizzes). It is not always necessary to develop your own resources. Today's technologies and new licensing arrangements such as Creative Commons open the way for the re-use and customisation of existing materials available from databases, commercial publishing houses and the internet. When preparing learning resources, issues such as accessibility, ethical practice and sustainability need to be considered.

Guiding principles checklist

2.1	Technology-based learning resources are appropriate to the achievement of the unit's aims and outcomes
2.2	Student circumstances such as special needs, accessibility and cultural inclusiveness are considered when developing and choosing resources
2.3	Resources are developed or chosen to cohere as an integrated whole
2.4	Resources are acquired or created to maximise sustainable use
2.5	Information ethics issues are considered in the use and re-use of resources

Good practice statement 4 Staff support

Staff have the necessary knowledge and skills to use technologies effectively to support learning and teaching.

Working with technologies can be challenging as individuals have differing levels of comfort in exploring and using new tools. In order for staff to effectively engage students and support their learning, they need to develop confidence with the technologies, understand their potential and know where to access support if required.

Guiding principles checklist

4.1	Staff are aware of the technologies supported by the University and how to integrate them into teaching and learning contexts
4.2	Staff have the necessary pedagogical understanding to make effective use of the technologies
4.3	Staff have the technical skills necessary to utilise the technologies used
4.4	Staff are aware of support available for students (eg technical, access and study skills support)
4.5	Professional development programs incorporate pedagogical implications; technical know-how; and policy and procedural requirements

Good practice statement 5 Student support

Students are provided with the necessary technical and learning support to use technologies effectively.

Meeting the learning needs of a diverse cohort of students, with a range of knowledge and skills with technologies and how to use them for learning, requires knowledge and understanding of students' backgrounds and experiences.

The technology environment is complex. End users have a range of hardware, software and network configurations; therefore monitoring student experiences is important so that technology does not get in the way of their learning.

Guiding principles checklist

5.1	Students are made aware of why technologies are used and how they support learning
5.2	Requirements and procedures for using technologies are communicated to students prior to starting courses
5.3	Students are informed of the support available
5.4	Feedback mechanisms are in place to capture student support requirements throughout the semester
5.5	Students are informed of ways of communicating with and the availability of staff

Good practice statement 6 Quality enhancement

Systematic and regular evaluation of technologies in learning and teaching is undertaken, with feedback informing future planning.

As critically reflective practitioners, we can set up evaluation processes to enable us to constantly evaluate the technologies in our teaching and learning processes. Access, usability and the impact of technologies on learning all need to be included in evaluation processes. Many of the technologies we use generate important information that can be used in conjunction with feedback from our students and our own reflections.

Guiding principles checklist

6.1	Feedback on the effectiveness of technologies in learning and teaching is gathered from staff and students
6.2	Feedback is integrated into planning for continual improvement
6.3	Support services for staff and students are evaluated and constantly developed in response to changing technology

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