



E-Learning Guides

1: Introduction to E-Learning at GCU

The first guide in this series will be of interest to academic staff who are considering the implementation of e-learning in their modules. It aims to provide an overview of the main issues relating to effective learning and teaching with new technologies, and will introduce you to:

- the context for the implementation of e-learning in GCU
- relevant pedagogical theories
- the need for new teaching and learning approaches
- the benefits and challenges of e-learning

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Introduction



This short guide is the first in a series which has been developed to support lecturers, Divisions and Schools within Glasgow Caledonian University who are considering the adoption of more flexible teaching methods. GCU aims to be inclusive of all sectors of society and responsive to the needs of the individual, and in order to support these goals it encourages innovation in learning and teaching. Enriching the educational experience through the appropriate application of new technologies, commonly referred to as **e-learning**, is just one aspect of providing the flexible opportunities which are increasingly demanded by our diverse student population. We may wish to use e-learning for a number of reasons, including:

- Enhancing **learning effectiveness** against a background of increasing student numbers and limited resources
- Enabling flexibility of **time, place** and, to some extent, **pace** of learning.
- Exploring and explaining **difficult concepts**
- Addressing the **equal opportunities** agenda by facilitating wider access to resources and supporting a variety of **learning styles**
- Improving **course management** and **communication** between staff and students
- Meeting the **needs of employers** and **workplace learners**
- Maintaining a **competitive edge** and enhancing our international profile

So what is e-learning?

At its simplest level, it is a term used to describe the application of Communication & Information Technologies (C&IT) to the educational context. Examined more closely however, it's clear that the reality is increasingly complex as new technologies continue to appear amid much 'hype' as to how they might transform education. The danger is that we become driven by the functionality these technologies offer, rather than by their potential to enhance learning and teaching. Many aspects of learning, teaching and assessment in higher

education can benefit from the integration of educational technologies, including, for example:

- a **rich variety of online resources** to encourage critical analysis and reflection
- realistic **multimedia case studies** to underpin problem-based learning
- **online discussion boards** in a secure environment to support learning communities and facilitate the participation of external professionals
- **simulations** and **animations** to support experiential learning and teach complex processes
- real-time communication tools such as **chat**, **shared whiteboards** and **videoconferencing** to promote collaboration and debate
- **computer-aided assessments** to improve the quality of feedback to students

What does this mean for us?

As academic staff, we all have our own preferred teaching methods which suit our personal style and discipline area. For many of us, the carefully considered integration of e-learning tools can enhance these pedagogic approaches and enable varied and improved interaction with students at all levels, both on and off campus. We are reminded by Biggs (2002) that **aligning all aspects of our teaching**, from learning outcomes through teaching methods to assessment, is vital to ensure the continued quality enhancement of the learning experience we offer to students. In this context, e-learning needs to be considered as a **fully integrated component** of the whole educational process.

E-learning involves much more than the simple transfer of information. It places demands on both learners and tutors and requires the acceptance of **shared responsibilities**. New strategies need to be developed and innovative teaching methods explored in order to make best use of its potential. Unless your programme is completely online however, the emphasis is likely to remain firmly on a **blended approach** which can incorporate the best of both the traditional and the new. All programmes and modules will comprise a number of distinct aspects including:

1. **Disseminating information and resources**
2. **Activities and tasks**
3. **Discussion and critical reflection**
4. **Assessment and feedback**
5. **Course management and student support**

Any of these areas might benefit from e-learning and your own context and priorities, and those of your School and Division, will determine which might be the most suitable targets for innovation.



There is a wide range of technologies available to support these aims, and if you're considering e-learning for the first time, this can seem daunting. In recent years **Virtual Learning Environments (VLEs)** have become increasingly popular as they incorporate a variety of tools which allow the lecturer to develop modules with web pages, online resources, discussion boards and simple assessments all within one framework, without any need for in-depth technical skills. They can also incorporate student tracking and log statistics. Here at GCU we have recently adopted BlackBoard as the VLE of choice, and all staff can now access BlackBoard to develop online resources and activities.

Support for BlackBoard at GCU:	elisu.gcal.ac.uk/online/index.htm
Access to BlackBoard:	blackboard.gcal.ac.uk
BlackBoard Training Workshops:	cittu.gcal.ac.uk

Educational Issues

Our own experiences as students will inevitably have an impact on how we ourselves teach, and as most of us will have been taught by traditional means, we're used to applying these well-established methods in our own teaching. Therefore the move to embrace e-learning can initially seem problematic as it requires lecturers not only to gain new technical skills, but also to become familiar with innovative teaching methods.

A variety of pedagogical approaches are in use across the University, depending on discipline area, student numbers, and level of programme. These might include **resource-based learning, problem-based learning, work-based learning, collaborative** and **student-centred learning** or a combination of these. Typical modules will be based on the conventional lecture, tutorial, seminar model, and may also include laboratories, practicals and field trips. Schools may have operational issues to address such as dealing with large numbers of students, improving levels of progression and retention, enhancing the quality and level of feedback, maintaining regular communication with placement students or distance learners, and addressing issues of accessibility. With all these aspects to consider, it is important to ask the following questions:

- **Why** do you wish to integrate e-learning into your learning and teaching?
- **Which methods** will best support your preferred pedagogical models?
- **How** can e-learning help achieve the desired learning outcomes?
- **What added value** will it bring to the student experience?

E-learning is firmly embedded in many of the current educational theories. For example, it is widely recognised that learning is a social process (Wenger, 1999, Vygotsky, 1978) and Fowler and Mayes (2000) explain how **learning relationships** can encourage the conceptualisation and re-conceptualisation cycle which facilitates deep understanding. They describe how interactive courseware and online discussions can play a major role in supporting these cognitive processes by engaging the learner in meaningful dialogue with tutor and peers. Laurillard's Conversational Framework (2001) also illustrates the crucial nature of **communication** in the learning process and highlights a series of actions and interactions which can be supported to varying degrees by new technologies.

Employing e-learning tools such as BlackBoard in this context can support a **constructivist approach** by encouraging student collaboration on meaningful activities, facilitate the development of knowledge creation and enable students to become more independent learners. In this way, virtual **learning communities** can develop and become important vehicles for motivating learners, sustaining their interest and supporting innovative and creative interactivity.

What makes e-learning different?

- A more **learner-centred approach** implies a change in role for the lecturer as s/he adopts a facilitative rather than didactic teaching style
- Online text-based discussions require a different style of **written communication** which contrasts with the oral presentations given in a classroom.
- **Materials** may need to be transformed into **new formats** for the online environment.
- Flexibility and off-campus learning can make **motivating students** a greater challenge
- **Establishing a community of learners** in the virtual environment will be a new experience for a lecturer used to dealing with face-to-face groups.
- **Authentic activities** need to be devised to support a task-based approach and to encourage online collaboration and effective learning
- **Time management** becomes much more important given the extended timescales involved.
- Managing **group work** online demands careful planning and monitoring

It's clear that effective e-learning involves much more than simply providing online resources and information, although that can often be a useful place to start. The implementation requires to be planned, managed and acknowledged by Schools and Divisions, and the process itself demands a high level of student support by lecturers who are not only confident in using the technology, but who also have well-developed moderating skills and an awareness of the diverse needs of their virtual learners.

The other guides in this GCU series address many of these areas in more detail. If you need help and advice with any pedagogical, technical or practical issues relating to e-learning in GCU, please contact:

APU: Academic Practice Unit apu.gcal.ac.uk, tel: 270 1323
eLISU: e-Learning Innovation Support Unit elisu.gcal.ac.uk, tel: 270 1330
CITTU: C&IT Training Unit cittu.gcal.ac.uk, tel: 331 3035

All are based in the Department of General, Academic and Professional Studies (GAPS) within Learning Services.

For different perspectives on e-learning, the LTSN Generic Centre E-Learning booklets provide another excellent resource. These are aimed not only at lecturers, but also at Senior Managers, Heads of Departments, Learning Technologists and Support Staff, and they highlight the main issues from a range of viewpoints. They are available to download at www.ltsn.ac.uk/genericcentre/index.asp?id=19519

References and Further Reading

Biggs, J. (2002) *The Reflective Institution: Assuring and Enhancing the Quality of Teaching and Learning*, Published online by the LTSN Generic Centre at www.ltsn.ac.uk/genericcentre/

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LTSN E-Learning Series (2003) www.ltsn.ac.uk/genericcentre/index.asp?id=19519

The full series of GCU E-Learning Guides is available to download from apu.gcal.ac.uk/pages/resources.htm

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