

Unit 2 Starting to use technology in teaching

If you are just starting to think about how you might be able to make good use of technology in your courses, but are perhaps unsure about where to begin or how much work this might involve, then please don't be! Using technology to support your teaching, and enhance your students' learning experience, really is within your grasp. This short unit aims to show you how, by presenting a series of examples that illustrate some simple but effective uses of technology to complement classroom practice. Hopefully you'll find something to try out!

1.0 Little blends, big benefits

It's important to realise that taking a blended approach to teaching doesn't have to mean re-designing your course to make extensive use of educational technology. The focus should always be on using technology in ways that are appropriate to you, your subject, your students, and your current good practice.

If you've read the introductory unit, you'll know that starting small is the way to go when first approaching the use of technology in your teaching. However you should also know that some of the most effective ways in which to use educational technology, whether you are new to doing so or not, often involve really quite straightforward interventions that don't take long to implement, or require any more technical expertise using the VLE than could be picked up in no more than a couple of hours. We can think of these kinds of approaches as 'little blends', where the emphasis is on enriching rather than replacing.

1.1 Some real examples of 'little blends'

Just take a look in the following interdisciplinary examples at the ease with which you can introduce a 'little blend' into your teaching. For each example think about the potential benefits for the tutor and the students, and then ask yourself 'Where might I usefully be able to do something similar?'

- **Romance language:** Students' persistently poor written language skills have prompted a Spanish lecturer to incorporate Spanish e-mail correspondence between UK, Spanish, and Latin American partner institutions. The lecturer is encouraged, as students feel compelled to write better to their Spanish 'e-mail mates' than in their course assignments.
- **Chemistry:** A chemistry lab professor creates an online discussion board in which experimental procedures, pitfalls and safety concerns are discussed before the real lab session. In her very first message she

includes a video clip of a lab class in which correct procedures are ignored and students are challenged to identify these as a group online. This has saved time (and glassware) during real lab sessions.

- **Religion:** A reader directs his students to consult a chapter in an e-book, which is accessible to all his mature students at anytime. Students are pleased to be engaged with oral, printed and electronic forms of instruction.
- **Nursing:** Students enrolled in an orthopaedics course are directed every week to the VLE to watch a different open source examination video which prepares them better for their practical. The lecturer follows up the video clip with an online self test which students can download onto their mobile phones or PDA's in order to reinforce key elements of the examination procedure whenever and wherever most convenient for them.
- **Computing:** A lecturer has a high proportion of direct entrants coming into their course from a partner FE college, and provides additional support for these students through organising guest access to VLE sites for the modules that were undertaken prior to them entering the course. To help provide further bridging support, the lecturer 'buddys' direct entrants with a previous direct entrant who has progressed to the next year of the course, with their communications facilitated via e-mail.

Hopefully at least a couple of these examples illustrate how simple uses of technology can have very worthwhile benefits. Now let's consider some further ways in which technology can be used to effectively enhance different aspects of classroom-based courses, specifically in relation to lectures, seminars, collaborative working, and the provision of tutorial support.

2.0 Enhancing lectures

There are many ways of using educational technology to support lectures, both in advance of and during the lecture. Just some of the possibilities include:

- **Providing skeleton notes online** Providing very basic outline notes online in advance of lectures can help students better prepare for lectures, and provide more 'space' within the lecture for students to listen rather than simply write. Skeleton notes also provide some structure for those who are new to note-taking, or need to improve their skill. Consider linking to a few key readings in skeleton notes so students can further prepare for your lectures. Providing definitions of key subject-specific terms within the notes can also help, particularly for international students who are then able to translate before, not during, the lectures.

Explicitly state that notes are provided in advance to enhance what students learn in lectures, with attendance still very much expected.

- **Get the students to write the lectures!** Not literally of course, but perhaps each week a different group of students can research the next week's lecture topic and then put together a short PowerPoint® presentation on what they've found out, and key questions they've identified. This could be provided to the tutor in advance of the lecture for them to add their annotations and additions, or could be used as is for exploring the topic in the lecture, with the tutor elaborating.
- **Make use of relevant multimedia** There's so much good, free-to-use multimedia subject material on the web. Why not elaborate upon explanations of particular topics by connecting to relevant examples during the lecture? This will enrich the lecture and aid understanding, and be particularly appealing to students who either have trouble visualising objects and processes, or who have a visual learning style.

You could also provide links to relevant multimedia examples in your own online materials (eg topic overviews, skeleton lecture notes).

- **Bring an expert in** Many modern lecture halls are well equipped with technology, and the ease of using internet video telephony these days means that it's actually very easy to bring a guest speaker into the lecture. Perhaps the students could decide upon key questions in advance, and the lecture becomes part guest lecture, part Q&A session. Alternatively, the tutor could provide a short lecture on a particular issue in the first part of the session, in which they would help their students identify key questions, before then chairing a Q&A with an expert guest.

► See [Unit 7 section 5](#) and [Unit 10 section 2](#) for more examples of freely available online multimedia resources subject to permissions.

3.0 Enhancing seminars

Through using asynchronous discussion boards or web conferencing tools (eg, Elluminate®) in particular, technology provides several options for enhancing or extending the traditional seminar:

- **Bringing an expert in – again!** But this time using a discussion board or via a web conference. Experts could be from the field, academic colleagues, or students from different disciplines or further on in the same course. The important point is that both communications tools aren't necessarily dependent on everyone being online at the same time. The discussion board is a time delayed communications tool and web conferences can be recorded for viewing at a later time. Both options open up the possibilities of students learning from the perspectives of knowledgeable others who themselves never have to fill out a travel form to be there.

One possibility is to have an expert 'hot seat'. Students explore an issue in advance through some key readings – perhaps including material from your guest, before deciding (maybe with the tutor's help) on a set of questions to post to the discussion board. The expert would then take some time to consider the issues raised before responding on the discussion board or prior to the synchronous web conference session. In this way they could even put questions back to your students for them to consider and respond to, before the tutor or expert provides a closing summary.

- **Online follow-ups** Encourage greater participation in subject-related discussion, particularly for those who are less forthcoming in face-to-face seminars, by having students (maybe in pairs) take turns to summarise seminar discussions, and post this summary online. The rest of the class can then be required to respond to this summary, either with key comments on what they learned from the seminar, or issues they are still unsure of. Alternatively, if the summary contains some follow-up questions, each student can be asked to provide a response to at least two.

Another good variation on online follow-ups, and which might be a better option when working with new undergraduates, is for each student to be asked to briefly summarise what they learned from the seminar, along with the one key issue or question they would like clarified. Each student then has to answer at least one question from a classmate, with the tutor providing their own input to clarify major points.

- **Making online seminars student-led** For more advanced students, you can take the idea of extending seminars further by having students open up, contribute to, and help close online seminars. This will help facilitate involvement in deeper subject-related discussion, as well as allowing experienced students to take more direct responsibility for their learning.

4.0 Supporting collaboration

Collaborative working is critical to understanding and the development of interpersonal and group communication skills, but can often be hard to support. Students can have problems managing group-work due to inexperience, or outside commitments making group meetings difficult. Lack of shared working space to meet and share documents can be a problem on campus, and when tutors are asked to help resolve group-working problems, it is often based on conflicting versions of events that are given long after the conflict first began.

► See [Unit 4 Section 5.1](#) for conflict handling tips.

Possible educational technology options to help support campus-based collaborative learning by tackling some of the above issues can include:

- **The provision of group-working tips and advice.** Easily accessible for consultation online. These can either be written by the tutor, or provided via a link to a good study-skills site that has appropriate advice on group-working strategies, roles, and common pitfalls and how to avoid them!
 - **Establishing online group-working spaces** For sharing resources and documents. Students can easily establish their own shared spaces through setting up a blog, wiki or social networking space. Most VLEs, like WebCT, allow the tutor to set up private group areas and discussion boards.
 - **Making the group process visible.** Consider asking students to take turns within their groups to write a weekly or fortnightly update covering progress, actions assigned, and any problem issues. After the nominated student has circulated the report for agreement, this can then be posted to a group discussion area that is also open to the tutors. This will give the group and the tutor with a means of monitoring progress, and provide documentation of agreed decisions and responsibilities that can be consulted should any group conflict need arise that the tutor needs to address. Using discussion boards this way also provides an easy means for the tutor to provide advice and guidance at key points.
- See [Unit 5 Sections 4 and 5](#) for more guidance on online collaboration.

5.0 Improving tutorial support

Tutors often find themselves repeatedly dealing with common questions. With large classes, the number of queries the tutor might be expected to deal with in person or through e-mail can become particularly problematic. For students, the concern might be with the anxiety that results from not receiving help on or near the point in time at which it is most needed. Again, in this area educational learning technology can be used in fairly simple but effective ways by:

- **Providing readily accessible online advice.** Providing general advice on study-skills issues via external links, or subject-related advice on a simple FAQ page, allows students to get immediate access to guidance prior to, or even without, contacting the tutor. This may allow face-to-face tutorial time to be used to address more specific concerns.
- **Establish subject and coursework problem forums.** In a similar vein, using discussion boards or web conferencing tools to handle general subject and coursework-related questions can be a very effective way of ensuring the tutor only needs to answer common questions once. The idea here would be to inform students that all general questions should be posted to the relevant area on the discussion board, where the tutor will answer them for the benefit of the group. Students could also be required to help one another to encourage collaboration, and also reduce reliance on the tutor. Live web conferencing sessions (or so-called “virtual office

hours”) can be scheduled in advance for more personal support at a distance.

- **Providing links to good self-monitoring tools** Maybe there are good interactive tests or simulations in your subject area that are freely available online, subject to permissions, and which your students might find useful as an additional means of monitoring their developing understanding. These might be available as part of an electronic textbook, or in an online repository. There’s a lot out there, and you may well be able to find something very valuable to point your students towards.
- See [Unit 8](#) for more guidance on supporting the online student.

6.0 Taking it further

Remember that you don’t need to use technology in particularly sophisticated ways to realise the benefits it can offer to yourself and your students. Thinking about what you could usefully do to enhance your courses in the types of ways described in the examples above is an excellent way to make a start, and you may find that implementing just one or two ideas like these can add a significant new dimension to how you teach, and how effectively your students learn.

7.0 Further reading

Bonk, C.J. and Graham, C.R. (Eds.) (2006) *The Handbook of blended learning: global perspectives, local designs*. San Francisco, California: Pfeiffer.

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