

Enhancing Learning and Teaching through Technology: Lessons from case studies

In 2008 HEFCW published a ten year strategy for the enhancement of learning and teaching through technology for higher education in Wales from 2007/08 to 2016/17.

The strategy emphasised the enhancement of learning and teaching facilitated and supported by the use of information and communications technology (ICT), referred to as *Enhancing Learning and Teaching through Technology (ELTT)*.

This leaflet summarises contributions from higher education institutions in Wales on:

- work that has had an impact and/or transformed practice within the institution;
- work that has the scope to be readily embedded within other disciplines or institutions; and
- work which was trialled, was unsuccessful, but which provided some useful lessons.

We are publishing these practices in order to share experiences and encourage consideration of alternative means of enhancing learning and teaching through technology. Our aspiration is that this leaflet will encourage further collaboration between institutions, and facilitate embedding of good practice developed within the sector.

What features do 'favourite' case studies tend to have?

- Regular **communication** with both staff and students to engage them fully in the process of identifying and informing the use of appropriate technology-enhanced learning and teaching provision, processes and practice, developing shared practices.
- Clearly outlining the **benefits** of implementing new technologies to staff and students, along with the **support** services available to assist them with its use.
- The development and implementation of a robust **framework**, developed in accordance with the mission and context of each institution, to ensure consistency in approach and enable the implementation of integrated processes. In some cases **existing frameworks** can be utilised, such as the [Blackboard Exemplary Course Programme](#), which focuses on

recognised good practice while also serving as a form of benchmarking.

- Utilise **existing evidence-based principles** already promoted by external agencies such as [Jisc](#), the [HE Academy](#), and the [Welsh Video Network](#). These include principles such as constructive alignment, deep learning and reflective practice.
- **Strong leadership** at senior management level with buy in and support from the offset. This enables effective practice to be cascaded, and ensures collaboration between traditionally separate functions and roles within the institution, eg between library and information services/other student services, and academic departments.
- Creating a link between the provision of learning and teaching enhanced through technology and the institution's **marketing** activity, recognising its role in ensuring HEIs in Wales maintain competitiveness in the global marketplace.
- Ensuring staff are aware of how technology should **most effectively** be used to enable adoption of new attitudes and ways of working.
- Using **staff development** activities and **bespoke** training to place the technology-enhanced tools, processes and practices into the context of the specific institution and its needs, ensuring that it is

relevant with the potential to be integrated centrally within an institution.

- Building **reflection and analysis** into practice. Feedback from both staff and students suggests that this was an area that they would wish to integrate into future practice, via methods such as focus groups, blogs and other online forums, in addition to traditional benchmarking exercises.
- The implementation of **peer support, review and collaboration**. Due to the innovative technology-enhanced learning tools available such as blogs and wikis, this can be more readily implemented and accessible for the learner, encouraging active participation throughout the process.
- Ensuring that effective practice in the use of technology-enhanced learning to transform learning and teaching practices is **celebrated**, through publicising successes and, where appropriate, through **staff recognition** and institutional awards.
- Remembering that technology helps **support** learning and teaching, but should not replace it.

What features make for a portable case study?

- Determining the extent to which students are able, and wish, to use their own devices (such as a mobile phone) for learning and teaching activities. This enables the institution to **target** investment and deliver **viable** activities in order to further implement technology-enhanced learning.
- Undertaking a **trial** on a small scale, perhaps departmental level, to develop an understanding of how a particular practice can be used on a day to day basis. If a trial proves to be a success and provides value for money, a business case can be made for investing in technology at an institutional level.
- **Collaborating** with other institutions to **share** good practice in technology-enhanced learning amongst staff. This enables staff to share experiences in an informal setting, develop a **network** of contacts, engaging with colleagues in a similar role, and discover **new ideas** to further enhance learning and teaching through the use of technology. A number of E-learning techniques can be used as part of this process, in order to illustrate their effectiveness in practice.
- Allowing sufficient **time** for staff to receive adequate training on how to use new technology and understand the **value** that it can bring to the institution's learning and teaching practices.
- Working in **partnership with learners** to enable the specific needs of learners to be addressed throughout the development of any new resource. This will achieve **mutually beneficial** outcomes for staff and students, and in turn ensure that students have a high level of **engagement** upon implementation of the resource.
- Developing **peer learning networks** to provide an online platform for students to access both social and academic support, through the development of **learning communities**. This approach enables **flexibility**, and has proven to assist users to overcome key barriers to progression, including isolation and loneliness caused by the lack of a social network, and difficulties balancing work, academic and personal responsibilities.
- Using online tools, such as wikis, to facilitate **group work** among students. This enables students to **collaborate** at a time and location that is most convenient for the individual student, providing an alternative for those who may find it difficult to contribute in a classroom environment. Using this type of method also enables tutors to evaluate the contributions made by each individual student.

- Using digital tools, such as blogs and social media, to improve the **marketing** of information and library services that are available to students.

What lessons have been learned that can inform future work?

- Ensuring appropriate **resource allocation** for technology-enhanced learning tools and equipment, in order to ensure that they are centrally available within the institution. This will ensure that a wider group of people are able to benefit, rather than usage being limited to specific departments.
- **Clarifying** what staff wish to achieve through the use of technology-enhanced learning, and understand that due to the **limitations** of certain software alternative methods may need to be considered.
- Ensuring that any technology-enhanced techniques to be implemented **significantly** enhance learning, and can be used to determine the level of students' understanding and encourage deep learning, rather than simply testing students' knowledge retention or surface learning.
- Addressing **perceptions** among staff from the start of the project, particularly the perception that the use of E-learning tools will lead to an increased workload and time commitment.
- Supporting **innovative practice** in order to ensure institutions are up to date with wider technological developments, therefore enhancing both staff and student experience.
- Recognising that not all techniques that are trialled will be fit for purpose or come to fruition, but that there may be **unexpected outcomes** that can inform future work in this area.
- Identifying key members of staff to act as **ambassadors** for the use of technology-enhanced learning tools, and consistently **demonstrating successes**, will encourage buy-in across institutions.
- Understanding that the **benefits** of enhancing learning and teaching through technology may not be immediately obvious, but will extend capability in the medium to long-term.
- Recognising that logistical or technical difficulties can **hinder** effectiveness and efficiency during the initial stages of a project, and that it can take time to embed activities into existing learning and teaching practice.

The case studies and the list of contributing institutions can be found at www.hefcw.ac.uk/policy_areas/learning_and_teaching/ELTT.aspx

