

SMS in Undergraduate Lectures at University of Nottingham

www.nottingham.ac.uk/geography/contacts/points/teaching.phtml?name=mount

Nick Mount is an innovative lecturer in Geography at the University of Nottingham, who won the Lord Dearing Award in 2007 for innovative teaching.

Tags:

HE, Data sharing, Personalisation, Student voice

Harnessing technology system outcomes:

Technology confident effective providers

Engaged and empowered learners

Sectors:

HE (particularly 1st year undergraduates)

Innovation

Students can text questions during lectures, and these are addressed by the lecturer in real-time. Similarly, they can text a glossary of terms at any time with definitions returned automatically to their phones.

Background

The target group is first-year undergraduate students of geography, commonly comprising in excess of 200 students. A significant proportion of their learning takes place in large lecture theatres that are, for many, an intimidating learning space. As such, teacher-learner interaction within the learning space is almost non-existent, with many HE students lacking the confidence or spoken English skills to express themselves and ask questions during lectures.

Technology

Nick first saw the potential of texting for addressing the above concerns at a handheld learning conference at Goldsmiths. SMS provides an anonymised way for students to interact with lecturers in real time during face-to-face teaching, thereby breaking down the barriers to learning imposed by the learning space and encouraging teacher-learner interaction. The technology is accessible, ubiquitous and it works.

Students use their own mobile phones to text questions during lectures, with the lecturer receiving texts via a web-based application that is very similar to most web mail services. SMS is something students have ready access to and most are on contracts such that the cost of sending texts is negligible.

A text number is rented from a web provider (www.txttools.co.uk) together with the web-based application account. Incoming messages are received free of charge and outgoing messages (for example, glossary responses) are charged at about five pence each. In addition, students can text technical keywords and receive an automated glossary entry during lectures. The system also supports voting, but this has a small delay on it due to differing speeds of mobile providers. Administration staff also occasionally use it to broadcast urgent messages to all students, such as lecture cancellations.

Teaching and learning

Nick considers first-year undergraduate learning to be 'a broad church', and learning syllabi content is only one aspect of this. The use of SMS helps students learn how to express themselves using a technology over which they feel a sense of ownership. It encourages question asking and other interactions between the lecturer and students. SMS does not replace verbal questions and comments from students but broadens the channels of communication open to them.

A key aspect is the way in which students text questions and the lecturer responds verbally to the whole class, which allows immediate feedback during lectures. Nick organises his lectures into blocks of teaching interspersed with five minute interludes in which he addresses any texts that have been sent. In practice this is typically up to eight texts at a time. Nick also starts each lecture by addressing any texts that have arrived since the previous lecture.

In addition, Nick displays technical words key to the lecture at the top of each slide. Students can text a given word to receive an immediate glossary by SMS.

Impact

Evaluation centers on usage logs to monitor uptake of the service and staff-student consultative committees for getting feedback from students. This has been very positive. Student support for the system is exemplified in February 2008 by the student representative's request to extend the texting facility across wider modules at the staff-student consultative committee:

GIS – request to extend the texting facility to other modules.

Excerpt from SSCC minutes, School of Geography, 18th February 2008

Anecdotal evidence of student uptake of the SMS system further suggests that students like the system. In the academic year 2007/08, 90% of first year students registered for text messaging with 96% in 2008/09. Eighteen members of staff presently access the system.

The txttools system allows access to usage statistics. For example, key word glossary requests have been tracked, revealing very high usage, and students have reported they find this feature very useful.

An average of 7.9 inbound messages is received per lecture. The glossary contains 39 terms related to the Geographical Information Science module, with 132 glossary requests during the 2007/08 delivery of the module; equating to approximately 13 requests per lecture. One term with particularly high usage (16 requests compared to the 3.4 request average) was flagged to teaching staff to ensure a recap was covered in subsequent lectures.

There have been some unanticipated benefits. For example, a student with an undisclosed visual impairment, texted that he could not make out what was on the board and requested the colours be changed for the following lecture.

Challenges

Initially, Nick had to invest some time getting to grips with the technology, and the vocabulary young people use in the SMS medium.

Nick has found he receives some 'very amusing' texts, sometimes poking fun at him, so a sense of humour is required. This suits Nick's personality and informal lecturing style, and only one student has ever over-stepped the line with text content. However, a balance has needed to be found between policing the system enough to ensure inappropriate texts are avoided, but not policing it so much that students are put off from using it.

Wider adoption

There are several considerations if the system were to be adopted more widely across the HE sector:

- » Success seems to require an enthusiastic innovator. Nick has been surprised at the level of resistance to trying it out from some of his colleagues.
- » SMS only enhances certain forms of learning in particular contexts, but may detract from learning in other contexts. In particular, text messages are short and therefore suit 'the lower end of the learning taxonomy', but would be less well suited to higher-order learning and thinking.
- » Not all lecture halls can be expected to be equipped for using the system. For example, many departments have basement lecture rooms with no mobile network coverage.
- » The culture and rules in HE generally reject use of mobile phones for learning.
- » There are subscription costs, and costs per message-send. Whilst low, these costs will compete with other costs for any given department. An investment case therefore needs to be made, although a shift to university-wide adoption via Virtual Learning Environments would reduce the cost per student greatly. Nick sees this as desirable and possible within a five year horizon.