IntroductIon
Healthcare organisations have prepared for the swine flu pandemic and are implementing policies to deal with it. Likewise, healthcare education must prepare for the possibility that teachers and administration staff may be absent, so buildings may have to close. While both pre registration and post registration students may be ill, the latter group may also be prevented from attending classes if they are required to provide direct care and study leave is cancelled. Healthcare education must, therefore, prepare to use alternative teaching methods if teaching is disrupted by the flu pandemic. Educational organisations have quickly implemented various policies to minimise any possible disruption to students.

PolicymakIng
Policy is generally considered to be a directive to be implemented, normally through vertical structures such as those from government level, or more locally at an organisational level such as within a hospital or PCT. In healthcare and healthcare education, policy is sometimes viewed with suspicion, as a way of management imposing wishes, cost saving measures or efficiency savings. Conversely, patient groups may spend considerable time lobbying for policies to be accepted by government level. For an issue to be deemed relevant by a policymaking body, it needs to be timely, and there is sometimes a small window of opportunity for an issue to be turned into policy. Lord Laming’s (2003) report on the death of Victoria Climbié led to timely policy implementation. A raft of government policy on childcare was published, the most well known of which was Every Child Matters (HM Government, 2003). This green paper built on existing plans to strengthen preventive services and has since prompted numerous other policy documents.

After the death of Baby P (now known as Baby Peter), a review of the implementation of these policies revealed that in some authorities there was still considerable room for improvement, and this has been debated widely in the media (Fresco, 2008).

With the World Health Organization recently declaring the A(H1N1)v influenza virus as a global pandemic, various policies have been implemented quickly. These aim to prevent the spread of infection or to manage healthcare in the event of either an overwhelming number of patients and/or staff shortages due to a worsening of the pandemic.

In higher education institutions (HEIs), similar policies for managing possible disruption to teaching by student and/or lecturer sickness have already been implemented; these normally rely on an increased use of e-learning.

Policymakers at HEI level include a range of people including those from e-learning/educational development departments, Staff and student sickness during the flu pandemic may disrupt education; this article explores how to implement and measure e-learning strategies. This article looks at measuring the success of these alternative teaching methods by using the known tangible benefits of e-learning. Consideration should also be given to supporting students on placements during this time, and as a consequence, some possible future areas for development are identified.

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Heads of departments, academics, administrators and technical support staff such as those who manage information and communication technology services.

HEI POLICY FOR SWINE FLU
At the most basic level, any HEI policy includes ensuring lecture notes are made available via its virtual learning environment (VLE). These have been described by Lee (2009).

However, e-learning is much more than uploading lecture notes, and some HEIs have far more developed e-learning policies. Several authors have attempted to define e-learning (Clarke, 2008; Santy and Smith, 2007; Glen and Cox, 2006), while various education organisations have also attempted to do so, such as the Joint Information Systems Committee (2008) and the Higher Education Funding Council for Wales (2007). However, there is no common agreed definition of e-learning.

In developing e-learning, consideration should be given to the different learning styles of students (Honey and Mumford, 2006). To go some way to accommodating this, the use of discussion groups (Simpson et al, 2008; Vesely et al, 2007) and some advantages of asynchronous (at different times) and synchronous (real time synchronous discussion) have been outlined (Lee, 2009). Where necessary, training is offered to those who may still, for whatever reason, not feel prepared to manage such learning using VLEs.

Activists for e-learning or technology enhanced learning (as it is often referred to) are perhaps using the swine flu issue to push for further technology enhancements to learning. These people are policy implementers rather than policymakers.

Further enhancements to learning could be achieved by implementing technologies such as synchronous audio conferencing – either through the standard telephone, or a voice over internet protocol (VOIP) system, such as Skype.

The latter may also incorporate using webcams and is similar to videoconferencing. The video method can involve multiple screens so participants can be seen and the “lead” can simultaneously use presentation software such as PowerPoint. This system could be used by academic colleagues to meet synchronously. However, these interventions assume teachers have access to broadband technology if they are required to work from home.

Other enhancements to overcome possible teaching disruption may include podcasting and further use of HEIs’ e-portfolio system such as PebblePad (see www.pebblepad.co.uk). Some of this may include ‘blogs’ and therefore an aspect of Web 2.0 learning, although if used in a closed system, such as one belonging to an HEI, it is really considered to be Web 2.0 learning.

MEASURING THE SUCCESS OF POLICY IMPLEMENTATION
The real learning from this potential push to increased technology enhanced learning will come once the pandemic level has been reduced and healthcare with its associated education returns to normal.

It is always important to measure the success of policy implementation so e-learning activists should be considering now how hastily implemented alternative teaching methods can be assessed. It might be useful to have a framework to measure success.

There may be those who argue that the implementation of such methods during disruption to normal teaching has not been a success. However, this may be due to a failure to prepare staff or students adequately rather than a failure of the method itself. JISC (2008) discussed the tangible benefits of e-learning and the main themes are outlined in Box 1.

Cost savings
JISC (2008) suggested that the main cost savings are in relation to submitting and marking assessments online, particularly when there are large cohorts of students.

Some courses already involve an element of online submission. While it might be possible to implement this in some HEIs in the next few months, there is the issue of staff downloading, marking and returning assessments online. This is an example of where policies on submitting assessments may need to be adapted in an emergency.

Preparation must also be considered, as not all staff may be ready for such a shift in emphasis in marking, especially as some teachers may be “digital immigrants” rather than “digital natives” (Prensky, 2001).

The main resource efficiency is that, provided that there is adequate preparation, teaching can continue. This has potential cost savings as, once normal teaching resumes, staff do not have to be paid overtime to have buildings open in the evenings or weekends so that “catch-up” lectures can be delivered in traditional face to face settings.

Recruitment and retention
Although increasing numbers of applications are made online, administrators still need to process them. This may be disrupted during potential or partial closure of HEIs.

When considering student retention, successful support has been given to non-traditional healthcare learners via HEIs’ e-portfolio systems (JISC, 2008). This can be developed by personal tutors for tutor groups and by module leaders or even programme directors for specified groups of students. Specific students in placements can be similarly supported, individually or in groups, for example in particular wards.

Skills and employability
JISC (2008) gave examples of how healthcare students have been supported to become independent and adapt to practice settings. However, some of these examples may take too long to implement if teaching methods need to be changed quickly. In situations such as these, it is important to ensure the quality of teaching does not deteriorate.

However, case based scenarios (JISC, 2008) should be easy to introduce quickly provided that teachers have the necessary skills in online facilitation (Salmon, 2003). This may also benefit healthcare professionals carrying out post registration and postgraduate activity.

Students should be encouraged to record their professional development using their HEI’s e-portfolio tool and HEI staff should be able to support them in this.

Student achievement
E-learning gives students the opportunity for formative assessment and timely feedback.

Although on planned technology enhanced modules the assessment task(s) may be designed and validated to use technology during disruption to teaching, formative assessment may have to be used as a “bolt-on” and therefore it would be difficult to make it compulsory for students.
Teachers should ensure therefore that students are aware of the benefits of formative assessment, how it can enhance learning and therefore student achievement. Teachers who are accustomed to using technologies such as blogs as a bolt-on outside the classroom are likely to be called on by less experienced colleagues, not necessarily to use blogs but to share their experiences of giving feedback to “thinking out loud”.

Equally, those used to working in online communities will be aware of e-moderating (Salmon, 2003) (different from moderation in the assessment process) and, again, will be able to help less experienced colleagues.

**Inclusion**

E-learning can provide opportunities for those who may find attendance and course participation at a traditional HEI challenging because of mobility or learning issues.

However, alternative methods should include and not exclude those who are able to achieve in a traditional face to face setting. While students with specific learning difficulties such as dyslexia may prefer to listen to lectures in an audio format, not all students benefit from this technology, particularly those who are hearing impaired.

For example, a lip reading student may have learnt to manage in a face to face setting by using strategies such as sitting where she or he is able to lip read and may have mentioned this to lecturers.

During disruption, if teachers upload PowerPoint presentations and think it would be helpful to give a ‘voice over’ or use a technology such as Adobe presenter, it is possible that lip reading students may not be included unless a full script is also provided.

**Widening participation**

While JISC (2008) gave examples of how e-learning could help in planned widening participation, this may not be so important during short term disruption to normal teaching. Its report also suggested the concept of social equity. Here, there is the suggestion that academics should foster students who are capable of independent, reflective and critical thinking about, and hence engagement with, wider society (JISC, 2008).

During a disruption to teaching, a skilled teacher should be able to use technology such as a VLE to upload lecture notes, and to ask questions and present discussion starters at an appropriate academic level that helps to develop these skills.

**Other benefits**

Students may benefit as they are able to attend and participate in online discussions while still caring for their families at home.

Using different technologies may help to deepen learning, especially if students have the opportunity to listen or time to reflect in an asynchronous discussion before responding.

For teachers, preparation for such disruption may lead to their professional development either in e-learning generally or in one specific aspect, such as using a particular technology. Alternatively, some teachers may be challenged to reflect on their teaching and consider different approaches for different aspects of their course.

**APPLICATION TO PRACTICE SETTINGS**

While this article has so far considered using technology enhanced learning in classroom settings, consideration can also be given to supporting students in practice settings.

Although guidance has been given (NMC, 2009), students may receive less support from local link lecturers or practice education facilitators (PEF). Again, technology enhanced learning should be able to help and local initiatives may arise or current initiatives be further developed.

**REFERENCES**


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