If It Ain't Broken, Do Not Fix It: The Complex Dynamic Of Introducing New Teaching Methods In Ancient Third Level Education Institutions[*]

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Abstract

Ancient scholarly institutions can boast of a successful history of academic excellence going back centuries. It is not surprising, therefore, that the lecturing staff that have best assimilated such spirit show a certain reluctance to change their ways, particularly when teaching features as second fiddle to research and is very much the exclusive domain of the lecturer. The purpose of this letter is twofold: First, to offer our academic and administrative colleagues an instrument for reflection on the suitability or otherwise of e-Learning as applied to third-level education, since e-Learning features in the strategic plans of many third-level institutions today, in spite of the fact that many among the teaching staff might not have grasped the concept of e-Learning. Second, the letter also aims at pointing out some genuine objective difficulties posed by trying to implement instances of rapidly changing technology in what could well be considered a bastion of conservatism, that is to say, the teaching methods of academics that have succeeded in their research field and have long experience in teaching largely as they themselves were taught three or more decades ago, as suggested by the wise adage; *if it ain't broken, don't fix it*.

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1. E-Learning

In my opinion, a power-point presentation or a video-recorded collection of memorable lectures on a given topic does not qualify by itself as e-Learning, although it could be an element of it. The reason why it is not e-Learning is that the knowledge acquired by the person watching the slides or video is not probed, and therefore its effectiveness as a learning tool remains unknown. I define e-Learning very simply and functionally as the learning of legitimate third-level whole courses delivered in a virtual learning environment (VLE). Here 'legitimate' means that it is the subject of examination. A VLE in turn can be defined as a piece of software for teaching and learning with a view to provide each individual student with legitimately scoreable outcomes (or marks), integrating a range of teaching instruments involving the timed and secure delivery of text and hypertext, one-to-one and one-to-many communications beyond the actual learning materials, static and dynamic image and/or sound, and including online references, exercises and exams that constitute in part or in full the year's-end mark the student obtains for the subject. Interactions student-lecturer can occur as blended learning—as the lecturer faces the students in the computer room—or as distance-learning, with direct or delayed interactions, via skype or email respectively, possibly following a standard face-to-face lecture.

Before we continue with our subject some words should be said about what e-Learning is not. As with any teaching method there can be found good and bad practitioners, but this does not necessarily say much about the research quality of the lecturer. It simply says that a successful researcher can be a poor teacher, and vice-versa. E-Learning is not a device to conceal bad lecturers, and it will not make all lecturers good instantly. Neither is it a method to facilitate lecturers' absenteeism; all experience indicates that e-Learning is more demanding of lecturers' time than traditional methods, but that this is for the benefit of the student. In truth, we are talking about a long-term process that requires monitoring and standardization, which are sadly absent in traditional third-level teaching. How teaching quality should be objectively measured remains an open question. A degree of student satisfaction at different stages of the course is necessary but not sufficient. Anonymous student assessments of lecturers and courses seem to be made to satisfy a politically correct desire to elicit student involvement, but there is no guarantee that it is a valuable contribution to the assessment of courses or lecturers. Neither is the lecturer's self-reported satisfaction obviously better.

Let us consider first some objections often levelled against e-Learning as compared to the traditional face-to-face lecturing:

1. The essence of third level teaching is personal contact with an experienced lecturer who masters the subject and communicates inquisitiveness and enthusiasm through body language that is not amenable to computerization.

2. While providing technological commonality, which is desirable, e-Learning might not respect individual and institutional teaching peculiarities and styles.

3. It does not guarantee the students' individual work, nor absolutely secure an individual returns for exercises, exams or other testing interactions.

4. Marking, specially of essays, can never be automatic.

5. E-Learning immerses the lecturer into the tumult of commercial advertising of educational products of all kinds. It requires some form of institutional or external authority to regulate and standardise the available teaching technology across an institution or an entire region, or at least to establish a minimal accessible standard.

6. It needs to elicit teaching staff's commitment to the method throughout entire institutions, or at least through academic teaching units such as Faculties, Schools, Departments. This encounters two major obstacles: a) a considerably steep and long learning curve for the teaching staff b) constantly changing technology, including yearly 'updates' of VLEs. But absence of such relative homogeneity of use in an institution detracts from the technology in the eyes of the student, who faced with traditional and contemporary teaching methods simultaneously, considers that he/she is used as an experimental subject in an educational project.

7. One possible limitation of e-Learning that is demanded by fairness to all students alike is that it strictly requires that exams and some exercises should be simultaneous for all students taking the course, unless the lecturer can afford setting several exams for different students that work a-synchronously.

E-Learning offers obvious advantages:

1. Since all learning entails repetition, e-Learning provides the obvious advantage of easy repeated access. Systems of monitoring students' engagement with the course contents should be developed, because simple tracking of students' time spent on the course or number of times the course was accessed by a student can easily be meaningless.

2. Provided that engagement with the course contents can be effectively monitored, e-Learning can be seen as fostering individual work by each student, as she/he is required to sit down and confront the course contents and exercises. Whether reading from a screen or from printed copy makes a difference in the rate of retention and understanding of the contents is a point that should be investigated further, my personal impression being that reading printed material is preferable to reading from a screen.

3. The right choice of VLE must be eminently integrable with administrative or other databases, such as registration databases, so that upon registration to a course students are automatically and immediately enrolled in the course list through the VLE and acquire access to the contents, exercises, timetables, lecture room allocation, venue changes, seminars, tutorials etc. as dictated by the respective lecturer.

4. The VLE should permit continuous monitoring of a student across all the courses or modules that a given students might have chosen, and this should be beneficial for the student him/herself and for their tutor.

5. It should also be integrable with library resources, and permit student cross talk.

6. Live sessions on problems or special topics could be organised at agreed times, simultaneous and live via skype or discussion board, or delayed via internal email. Such arrangement, which could be demanding, could extend, if desirable, the number of students registered to do a given course across regional or even national barriers.

7. A technologically uniform podcasting system for example would seem to be a very desirable development. A common standard of powerpoint presentations including sound files with the lecturer's voice moving along the slide show is a very simple advance currently available to all lecturers and students, which does not preclude the traditional face-to-face method.

8. Perhaps the most important advantage of e-Learning is that it provides an opportunity for lecturers and institutions to reflect on the way they lecture, and on possible ways to improve it. One could ask, with Bain (2004, pp.98-135) whether students are seen merely as recipients of set contents, whether they are asked questions throughout the class, whether they are encouraged to learn outside the class, if they are encouraged to compare, apply, evaluate, analyse and synthesize, or just to listen and regurgitate? Whether problem-solving, or the case method, or some other method is the most suitable for the discipline we teach? The answers do have a bearing on the way courses are delivered.

2. Collaboration

Collaboration among third level institutions in teaching similar subjects, and among students in learning is a subject worth addressing only in so far as it is accepted that different institutions teach at different levels and for different audiences. It could be said that Biochemistry, or English, for instance, are the same everywhere, but this is clearly fallacious. Different teachers emphasize different parts of the discipline, and have different applications in sight. At third level, genuine local expertise grows in a relatively secluded and specialised intellectual environment. Collaborative research is often undertaken by laboratories in different countries, and in a small country or region it is unlikely or perhaps even undesirable that very similar research areas are developed too closely. For this reason, the best research-led third-level teaching can hardly be shared without a real chance of it losing its communicable enthusiasm and experience in the subject.

Collaboration among different bodies within an institution should also be considered; for instance, what is the domain of the undergraduate or the research library, of the education department, the Information Services, staff development, etc.

On a wider scale, it could be debated next whether there would be any advantages in sharing teaching technology within the region; for instance, in having a common VLE hosted in a central server, with each college being able to brand or modify their own instance of the VLE in their own way. This would facilitate students and teachers who migrate among colleges, and also it would facilitate the creation of an inter-colleges centre of excellence for e-Learning, where software usage, data, and developments in other regions could be investigated, new

software tested and developed, and training of teaching staff provided. It would also facilitate a centrally located storehouse of digital technical, scientific and educational literature, whereby colleges, departments or teachers could subscribe at fractional costs, and of teaching 'atoms' that different people could integrate in their own courses. For instance a good simulation of an experiment, or a commentary on a text, or access to digitised archival material could make the range of courses and exercises possible immensely adaptable to local expertise.

3. Discussion

E-Learning enthusiasts will have to prove that their method can overcome the flaws and capitalise on the advantages that are perceived today, and this will take time, inventiveness and perseverance. Historically e-Learning was used initially in primary schools, where the problem of numbers of pupils is most acute as the entire population needs to be served. Much of the primary and secondary level e-Learning came wrapped in Vygotsky's philosophy of social constructivism (Vygotsky 1978), where pupils learn together and teach one another in an informal atmosphere, and where teachers are seen merely as facilitators, and not as authority figures. This politically-correct model may not be applicable, or even desirable, for third level education, where there is a natural competition for marks among the students, and where in most subjects individual student understanding and individual work are rewarded, where individual capabilities, for instance for essay-writing, or to obtain numerical solutions to problems need to be tested, and where the lecturer needs to be seen as an inspiring authority in his/her field.

In my opinion and modest experience, both as third-level student and lecturer, the value of e-Learning in higher education can only be assessed genuinely if and when it is used consistently and fully to grade third level students, and not simply as a temporary 'experiment'. In my experience, only if the student appreciates the commitment of the institution and the lecturing staff to a method of teaching will that method have a fair chance to deliver its full potential. Quite legitimately, the larger the institution the more varied the views will be, among teachers and students, about the value of a teaching method. There is little point in the administrative staff proposing the large-scale adoption of e-Learning in an institution if they are not carrying with them a sufficient majority of the teaching staff. There are two models to achieve this (never forgetting that some teaching staff could refuse to cooperate with any scheme); one is to assume that at least some of the current teaching staff will require the collaboration of teaching technologists, educational designers etc. to mediate between the contents and the student receiving the contents. And second, that openness to the acquisition of the necessary skills by the teaching staff can be established as a requirement to occupy a new teaching position. In either case, a culture change is needed in third-level educational institutions with regard to teaching, which is about to cease to be a trivial and unmonitored activity to become more standardised and open, following the transformation that research has undergone in recent decades. Perhaps in future peer-reviewed teaching could be added to peer-reviewed research, and lecturers ranked by their demonstrable teaching ability in a relatively more objective and transparent way.

The cycle of teaching technologies, or the period between the creation of a new technology and its being replaced by something different, has been estimated to be about 10 to 15 years, but it can be much less if we consider the frequency with which new versions of VLEs or other teaching software are produced. The rate of creation of new knowledge relevant to most disciplines is certainly shorter, as is the rate of emergence of entirely new teaching technology. This suggests that a mature lecturer aged 50, comfortably installed in his or her chair, and beginning to convert his courses using e-Learning technology, may need to get through not only two or three editions of his contents before getting to retiring age, but also, at least one change in the teaching technology. In-house periodical training in the later would seem an inevitable necessity, something that could be best done in the months of the 'long vacation'.

Students, especially if they have grown up in the social constructivist model of shared learning in their primary or secondary education, will always find ways of unfair 'collaboration' that make a mockery of many online tools for individual assessment. One way, not entirely satisfactory and rather time-consuming for the lecturer, to avoid this, is by 'personalization', or tailoring either the curriculum or the exercises and exams to individual students. This requires databases of subjects, questions, problems, essays, exams, etc. that can be shuffled from year to year to create unique profiles peculiar to each student.

In brief, while there is nothing wrong, and much that is good and irreplaceable, with traditional face-to-face lecturing in third level education, my claim here is that the new teaching technology and the use of VLEs and other instruments provides opportunities for improvement, motivation and standardization that have already taken place in the area of research, and which entail a commitment and a culture change in the minds of third level teachers and institutions. Currently, funding of third level institutions primes innovation and research, but this should not be at the cost of not innovating and making less arbitrary the students' educational experience.

4. References

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