

Technology and the Changing Educational Environment

A Case Study in Griffith College Dublin

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A brief history of Griffith College

Griffith College is a private third level institution which was established in 1974 in Dublin, Ireland. The college grew over the next thirty eight years to its present size with in excess of 8000 students on the Dublin campus and satellite campus' in Cork and Limerick. There are also many partnerships between Griffith College and other colleges and universities in both Europe and Asia. Currently the college provides professional courses in accountancy and is also validated by HETAC¹ to provide level 6, 7, 8 and 9² courses across a diverse range of subjects and disciplines. These include Business, Law, Fashion, Computing, Design and Architecture.

This case study examines how the introduction of moodle³, was incorporated into the college in 2005. The change heralded a change to a blended approach to teaching and learning.

A description of the change

In 2005 the directors of Griffith College decided to implement a course management system (CMS) called moodle. It is similar in function to Blackboard and Webct. A course management system provides the lecturer with a platform where all teaching material, class announcements and faculty news can be posted by lecturers without any prior knowledge of computer programming. Traditionally lecturers photocopied all notes and distributed them in class. The change to moodle would avoid this as notes and teaching materials could be posted on moodle in advance of each class and students could download the notes themselves. The directors also wanted lecturers to integrate moodle into their teaching and learning pedagogy, driving traffic to moodle using quizzes, forums, live chat rooms links to journal and many of the other functions assessable using moodle.

This case study will evaluate, critique and analyse how this change was implemented and how this change has impacted on the lecturing staff at Griffith College.

The motivation for the change

Child and Kieser (1981) suggest that change stems from both internal and external factors. In Griffith College the motivation for this change came primarily from the external environment. The multicultural student body, coupled with a changing external environment in education where blended approaches to teaching and learning are being encouraged, led the management team to move away from the teaching style that had prevailed hitherto towards a blended approach where all teaching material would be provided online. Blended learning is a fusion of traditional face-to-face

¹ HETAC. Higher Education & Training Awards Council

² These levels relate to the type of qualification awarded, level 6 is a certificate; level 9 is a master's degree.

³ Moodle: Stands for "Modular Object-Oriented Dynamic Learning Environment." Moodle is an open source course management system, originally developed by Martin Dougiamas. It is used by thousands of educational institutions around the world to provide an organized interface for e-learning, or learning over the Internet. <http://www.techterms.com>.

teaching with an online learning experience (Garrison and Vaughan, 2007). While the concept of blended learning seems intuitive and simple, effective implementation requires a change in the delivery structure of courses. Blended learning is not achieved by simply adding an online dimension to an existing formula of teaching. Blended learning is a 'fundamental redesign that transforms the structure of, and approach to, teaching and learning' (Garrison and Vaughan, 2007, p.5).

The approach taken to integrate moodle in the college

Burnes (1996) cites two main approaches to change, the planned approach and the emergent approach. The change under discussion in this case study falls into the planned approach to change. Lewin (1946) and Kotter (1996) also deal with how change can be implemented in an organisation. In the planned approach the objective is clear and the change can revolve around predictable and pre-planned steps. The success of this change initiative would depend on how the new idea is embraced by the lecturers, the leadership ability of the team driving the change and in the case of new technology the support given to ensure no one is left out of the process.

In the next section the foundations upon which the change is implemented will be discussed. It will be shown that many of the ingredients for a successful change initiative were present in Griffith College.

The factors in the college that facilitated this change

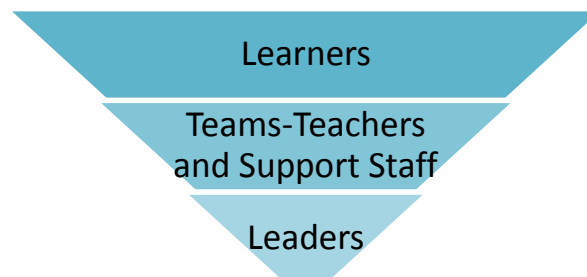
The Culture in Griffith College

The culture of an organisation is an important determinant in how successful any change initiative will be. Particularly in an educational establishment where the success of the change to moodle can only be achieved through the cooperation of the lecturing staff it is very important to assess the culture in Griffith College as a prelude to analysis of the change itself. Sociologists, anthropologists and economists have all tried to define culture and how it relates to a firm's identity. When attempting to describe the culture in Griffith College it helps to look at the values, beliefs and assumptions held by the staff.

In educational organizations, because lecturers have great autonomy within their sphere of teaching, change is most successful within a culture of professional accountability. Hord (1997) describes the characteristics of a professional accountability culture as one where staff has a shared vision, are committed to student learning and engage in collective learning. This is similar to Schein's (1992) definition which sees the culture of a group as a pattern of shared basic assumptions learned by a

group as it solves its problems, and that these values, having worked in solving problems are taught to new members. The part-time status of the staff ensures that many of the traditions and “ways we do things” is passed from lecturer to lecturer in the part-time lecturers’ common room. This “professional subculture” (Hofstede, 1981, p.27) is very evident in Griffith College.

The fundamental core values in Griffith College are embedded in ensuring top quality teaching and learning to the student body. The college and the lecturers have embraced the inverted hierarchy adapted from the ideas of Karl Albrecht, reproduced by Sallis (1996, P. 31).



This value system, where the learners are placed at the centre of all decisions is one where change initiatives, directed at improving the welfare of learners are embraced. Teaching is seen as sharing best practice with the learners and building a professional relationship with students. Students are facilitated and encouraged to achieve their potential in an atmosphere of openness. All lecturers are committed to ensuring that students are equipped to pursue further education or enter the workforce confidently. The assumptions in the college are that all lecturers are committed to their profession and strive to provide this. This is evidenced by the high levels of retention in the college and by surveys of students who will often comment on the excellent relationships they have build up with their teachers. The management team support all efforts to engage and enhance student learning by funding any technology necessary to implement change and also by facilitating training. A teaching and learning department exists in the college to enable training and educational excellence.

This focus on the learning and enhancement of students’ educational experience facilitated greatly the introduction of moodle. The prospect that all notes could be posted on moodle and how this could help students fed into the existing culture where the student’s needs were paramount. The vision for this change was that a community of learners would exist outside the classroom. The challenge for the organisation was to capture this enthusiasm and facilitate its implementation.

The Leadership style.

Greiner (1972) identified the different phases an organisation goes through as it grows to maturity. The leadership style required at each stage differs. As a company develops initially the leadership and drive will often emanate from the entrepreneur or individual who started the firm. Griffith College has developed exponentially from the small college that began in 1974. It has, over the years validated new courses, added an accommodation block, and built partnerships abroad. Clarke (1994) built on Greiners work to suggest that the management and leadership style should correlate with the stage of development the organisation is at. Using this concept, Griffith College would be at Phase 5, the final stage, on Clarkes scale, suggesting a leadership approach which was team centred, collegiate and built on the personal skill of participants would be appropriate.

Path-goal theory suggests that good leaders should define goals, clarify how these will be achieved, recognise obstacles and provide support. The introduction of moodle into Griffith College required such a leadership style and model. The culture of the college ensured that the subordinates (lecturers) would embrace a participative leadership approach where change would occur through collaboration between management and lecturers and between lecturers themselves. The leadership style in Griffith College did approach the change using a collaborative model where teams were formed to implement the change and lecturers were given freedom to adopt the change as they deemed appropriate. Leaders at this stage in a firm's development should act more as mentors and group facilitators (Senior, 2002 p249). This was the approach taken as is evidenced by the steps taken by the management team when implementing moodle.

An analysis of the introduction of the change

McLoughlin (2008) cites two ways in which the rapid development of technology has impacted on educational institutions. As students interface with computers and technology daily, universities need to recognise this reality in order to communicate meaningfully with their students. Irrespective of the content of the course the method of communication of material must move away from the traditional handouts to electronic means of communication.

Secondly, as university prepares students for life after formal education, it is crucial that technology and its applications are imbedded in all courses. It is important that students are exposed to different means of learning from didactic teaching methods to online forums, peer reviews and other tools readily available online. As Owen and Demb (2004, p.637) noted, the special challenge faced by colleges and universities is to preserve "vital core values" as they stretch towards "frame-breaking new realities". Ertmer (1999) cited resource barriers and individual internal barriers as the main obstacles to change where technology is concerned. There were few resource barriers

as moodle is web based and free, however some lecturers had issues with pedagogical practice change, reservations about the appropriateness of this blended approach and fears concerning copyright.

As mentioned earlier the values of Griffith College are a shared belief that the students learning environment is paramount and the focus is on enhancing the college experience to ensure academic excellence and sustainability. The sustainability of the college is important for the current cohort of students and also for the alumni. Innovations and changes that ensure the colleges sustainability are welcomed. However, successful implementation of change is not guaranteed even in the presence of a willing and able workforce. As Kotter (2002, p.1) noted “People change what they do less because they are given *analysis* that shifts their *thinking* than because they are *shown* a truth that influences their *feelings*”.

Research and Discussion

Primary research, carried out to establish the extent to which lecturers in Griffith College have embraced Moodle, involved a questionnaire distributed to all lecturers. The response rate was low at approximately 27% leading to a sample of 45 lecturers. As mentioned earlier approximately 23% of all lecturers in Griffith College are full-time and 73% part-time. The sample of lecturers in this survey mirror that split. It should be noted that the respondents self selected to reply to the survey and as such inferences drawn from this survey should reflect this fact. ⁴

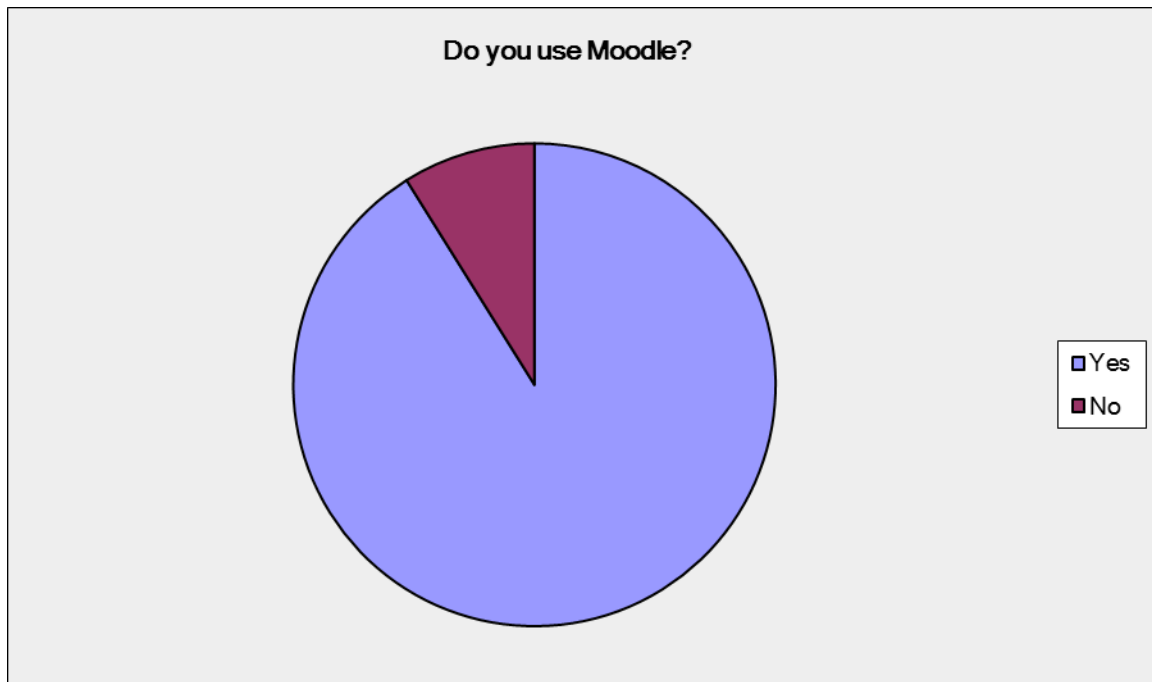
The survey sought to establish the extent to which the lecturers had embraced moodle and to identify both the barriers to its use and the factors which encouraged its implementation.

The survey was deliberately designed as a short questionnaire in order to encourage participation in the survey.

Graph one illustrates the proportion of the sample that currently use Moodle.

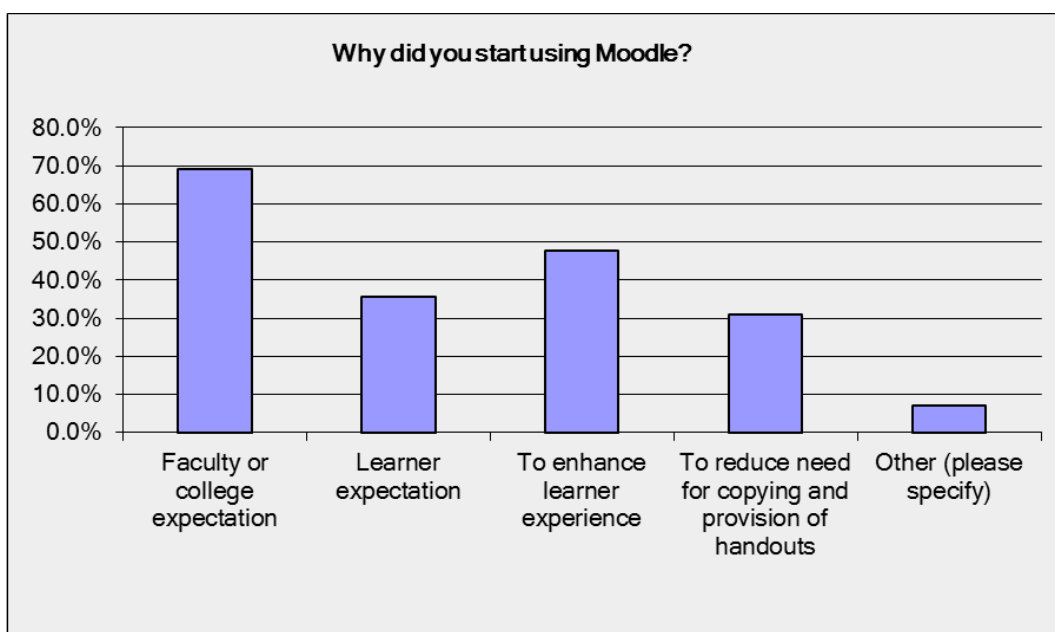
⁴ Total population 167 (129 p/t and 38 f/t) Response 45 (34 p/t and 11 f/t)

Graph 1: Lecturers using Moodle



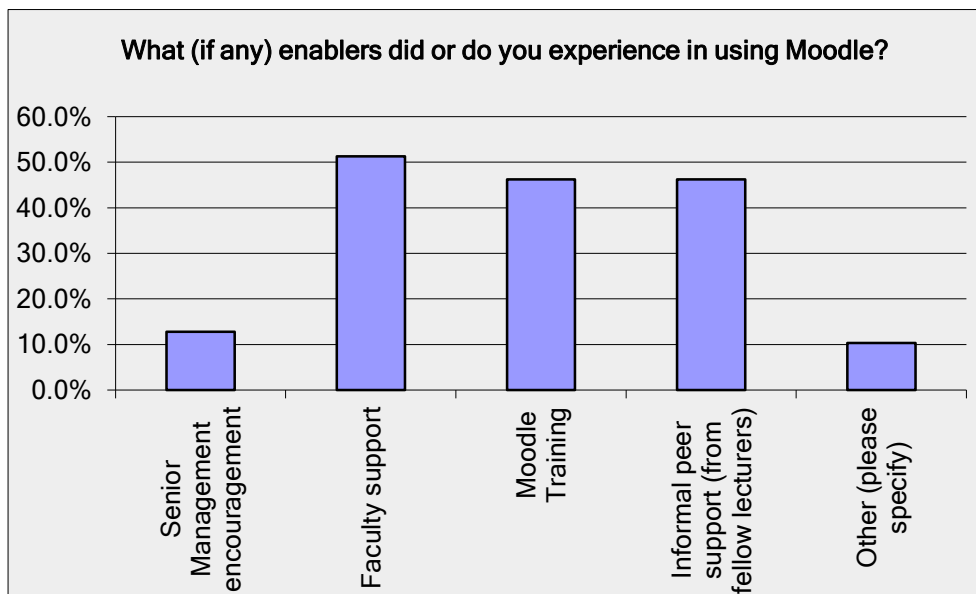
When we examine the motivation of lecturers to start using Moodle we can see the main drivers were faculty or college expectation (69%) followed by their wish to enhance the learning experience (47%) and learner expectation (36%). This supports the literature discussed above where a culture of professional accountability exists among lecturers (see graph 2) and the inverted hierarchy adapted from the ideas of Karl Albrecht, reproduced by Sallis (1996) discussed above.

Graph 2: Initial motivation to use Moodle



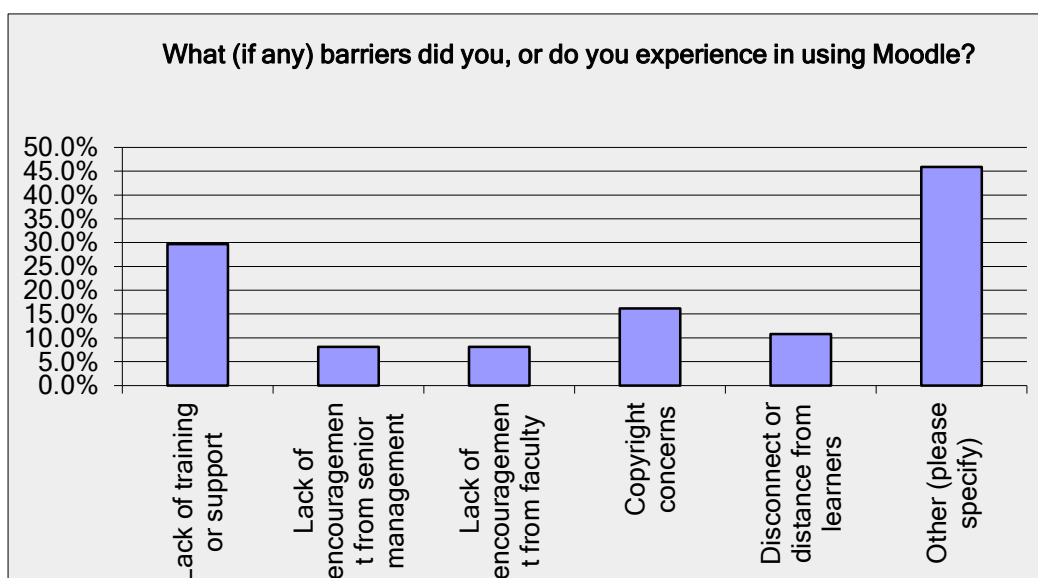
In seeking to establish what enabled lecturers using Moodle (graph 3), faculty support was considered the most influential (51%) which reflect the path goal theory outlined above, where managers and lectures collaborate to achieve the change (i.e. introduction of Moodle). This motivation was followed closely with Moodle training and informal peer support (both 46%). The informal peer support is reflective of the professional subculture Hofstede (1981) refers to.

Graph 3: Perceived enablers to using Moodle



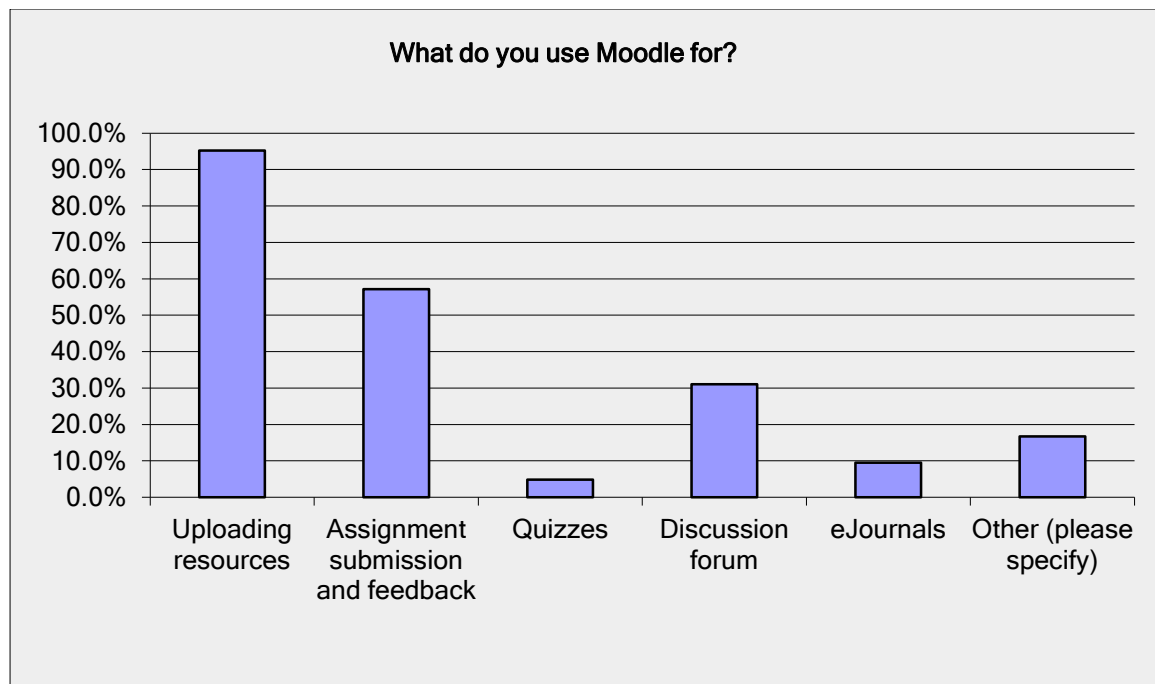
Conversely barriers to engaging with Moodle included primarily lack of training (30%). The 'other' category showed many (16%) lecturers cite lack of time as key barrier to using Moodle (see graph 4).

Graph 4: Perceived barriers to using Moodle



When asked what they use Moodle for (graph 5), lecturers primarily use Moodle for uploading notes (95%), accepting assignment submissions (57%) and posting notices (all those who responded to the 'other' category cited posting notices as being another reason). This supports the blended learning environment the college sought to encourage with Moodle. It supports Garrison and Vaughan (2007) observation that blended learning cannot be achieved simply by adding an on-line dimension. Whilst lecturers do indeed use Moodle to host notes primarily, they have embraced other uses such as assignment submission and video tutorials (evidenced in the 'other' category of same question).

Graph 5: Resources used in Moodle



Conclusion

Griffith College Dublin has experienced relative success in lecturer engagement with Moodle, primarily as a result of the culture (i.e. management and faculty expectation and support) in the college and lecturers professional commitment. A key challenge for the college going forward is the way in which they offer Moodle training. Lecturers may advance the manner in which they use Moodle (primarily resource uploading) with more informal and formal support mechanisms.

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