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Investigating impacts of elearning projects: Do they improve collaborative teaching developments?

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Abstract

The widespread introduction of elearning strategies has forced universities to adopt new and more collaborative approaches to educational development. eLearning in particular requires specialist skills and is currently driving this trend. At a large Australian research-intensive university with the mission to institutionalise elearning, there has been major investment in the establishment of a novel central team model (Ellis *et al.* 2007). This paper reports a study of the experiences of academic staff from Sciences, Technology and Health who were involved with the central team in developing elearning projects. Semi-structured interviews were conducted with participants, followed by thematic analysis. Preliminary findings provide insight into the impact on individuals and organisational units. The findings in particular address collaborative teaching developments and participants' reflections on working as part of a team. Critical factors for the success of projects were identified, including vision and leadership, curriculum need, and the functioning team. Issues identified include resourcing, infrastructure gaps, management patterns, and recognition and rewards. Finally, we make recommendations for improving the efficacy of elearning development teams.

Introduction

Universities are facing increasing pressure by governments to improve the quality of teaching (Bowden & Marton, 2004). The Australian Federal Government is tying funding to assessments of teaching quality (Ramsden, 2003). Employers are calling for universities to teach generic skills such as information technology to equip graduates for work (DEST, 2002). Pressure is also coming from the current cohort of students, the 'Net Generation', who have grown up with information and communications technology (ICT), and prefer a blended mode of learning and teaching, comprising of both face-to-face and online (JISC, 2007).

In response to these pressures, many universities are increasing the use of online learning in their units of study. Goodyear (2005) and Laurillard (2002) have written about the adjustment in the approach to learning and teaching required to improve the quality of online education in universities. Laurillard advises that, "Collaborative development is crucial for learning technology because of the range of skills needed. An appropriately balanced [development] team is the first step in quality assurance of the materials and services produced" (2002, p.227). While there is a growing literature on the experience and outcomes of elearning development project teams, there is little specifically reported on the team experience from the perspective of the academic staff involved. The exceptions primarily address the experience of the individual academic (Torrissi-Steele & Davis 2000; Roberts, 2003; Ham & Davey, 2005). This paper draws from an exploratory study addressing this gap in the literature.

Context of the study

As in many other universities, the University of Sydney has established a strategic plan to provide mainstream support for the use of ICT in learning and teaching (The University of Sydney, 2004; Ellis et al, 2007). One major initiative in the implementation of this plan is support of strategic elearning development projects within a project management framework to ensure project outcomes are met. Projects to be supported are identified through a staged competitive process (led by an academic director for each of three clusters of five to six faculties), designed to be developmental as well as selective. Central staff (the Flexible Online Learning Team, FOLT) are assigned to successful projects as project managers and educational designers, who work with academic staff in integrating ICT into their learning and teaching activities (Wozniak *et al.*, 2005). This initiative has been in operation since mid 2004 and elearning resources have been developed for a wide range of disciplines, as well as professional development resources for staff, through over eighty projects across the three clusters.

While evaluations have been conducted on specific projects, particularly on outcomes in respect to student use, reports from broader investigations into the impact of the initiative are limited. Research, using Rogers' Diffusion Theory (2003), identified that of the five attributes of the Rogers' framework, insufficient attention had been paid to the 'social system' (Mahony & Wozniak, 2006; Mahony & Scott, 2005). Some research has been published on the views of various stakeholders (Wozniak, Scott & Atkinson, 2006), which identified emerging understandings of the experience of academics among others involved in collaborative elearning projects. This paper reports from a study specifically addressing the experience of academic staff involved in elearning strategic projects.

Methodology

This research project was located within the interpretative paradigm, using a grounded theory approach (Strauss & Corbin, 1998). Our goal was to investigate how academic staff perceived their experience and to look for patterns emerging from their reflections.

Participants were academic staff who had been involved in the development of one or more of 38 of the University supported elearning development projects conducted in two of the three clusters (Sciences and Technology, Health Sciences). Between October 2006 and June 2007, following approval from the Human Research Ethics Committee at the University of Sydney, 79 academic staff, who had been involved between 2004 and 2006 with the strategic elearning development projects in the two clusters, were invited to participate in the research. They were interviewed at least six months after the completion of their project(s). Staff were assured that participation was voluntary. Eighteen academic staff agreed to be interviewed, making a participation rate of 23% of academic staff participants, representing 55% of the projects conducted.

Data were collected using a semi-structured interview which investigated the subjects' views on the impact of the project outcomes on their approach to learning and teaching and on staff workload. Participants were sent the interview questions in advance via email and were interviewed face-to-face or via telephone at an appropriate date and time. The interviews were conducted by one of the researchers who had not worked with the participant during the elearning development project. Brief notes were taken and the interviews were audio recorded and later transcribed. The researchers conducted a thematic analysis of the interview data, which revealed three major patterns on which this paper is reporting. These are: key impacts on staff, key issues and critical factors for success.

Findings

Key impacts

Analysis of the interviews identified two groups of impacts. The first is the impact of the elearning project on the individual involved. For many academics this was the first time they had been involved in a teaching development project that was managed by someone who was not in their department and that relied on input from a variety of other people, some of whom were also organizationally located elsewhere. This required good communication lines being set up and maintained and a level of professionalism from every member of the team to ensure a supportive and friendly environment for the life of the project. The second impact was seen to be on the organisational unit where it was apparent that the success of a project relied on the project processes in place and on the relationships between the various units involved. This was especially important for the projects with a whole of university strategic purpose.

Impacts on the individuals

Impacts on the individuals included teams, timing of projects, professional development and control issues. Many academics reported that the project had been a team experience for them. For some this was not originally expected; for some this was not a comfortable experience whilst for many it was a pleasant situation to be in. Learning to work in a team was a concern for some academics, including sharing of the workload. One respondent (T3) said, “And this is where I am very confused because I was never the person in charge... I don’t liaise directly with any of them.” On the other hand, another respondent (T14) said, “It was good to have the FOLT team there. It was good to have the project manager there because she kept tabs on where things were at and it was almost like you had your conscience speaking.”

Knowing and understanding the different roles in an educational development team was a new experience for many academics who had not previously questioned how they went about developing learning resources for their students. In some cases it would appear that insufficient effort had been invested in team development, leaving members of the team unsure of their responsibilities for the project. For some, just having a precise role rather than one ranging across setting the goals, investigating the background, choosing the delivery mode, etc, was a novel experience in that it shares the control amongst members of a team rather than on one set of shoulders; clarity on individual responsibilities was, however, needed. One respondent (T13) noted:

“The elearning bit was dealt with by the elearning team but the rest of us were sitting there doing our own thing. You think ‘Oh, the elearning team will do all of that.’ And then they say, ‘Where is the content?’ You think, ‘Well, it’s in my head.’ But, you know, somebody has to go on and do that, so I think we didn’t factor in those things so well.”

Further role issues centered on perceptions of control and where it lies. One respondent (T1) reported:

“I was just supplying content to a large degree for what someone else had in mind. I went in [to a meeting] wanting to put my views forward as to what might be a better way to take the site forward.... but [the project director] was quite inflexible....So, from my perspective, that doesn’t seem very collaborative.”

In academe it is accepted that creating your own teaching materials is often an insular activity. We accept that many academics work alone on this aspect of their professional lives and that working with others can often cause a leap in understanding of both the pedagogical basis of producing effective learning materials and the process by which this can be achieved. Some respondents, such as T12, strongly acknowledged the high level of skill(s) available in the team, noting:

“We had a team of four people and everyone had their role and we communicated very effectively, so the process of producing an online component took six months instead of a year, as we had planned. So it was a very good experience because it showed it was just a matter of getting the right team together and communicating effectively.”

Working in a team (maybe for the first time) requires academics to be open to the suggestions of others and to accept diversity of opinions. From our interviews, a certain amount of philosophical conflict arose within some teams, and this may have been due to the team being very large or because there was insufficient early communication and discussion about the overall project. Respondent T3 reported:

“The idea of using [discipline specific material] I was not comfortable with... because when the [non discipline staff] choose from the [student] script to illustrate a point, they might be including a fact which is wrong. Making sure what was being presented wasn’t reinforcing the wrong thing took a lot of my time.”

Either directly or indirectly, many academics noted the opportunities they had had for some level of professional development during the project period. Some academics reported that they considered it their responsibility to provide professional development opportunities for the members of their teams. From the large number of positive comments about personal professional development, many academics indicated that they valued the opportunities they had experienced. For example, one respondent (T11) noted, “More networking with people and sharing ideas...have helped me and I hope that my work on those projects have helped other people.”

Impacts on the organisational unit

Impacts on the organisational unit included discussions on processes, relationships between units, and the role and implementation of university-wide projects. For many academics the chance to share knowledge and ideas, and to work with others from other faculties was an important experience and one that they may not have necessarily previously

experienced. One respondent (T10) noted, “This has brought me in contact with a lot of other people and disciplines that are interested [in the resource].” Another respondent (T14) explained:

“I am fully supportive of having projects like this. I think they are important. They play an important role in getting people online, particularly people who have good ideas but don’t have structural support in their department to pursue it.”

Comments about the output from the projects varied but in general they indicate a willingness to investigate the efficacy of the projects and to disseminate the findings within an audience that is larger than their immediate colleagues.

Key issues

While the strategic elearning development projects appear to have had, on the whole, a positive impact on academic staff, a number of problematic issues were raised. These include funding to develop content for the elearning resources, rewards and recognition, capacity of FOLT to manage and develop resources, and technical infrastructure and forward planning.

Funding

One issue which affected staff satisfaction with the development of the elearning development projects was funding. FOLT expertise was necessary but not always sufficient. Limited avenues for additional funding for teaching development were available from the University and faculties. Where funding was made available, staff noted that the development of the projects was straightforward as it enabled the appointment of additional staff. For example, one respondent (T15) who used University funding to appoint a project officer noted, “If we didn’t have the project officer it would have made things a lot more difficult and I don’t think we would have been anywhere near as successful.” Another respondent (T17) highlighted the importance of funding to get projects finished:

“The biggest problem with these projects is that there is not the money to buy you out of teaching... I was very lucky because [the academic director] did find some money for me and there was a small amount to buy me out at the end to get the project finished. If I hadn’t had that, the project would still be sitting there. The head of school doesn’t want to hear about releasing a staff member for nothing, for the joy of writing a website... You have to look at the investment for people as well. You know, investment of their time and effort into something like this.”

Other faculties used funding to appoint additional team members, as content developers, research assistants and/or faculty-based educational designers. Staff working on large projects which didn’t receive funding reported heavy demands on their time.

Given that additional funding was often a key factor for the success of a project, one respondent (T12) noted that not all staff knew how to gain access to it:

“What’s stopping people from getting involved with online is that they just don’t know where they can get access to money and support, especially the elearning team. I wasn’t aware of it until [the academic director] mentioned it. I think that really makes a big difference... It’s there, it’s just not everyone knows about it or it isn’t pointed out clearly.”

Respondent T13 also pointed out the disjuncture between the University’s vision for learning and teaching and its strategy for helping staff achieve that vision, noting, “The University says ‘Let’s get involved in this.’ Where are the resources, the time, the money, the people?”

Reward and recognition

The lack of reward and recognition for being involved in educational development projects can limit the commitment to enthusiastic participation. Many respondents commented on this. They reported that they were under pressure to submit research grant applications and write discipline-specific research papers, rather than work on learning and teaching projects or educational research. The disjuncture between educational and discipline-based research was noted by one respondent (T17):

“We are supposed to be out there conducting research, attracting grants, and educational research is well known for attracting zero to almost no money. And the grants that the faculty offer are very competitive and are low amounts. It is just not worth people’s while if you are looking at ‘What research money have you

brought in?’ at the end of the year? And you can say, ‘Well I got FOLT hours.’ Well, they will go, ‘Well, yeah, so?’”

In talking about recognition, it was also commented that many academic units did not give priority to teaching developments. One respondent (T10) reported:

“Within my discipline there isn’t a lot of emphasis or effort put into innovation in the teaching of units of study. And to me that is a little bit disappointing because there is not a lot of dialog with the other people about it... People have said ‘Well, it’s great if it works but I don’t really want to be involved in it because it’s going to take time away from this, that and the other thing’ and that is a disappointment. That... is a perspective or a view that’s held and held on to a little too tightly for my liking.”

Capacity of central team

Another resource that has had an impact on the success of projects has been the capacity of FOLT to work with staff to develop resources. A number of respondents praised the expertise of FOLT educational designers. For example, one respondent (T9) said, “I can’t say enough good about the educational designers involved in our projects... The team was really good.” In addition, one respondent (T13) reported that working with the elearning initiative is better than working in isolation, noting, “They meanwhile can then give you the sort of expertise you need. I think that has worked much better, having seen both sides - trying to work on our own and then doing this elearning initiative - it’s much better.”

However, other respondents reported that the people assigned to them from the pool of educational designers were perceived not to have the skills needed for the project. One respondent (T9) reported that on one project, “The problem there was a lack of skills... and a perceived skill in listening to what the brief was and perceived skills or apparent skills in carrying out the technical design, and that was never resolved.”

The management model of the elearning initiative projects also attracted comment. While some respondents were pleased, others found problems with some of the management processes. One respondent (T11) reported on disruptions to work due to other the educational designers’ other scheduled commitments, for example conduct of the Application to Activate (A2A) scheme, the University’s quality assurance of sites on the learning management system. The respondent reported:

“I felt that it was very episodic. They would spend a couple of days working on the project and then for a couple of weeks they would be doing A2As or something like that... By the time they came back it was, like, ‘Where were we?’”

Comments were also made about the size of projects and the manageability of them. One respondent (T11) noted, “Most important thing I learned? How difficult it is to manage large projects.”

During the early project periods in 2004 and 2005, some respondents reported perceived errors in estimating the time required to develop projects, which resulted in some projects running overtime. One respondent (T10) who was involved in the elearning initiative in this period explained, “There was a miscalculation in the amount of time it would take from the elearning team... We had hoped to have the whole project ready... but anyway, only sections were ready.”

Another criticism about the early project period related to the strategy in some areas to develop similar projects together, in an effort to share knowledge. While one respondent (T17) reported, “It really didn’t really bother me”, another (T14) said this process increased the workload:

“We were asked to join forces with two other projects... and put the proposal in together as a combined proposal... Now, what ended up happening was that... my workload grew because I was the [project director] for that... I think the second time around they didn’t combine projects because of some of those issues that came up. It was good in another way, that I suppose that I got to meet and collaborate with a group of people but it took more time than it would have if it had just been my project.”

In addition, some academic staff reported difficulties working in a project management environment. Respondent T3 said:

“I found it a bit disconcerting that they were... providing... the IT support on the run. Not that I had a great agenda or anything like that but this business of um, well, you’ve got [the educational designer’s] time, you know, while she is doing three other things... um... and I just didn’t know how that whole thing functioned. I have never had the experience before... The other thing is I’ve never had the experience of working in one of

these teams of multidisciplinary sort of people, you know, and having... [a] manager with all her timelines and all that, sort of... managing and balancing various things. You know, I always felt I was a tiny little cog, you know, in this whole system.”

Technical infrastructure, including forward planning

Another set of institutional resources that affected project success was technical infrastructure and forward planning. Many frustrations were voiced about the lack at an institutional level of one or the other for elearning development. One respondent (T17) reported limitations with the institutional learning management system, WebCT, claiming, “One of the things that frustrated us a little bit was that WebCT obviously can’t do everything and it is fairly constricted in its approach to things.”

Because of this, some elearning resources were developed outside the institution’s learning management system and required infrastructure beyond that managed by FOLT. In other cases, desired infrastructure was not available (e.g. a database software solution) and complex programming was used to develop work-arounds. Respondents noted that investigating and organising this took up a great deal of time and distracted the project team members from their task of developing the resources. One respondent (T9) reported, “The building of it... all turned out to be much longer, take much more time than usual.” Another respondent (T10) noted that the University needs to think more strategically about infrastructure:

“If we want to give students flexible access to learning resources and if we want academics to take up this idea and to integrate it into their curriculum, we’ve got to have much more strategic planning in terms of how those resources are going to be placed and used... And because the students like it, again, they want to be able to use it beyond just that one unit of study. So that’s a bigger problem.”

As we move into the fourth year of the strategic elearning development projects, many of these key issues have been resolved. However, issues such as the paucity of servers and databases continue to hamper the efforts of some staff.

Critical factors for success

The third pattern emerging from the analysis, summarized in Table 1, concerned the factors which were necessary for staff to perceive that the elearning development projects had been successful.

Table 1 Key success factors

<p>Vision – the big picture Leadership – a driving force Curriculum purpose – agreed gap to fill or improvement to be made Project structure –project management structure Resources – usually a menu of several elements Functioning team – clear roles and responsibilities</p>
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These factors in general are not new to a project management approach. The project management approach to educational development was, however, new to many participants, and their reflections were typically presented more in comparison with their own experience of autonomous educational development work rather than in comparison with project management and project team standards in general.

Vision – the big picture

In analyzing the interview data, we found that there needed to be a clear vision held somewhere in the team. Communication of the vision was desirable, but not always essential, as outlined below:

“We probably didn’t get out of the project what we could have because it was constrained, which in a bigger picture perspective that I don’t have, may have been the best thing to do. So you never know, because you only see your patch of area.” (T1)

“I’ve been working now for nearly ten years to get staff to think through why they are selecting that content and focus on that rather than on the content they think every [name of professional] must engage with... I think it has probably achieved my goal of also getting staff to think a little bit differently about how they might be... not always delivering content.” (T8)

It wasn't, however, necessary for everyone to report they understood or agreed with the vision, but it needed to be present. Respondent T3 noted, "I am sure [the project director] knew what was going on but I sort of didn't have it clear in my mind."

On a broader note, one of the respondents (T13) wondered who was providing the overview of elearning across the institution and said, "You want people to be able to do small projects related to their particular units of study but you also want things that can move further and more laterally. And getting a mixture of that, I don't know who sees that, whether somebody centrally sees all that. Maybe after the event but not before. So we are not very good at planning that sort of thing out and people obviously don't... still don't quite understand where elearning could take them or how it could be included within their unit."

Leadership – a driving force

The vision was usually associated with a leader. This leadership may be located within the project team, as exemplified by respondent T8 who said:

"From my own perspective it was really about using a vehicle to upskill staff in the elearning area [in particular because of increased teaching of distant students] and that was why I was prepared to... get it off the ground, that was my major driver, I mean, it also dealt with some issues that we had in terms of curriculum development"

Leadership may also be at a higher level (e.g. a sponsor). For example, respondent T1 said she became involved with the project "because [the project director] harassed me."

Curriculum purpose

A clearly identified gap or need for improvement in delivering course curricula to students (or professional development opportunities for staff) appeared essential. When the purpose was perceived as having an impact broader than at the level of an individual unit of study, there was greater cause for collaboration. For example, respondent T5 said, "First year students...lack...understanding of some fundamental concepts", respondent T12 said, "Students wanted more feedback but we didn't have the staff to provide them with that feedback, so we needed to provide an alternative mode or component", and T9 wished to address the "espoused needs of academic staff".

Structure

Timelines, milestones and the need to meet agreements with external team members supported the environment for working together (although this approach was perceived by some as alien to the academic environment). Respondent T8 noted:

"I would say that the use of the... external team structure or the... access to, even if you want to call it, an external consultant... is a helpful model for us within the faculty because it provides a driver in and of itself. If it's just you and you know the guy in the office trying to sort something out, well, it gets, you know, forward and back and around about. Whereas I think the externality of deadlines and things like that is actually helpful in the current academic environment."

In contrast there were instances where this structure apparently was not present, as reported by respondent T11:

"Because basically what happened is that I just don't think anyone was clear what we were doing, how we were going to get there. And I think people were just not used to running projects."

Resources

Access to a *variety* of resources is necessary. Respondent T1 said:

"I think as long as you're clear about what you have to do and then you can delegate everything else, and you have the means in terms of funding to be able to delegate and buy someone else's time, to do the things that you absolutely don't have to do, then I think you're fine."

Clarity is needed about what skills and other resources are available and when. The University's elearning development projects model did not provide access to all the skills and resources that was perceived to be expected or necessary. Respondent T2 reported:

“I guess one of the difficulties I have with getting these projects set up is knowing what type and level of expertise there is available [in FOLT] to draw on. For instance, if I had access to [faculty-based staff person's name]..., I know exactly, I know his level of expertise, and that he's got a high level of technical competency, and sensitive and flexible approach to educational design that will adjust itself to the needs of the learning outcomes that need to be achieved. I don't know that about that team. I don't know that their, what their expertise,... background or training or knowledge or anything is in relationship to educational design. Nor do I know what the technical skills are.”

Many projects acquired other people (faculty level educational developers, web developers, research assistants) through a range of mechanisms, though most common was another University strategic approach, the annual Teaching Improvement Fund (TIF) grant round. (Access to this scheme varied: a number of small TIFs were available competitively in Sciences & Technology on a timetable which was positively associated with identification of other project needs; this was not the case in the Health Sciences.)

It was noted several times that there is a real workload attached to acquiring the resources needed in a project environment, as explained by respondent T12:

“So there is a bit of workload in finding the money. It is not like you get support from the school to do these things, you have to actually do that, and I think that's the time consuming bit, spending the time writing grants which is good, it makes you think the idea through and be very clear about where you get to but at the same time it takes time. It's, you know, I am trying to juggle... scientific research at the same time.”

Functioning team

A team provides a greater range and depth of expertise than could otherwise be accessed. In talking about the experience of working within a team on an elearning development project, respondent T2 said:

“That might be helping to inform what I think of as being the team approach to these things and I think it applies to teaching as well as to development. That teaching is not something that's just done by the expert, it's supported by a team of people.”

Roles and responsibilities of team members, however, need to be clearly identified and to match the needs of the project. As respondent T9 noted, “Except for the people problem in the middle of last year [a key person left the University and was replaced in the project by someone without the same set of skills]... the team was really good.” Another respondent, T11, reported, “The designer we had for [name of project]... just really didn't seem to have any idea what [she/he] was doing.”

In addition, expectations which are not framed in a team approach where team work is expected, lead to dissonance and frustration. In this sense, respondent T11 also reported:

“I wanted some practical help... I think at the beginning it wasn't clear the nature of the assistance we were going to be receiving. The word was phrased, it seemed to me, that we were going to get personal assistance. It seemed to me that somebody, I imagined that somebody would come here into the school one day a week for two or three months or whatever and help set up the, you know, how... we were going to do it, sort of thing... My expectation was that I would be personally, or the school would be, supported for a period to get its act together and then that would be made available to other people.”

Discussion

The nature of success

The interview questions were designed to prompt participants' reflection on both their experiences and on project achievements and outcomes. During analysis of the transcripts, one set of patterns emerged which we categorised above as 'key success factors'. 'Success' in this context was not limited to the standard criteria for project success in the project management literature, although those criteria are useful and most projects generally met the three common criteria of project success when considered in terms of the project agreement documents: 1. Finishing the project on schedule, 2. Keeping costs within budget, and 3. Meeting quality outcomes (or goals) that have been agreed upon by the project team and the project stakeholders (Baker, Baker & Campbell, 2003).

These elearning projects were strategic in intention, with intended outcomes not always included in individual project agreements: collaboration among academics was one. There were also individual and/or organisational unit agendas additional to those in the documented project agreements - these were implied or explicitly stated by participants in the interviews. Our findings further demonstrated that there was often a fuzzy grasp of the concepts of project and project team by many of the participants. Taking this into account for the purpose of considering collaboration, we have developed these success criteria for a project:

Necessary

1. Participants expressed a view that specified project *outputs* were achieved (Project)
2. Participants expressed a view that specified project *outcomes* were achieved (Project)
3. Participants expressed a view that participation in the multi-person experience was a positive experience (Individual)

Desirable

4. Participants reported achievement of additional positive outputs or outcomes relevant to the project purpose (Project/Organisational Unit)

The functioning team

The University's elearning initiative, by its very nature, led to the formation of development 'teams'. At least three persons: an academic, a project manager and an educational designer, were involved and were expected to form a project team; normally there were more than three people involved. It was clearly not enough to put these individuals together in a group and call it a team: this led to the emergence of the key success factor, the 'functioning team'.

Emerging from the interview data was a sense that few participants entered these project teams with an understanding of and commitment to a team approach, an approach which would include both clear identification of expertise, roles and responsibilities and an expectation to work together for a common purpose. This perhaps should not have been a surprise as the necessity to move from the 'lone ranger approach' to a team-based approach has been acknowledged by many (e.g. Taylor, 1998). In general, however, the importance of including educational designers, technology experts and the like is then foregrounded rather than what is required to transform a disparate group of academic staff, educational designers, web developers, graphic designers, administrative assistants, and/or research assistants into a functioning project team for a limited project period.

The identity of a 'team'

There also emerged what might be termed the struggle for identity, made visible by overlapping nomenclature. Hence, we had the Flexible Online Learning Team (the central group who provided project managers, educational designers), the academic teams (when more than one academic was involved), and even the educational design team (when the expertise provided by FOLT was differentially provided by two or more educational designers on a project).

Recommendations

These findings have highlighted for us the importance of:

1. checking individual project team member's conceptualisation of collaboration, teams and project management, and taking steps to develop common conceptions of the team, its identity and purpose
2. identifying explicitly the roles and responsibilities of each team member
3. embedding implicitly or explicitly activities which will develop all team members' understanding of, and respect for, all team members' roles and responsibilities as a group of individuals collaborating for a common purpose.

Allocation of time to project teams to address these needs is necessary. Process recommendations to support such activities are already embedded in recommendations for the development of student teams. Drawing on this existing literature of team building for the higher education context may be useful.

Conclusion

For collaboration to be improved, it is emerging that in projects such as those described here, more attention is needed to creating the functioning team. This has implications for the time allotted to these projects and the personnel mix assigned to

them. For the latter it is essential that an understanding of the goals of the project and the roles and responsibilities of all team members are facilitated.

References

- Baker, S., Baker, K. & Campbell, G.M. 2003. *The complete idiot's guide to project management* (3rd edition). New York: Alpha Books.
- Bowden, J. & Marton, F. 1998. *The university of learning: Beyond quality and competence*. London: RoutledgeFalmer.
- DEST 2002. Employability skills for the future. March 2002
http://www.dest.gov.au/NR/rdonlyres/4E332FD9-B268-443D-866C-621D02265C3A/2212/final_report.pdf [last viewed 28 May 2007].
- Ellis, R.A., Jarkey, N., Mahony, M.J., Peat, M. & Sheely, S. 2007. Managing quality improvement of eLearning in a large, campus-based university. *Quality Assurance in Education* 15(1): 9-23.
- Goodyear, P. 2005. Educational design and networked learning: Patterns, pattern languages and design practice. *Australian Journal of Educational Technology* 21(1): 82-101.
- Ham, V. & Davey, R. 2005. Our first time: Two higher education tutors reflect on becoming a 'virtual teacher'. *Innovations in Education and Teaching International* 42(3): 257-264.
- Joint Information Systems Committee (JISC) (2007) Student expectations study.
<http://www.jisc.ac.uk/publications/publications/studentexpectations> [cited September 17 2007].
- Laurillard, D. 2002. *Rethinking university teaching: A framework for the effective use of educational technology* (2nd edition). London: RoutledgeFalmer.
- Mahony, M.J. & Scott, K. 2005. Roger's diffusion of innovation theory and the 'Using Still Images Online' Project. *E-Learn – World Conference on E-Learning in Corporate, Government, Healthcare and Higher Education* 24-28 October 2005, Vancouver, Canada. CDROM.
- Mahony, M.J. & Wozniak, H. 2006. Roger's diffusion of innovation theory and professional development in eLearning: a case study of the 'CHS eLearning Resource and Staff Support Project'. In: Tulloch, M., Relf, S., & Uys, P. (eds). *Breaking down boundaries: International experience in open, distance and flexible education – Selected papers*, Charles Sturt University, Bathurst: Open and Distance Learning Association of Australia, pp.70-78.
- Ramsden, P. 2003. *Learning to teach in higher education*. London: RoutledgeFalmer.
- Roberts, G. 2003. Teaching using the Web: Conceptions and approaches from a phenomenographic perspective. *Instructional Science* 31(1/2): 127-150.
- Rogers, E. 2003. *Diffusion of innovations* (5th edition). NY: Free Press.
- Strauss, A. & Corbin, J. 1998. Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks: Sage Publications.
- Taylor, P. G. 1998. Institutional change in uncertain times: lone ranging is not enough. *Studies in Higher Education* 23(3): 269-279.
- Trigwell, K. & Prosser, M. 1997. Towards an understanding of individual acts of teaching and learning. *Higher Education Research and Development* 16(2).
- Wozniak, H., Scott, K.M. & Atkinson, S. 2005. The balancing act: Managing emerging issues of elearning projects at The University of Sydney. In Goss, H. (Ed), *Balance, fidelity, mobility: Maintaining the momentum? Proceedings ASCILITE*

2004 Conference. Brisbane Queensland, 4-7 December, 2005.

http://www.ascilite.org.au/conferences/brisbane05/blogs/proceedings/86_Wozniak.pdf [last viewed 28 May 2007].

University of Sydney 2004. ICT in Teaching and Learning Strategy

http://www.usyd.edu.au/learning/planning/docs/ict_in_tandl_strategy_2004_ver2.pdf [last viewed 28 May 2007].

Torrisi-Steele, G., & Davis, G. 2000. A website for my subject: the experiences of some academics' engagement with educational designers in a team based approach to developing online learning materials. *Australian Journal of Educational Technology* 16(3): 283-301.