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Renata Phelps
Southern Cross University

Toni Ledgerwood
Southern Cross University

Liz Bartlett
Southern Cross University

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Managing the Transition to Online Teaching: The Role of Project Management Methodology in the Learning Organisation

Renata Phelps
Lecturer
School of Education
Southern Cross University
rphelps@scu.edu.au

Toni Ledgerwood
School of Social and Workplace Development
Southern Cross University
tlledgerw@scu.edu.au

Liz Bartlett
School of Law
Southern Cross University
lbartlet@scu.edu.au

Abstract

This paper examines the application of project management methodology to the development and delivery of online units within University environments. While project management is acknowledged as having advantages as a methodology in certain circumstances, it can be argued that it is culturally and ideologically inappropriate for managing academic development. Online development which occurs within an institution-wide context presents significant challenges in terms of cultural change and staff development. Furthermore it is argued that online units should not be viewed as a "product" - there is no beginning or end to the process of online unit development and the pedagogical and technical goal posts are continually shifting. If online development is to be successful then it must be embraced as an integral aspect of the everyday work of academics and general staff alike. It is argued that that "management", per se, is antithetical with academic work and that academic environments are more appropriately approached as "learning organisations". The experiences of three individuals who have acted in the role of "project managers" within one institution are used to illustrate the perceived advantages and shortcomings of project management methodology. It is proposed that a more appropriate central approach rests with action learning where learning is intrinsic to the process and there is no expectation of a beginning and end to the product. Staff development is integral, as are processes of evaluation, documentation and shared growth towards improved practice. It is acknowledged that there is an important coordination role to be played in initial and ongoing online development but that this process should be viewed as one of facilitation and coordination rather than management.

Introduction

As universities internationally embrace the challenge to deliver their courses online, new structures and processes are being established, challenging traditional models of course development and delivery. Online teaching necessitates high levels of staff mobilisation and service coordination across institutions. It brings academics into closer day-to-day working partnerships with administrative and information technology staff. New demands are placed on organisations and sub-sections of organisations, affecting staff work practices, and requiring careful financial and personnel management.

Universities have reacted differently to these challenges. Some have had appropriate support structures already in place which have embraced these online initiatives. Others have had to create structures in response to the demands. For some institutions, online development has been "piecemeal", driven by individuals rather than policy or broader initiatives, say for the online development of full courses. Other institutions have confronted the challenges of bringing large groups of units, and subsequently academic staff, online. The challenges presented by this latter approach are of particular interest and are the ones addressed in this paper.

In moving full study programs online, considerable changes to individual work practices and academic culture need to occur. The staff development, staff coordination, resource allocation and financial management challenges are considerable.

This paper examines the application of project management methodology to the development and delivery of online units within university environments, drawing from the experiences of three project managers at Southern Cross University. While project management is acknowledged as having certain advantages as a methodology, it is argued that it can be culturally and ideologically inappropriate when dealing with academic processes.

The Challenges of Online Development

Online development which occurs within an institution-wide context presents significant challenges in terms of cultural change and staff development (Slay, 1999; Ellis and Phelps, 2000). As more and more institutions struggle with these difficulties, issues of staff development are beginning to be acknowledged and discussed more widely in the literature (Ellis and Phelps, forthcoming; Ellis and Phelps, 2000; O'Reilly, Ellis and Newton, 2000; Slay, 1999; Phillips et al. 1999; Ellis, O'Reilly and Debreceeny, 1998).

Teaching online requires more than the development of technical skills. It requires new pedagogical approaches, new working partnerships, new needs for motivation, new staffing roles and structures and new models of student support.

More than ever before, collaborative relationships must come to bear on the teaching process, and with these changes, added staff and policy development (Ellis and Phelps, 2000, p.27).

Unlike print-based distance education materials, teaching online fosters opportunities for interaction. It creates a more fluid environment where content and process are responsive to the learning needs of individuals. And, of course, the technical dimension brings with it new possibilities and challenges. While creating exciting opportunities for teaching and learning, it necessitates new knowledge and skills on the part of students and academics, and thus new levels of technical support. There is no beginning or end to the process of online unit development and the pedagogical and technical goal posts are continually shifting.

The Southern Cross University Experience

Southern Cross University, a small regional university in the north east of NSW, Australia has a history of pursuing innovation. Its response to online development has been no different. Driven initially by individuals, its initiatives are now being pursued at the institution-wide level.

In 1998, two large and significant projects were funded by the Executive of Southern Cross University: the 'SaWD Online Project', initiated by the School of Social and Workplace Development (SaWD), and the 'Paralegal Online Project' initiated by the School of Law. These projects commenced in Semester 2, 1998¹.

The SaWD and Law initiatives were examples of system wide change, as opposed to being individually driven (Ellis and Phelps, 2000). Both entailed moving full undergraduate courses online, and thus involved virtually all staff within these two Schools. It is not the intention of this paper to detail these initiatives as these projects have been discussed in several articles to date (O'Reilly, in press; Fisher, Phelps and Ellis, forthcoming; Ellis and Phelps, 2000; Klich, Fitzgerald and Wallace, 1999; Stewart and Finch, 1999; Ellis and Phelps, 1999; Ellis, 1999; McMurray and Dunlop, 1999). However it is important to state that in the case of both projects the goals of this online development was more than simply 'web mounting' or 'web enhancement' but involved significant redevelopment to make appropriate pedagogical use of the new medium (Ellis and Phelps, 2000).

A number of conditions were imposed on the allocation of funding to these two projects, one of which was that they both employ project management methodology. To this end, project managers were appointed to both projects, project management boards were formed and staff involved in these positions undertook project management training.

The three authors of this paper were involved in this role of project manager. Liz Bartlett was involved in the Paralegal Online Project from its inception. Renata Phelps was the first project manager with the SaWD Online Project, relinquishing this role in 1999 to be replaced by Toni Ledgerwood. This paper represents reflections on our experiences on the projects following a two-year period.

It should be noted that none of us had previously performed in the role of project manager. This is not surprising since, as we go on to describe, this methodology was new to Southern Cross University. Each of us were already employed in the University in various administrative capacities, Liz having been the School Administrative Officer, Renata had worked with the School of SaWD in the area of research and Toni had been seconded from the University Library to assume a position with the SaWD Online Project, later moving into the Project Management position.

Of course we openly acknowledge that the views represented here are our own, that they are subjectively derived, and that they present what may be considered a somewhat controversial view. However we would argue that there is great value in openly recording and sharing our reflection on our practice with others likely to pursue the same directions as those at Southern Cross University.

¹ A third initiative for the development of a new course, Disaster Management, was also later funded, although this paper will focus primarily on the first two mentioned projects.

Project Management Methodology

Project management as a methodology emerged in the late 1950s and had its origins in the construction industry, and then in the military weapons and systems development businesses (Cleland, 1999). Most recently it has been embraced by the information technology sector. A "project" is defined as an activity which stands alone and has a discernible lifetime. It involves a set of relevant expenditures and activities aimed at achieving specific objectives (Davis and Morrison, 1989).

Project management embraces methods of planning, organising, controlling and reporting. It creates structures for responsibility and accountability. It formalises goal setting and risk management and links budgets to milestone achievement. The structures created are likely to involve the appointment of a project manager and project board, which carries ultimate responsibility for the project attaining its goals within the allocated timeframe.

It is not the intention of this paper to detail these structures, approaches and techniques as these are well documented in the appropriate literature (for example Gido and Clements, 1999; Cleland, 1999; Maylon, 1999). The value of all these aspects of project management are indisputable and project management has been broadly adopted and refined as a management approach within a broad range of contexts.

The implementation of project management within higher education institutions is somewhat less well established, particularly with regard to areas of academic endeavor such as course development. There is very little literature available documenting the application of project management in universities, especially in areas relating to academic processes. Course development (both internal and external) is rarely viewed as a "project" and is usually "managed" by a single academic or small team, although this process would seldom be seen as "management". These traditional approaches can be explained through an examination of the management structures in place within universities which reveals flat hierarchies and decentralised authority (Morgan, 1997), to the extent that the widely discussed "academic freedom" represents more of a self-management structure.

The introduction of project management methodology into the academic environment creates cultural and procedural dissonance. Through reflection on our experiences as project managers in the aforementioned online projects, we would like to discuss what we perceive as a number of issues presented by the adoption of project management as the dominant methodology for online development within academic institutions.

Online Development: Cultural Transition or "Project"?

As was defined above, a "project" is defined as an activity that stands alone and has a discernible lifetime. Developing courses for online delivery is not a short-term initiative. Online development, of the type described above, involves significant system-wide change in work practices and processes. Online development represents a challenge to academic culture. It challenges the skills and knowledge of staff, their visions of the future of educational delivery and the official policies and resourcing of the organisation, including workload allocation, professional recognition and reward (Coaldrake and Stedman, 1999).

To be successful, the adoption of online teaching practices must be built into the everyday practice of the institution. Its adoption needs to be embraced in a culture where all participants perceive its pedagogical advantages, and are prepared to incorporate its methods into their everyday workload.

We believe that perceiving online development as a "project" isolates it from the everyday culture of the institution. It creates a sense that when the "project" is complete that involvement will cease. It creates an illusion of reliance on the "project" to sustain the ongoing initiatives. In fact, rather than infrastructure being established to support the new culture and process, there is a real danger that such infrastructure is poorly integrated into mainstream institutional functioning and that it will be lost once the perceived needs of initial development are past.

The Illusive Online Unit: Product or Process?

A further question which arose for us as project managers was whether we were actually producing a definable product. For instance, a project allocated the task of developing a piece of software will have a tangible end-product - a piece of software that works and is marketed. Here success can be measured by a range of factors such as sales or customer satisfaction.

Unit development in an academic environment however is far more complicated. There is no beginning and no end to the process. Any reputable educator will view their unit as a work in progress, constantly improving and updating in response to new literature and theories, changes in legislation, feedback from students and developing pedagogical ideas. Compounding this need for constant redevelopment, is the technological dimension - again, the committed online teacher will want to continue to develop their unit utilising new and more appropriate technology.

These perspectives on the online unit re-emphasise the first issue raised - that of whether online development is "project" or "cultural transition". In fact we would argue that online units cannot be perceived as a "product" but are in fact a "process" - a work in progress, with appropriate strategies established for ongoing refinement.

Compounding this is the fact that the success of a unit is highly subjective. The ultimate aim, of course, is to meet the learning needs of students, however these will vary greatly between students. Of course, one academic can develop a unit and consider it to be a good unit. However the pedagogical approaches adopted, the content covered and the assessment employed might not be congruent with the teaching philosophies of another academic, a point which we will discuss further in this paper.

Information technology departments have their definitions of what makes a good unit, embracing such factors as organisation-wide adoption of course management systems, consistent presentation (font, graphics, navigation etc), functionality, and for some the level of "bells and whistles" attached.

The pedagogy of online education is so new that there are no real models to follow. Teachers change, pedagogical approaches change and technology changes; it would be irresponsible not to acknowledge the ability of our online units to change with them. Thus, in unit development there is no tangible product of which success can be measured. Everyone knows what a bridge should look like but does anyone know what an online unit should look like? Can we employ a management methodology successfully to an area with such ill defined and moving goals?

Management or Self-Management: The Difficulties of Herding Cats

At the risk of causing offence, all three of us will admit that one of the most precious pieces of wisdom shared with us was the saying that "Managing academics is analogous to herding cats". Given that this, we think, originated from an academic staff member, we feel that it is not too controversial to say that the academic culture is one where academics are more open to self-management than external management, at least in terms of their teaching and research responsibilities. This form of professional bureaucracy (described by Morgan, 1997) is appropriate where people with key skills and abilities need large measures of autonomy and discretion to be effective in their work.

Project management methodology works on an assumption that people are employed to work on the project, preferably with their undivided attention. In most cases, however, academics take on unit development on top of an already heavily demanding workload. Even if they are given time release they are likely to be teaching up to 4-5 other units simultaneously, together with research and administrative responsibilities and their unit writing is often pushed into their own time.

Imposing a management structure on online development which would seem to be in direct opposition to these traditional practices and cultural assumptions is a recipe for further tension. The process of writing units (whether for external or online development) involves a level of creativity and of person responsibility (ideally over delivery as well as development) in order to produce an ideal learning resource. Academics traditionally are responsible for managing their own timelines. While some, of course, do so more effectively than others, most if not all ultimately "come up with the goods". Project managers are not in a position to reprioritise the work priorities of academic staff, nor to pull them away from other work commitments. Nor would their unit development necessarily be successful were this to occur. Again, the transition to online development is not a "one off" occurrence but a process of integration into the academics' own work practices.

Maintaining a Sense of "Ownership"

As was alluded to above, a sense of "ownership"² is important in the unit development process. Academics who know that they must bear the brunt of disgruntled students if their unit is sub-standard will take far greater care and responsibility for quality development. This issue of ownership is discussed extensively by McMurray and Dunlop (1999). As stated by these authors it is "important that those responsible for the practice of the action maintain collaborative control of the process" (McMurray and Dunlop, 1999, p. 3).

While team involvement in unit development was acknowledged and welcomed by academic staff it was important that decisions directly affecting their teaching approaches were made consultatively and democratically. As reported by McMurray and Dunlop (1999, p.4) "many academics, accustomed to exercising autonomy with respect to developing and delivering learning materials, openly resisted the role the Information Technology department of the University assumed in making decisions that were often seen as having pedagogical overtones".

This active ownership by the academics was also necessary in terms of the ongoing sustainability of online units. It is not enough for academic staff to hand over technical dimensions of their unit development to administrative or technical staff. In the interests of

² In using the term "ownership" we are not referring to the unit being the intellectual property of the writer, nor evoking other legal implications. Rather we are referring to the sense of personal commitment and responsibility necessarily developed by the academic as they engage with the writing process.

ongoing maintenance and updating of units, as well as delivery, it is necessary for academics to have the skills, confidence and motivation to undertake their own unit development.

All three authors have been very conscious of the need for the ongoing maintenance of units, and wary of creating a culture whereby online units fail to be continually updated. However again, the notion of the "project" tends to create an illusion of dependency. Units are developed within a context of additional project support and then academics tend to feel reliant on that support. This is not to say that such support is not required, but that there is a danger that this support is not established as part of the institutional culture and structure.

Partnerships and Teams: A Environment for Developing Together

Universities are environments for learning, critical enquiry and debate. Academics seldom accept policy and process without active involvement, debate and contribution. Online development is of course no different. Choices regarding the type of media and software adopted and how this media is used are important issues, and should involve input from a wide range of individuals from academics and educational designers to technical staff, based on experimentation, evaluation and praxis. Again, ownership over policy decisions is critical.

Project management tends to place responsibility for decision making into the hands of the few. It emphasises the role of the project manager and project board, moving responsibility further away from grass-roots implementation.

In our early stages of development there was significant focus on collaborative development and learning. McMurray and Dunlop (1999) document the change management issues associated with online development in the SaWD Online project. Staff development workshops were opportunities for staff to learn together, to challenge each others' designs and to share resources, ideas and frustrations. Perhaps the biggest advantage they describe in this form of development is the level of commitment and enthusiasm generated and maintained, at least initially, through the team-based collaboration model.

There was immense value in this collaborative approach including the cross-fertilisation of ideas and experiences. In particular, the group developed a sense of cohesiveness which was extremely supportive as development progressed. Sharing of blueprints was seen as beneficial for most staff involved, and from a project management perspective ensured that the pressure to keep to deadlines was maintained. The added benefits both in terms of learning and motivations which are gained through collaboration are further documented by Ellis and Phelps (2000).

Yet as the projects progressed the pressures of project timelines tended to decrease the ability to focus on collaborative processes and facilitating group learning and experience sharing. Academics gradually worked more and more in isolation, or developers were contracted in to ensure timelines were met.

An Unwitting Transgression from the Concept of 'Pilot'

Initially the two projects were conceived, and referred to, as, "pilots". They had been seen as experimental, piloting online education in the University curriculum (Hayden, Saenger and Parry, 1999). They were opportunities for trialing various methods and approaches and evaluating their implementation

What in fact occurred was an unwitting blurring of the distinction between "project" and "pilot". The initial visions became lost to the imperative of establishing "success" of the project. Furthermore, certain aspects of the project were considered mandatory (such as the course management shell) which limited the ability of participants to try different things and learn from each others' different experiences. Learning was de-emphasised and "success" (whatever that could be defined as) became imperative - as was explicitly stated to one of us, "failure is not an option".

The projects were evaluated after the first phase of development (Hayden, Saenger and Parry, 1999) and a review was conducted of the technologies employed. However the pace of the ongoing deadlines imposed by the initial project plans left little opportunity for active learning and adjustment in the light of these evaluations, and the readjustment to the use of new technologies has once again been made without opportunity for solid evaluation.

Repositioning Individual Attribution

Reflecting on our experiences from another perspective we feel that project management leads to somewhat unforeseen changes in terms of individual's attributional perspectives. Attribution theory concerns people's causal explanations for events (Martinko, 1995). Beliefs about causation influence expectations, which in turn influence behaviour. Attributional explanations can be classified according to locus of causality which refers to whether individuals believe that the cause of their success or failure, for instance, resides within themselves (internal) or outside of themselves (external).

Project management, we would argue, tends to foster external attribution amongst participants. Most of the key players in the unit development process (academics, administrative staff, IT staff and even university management) tend to see success or failure of a project as residing with "The Project". Responsibility for what is done, what is learnt, what processes are used and what decisions are made all ultimately rest with the project manager, it could be argued with the ephemeral "project board". We call it "ephemeral" as members of the project board can attend project board meetings assuming their role of project board member as distinct from their normal everyday role.

People who in other circumstances would be highly independent, self-responsible and capable workers tend to feel they can rely on the project structures to direct, drive, report and evaluate their performance. If things go wrong it is easy to blame "The Project" - the project structure, the project board, or the project manager or factors "outside" the project.

Project Management for Project Management's Sake

Finally the amount of time and resources spent on project management processes themselves must be raised. Activities such as preparing monthly board documentation may in many instances be more productively spent elsewhere. While accountability is acknowledged as critically important alternate structures for reporting, and more direct and immediate forms of risk reduction may be possible without the formalised structure of a project board. Online development needs to be carefully integrated into mainstream institutional functioning and the creation of a project board can create artificial and additional bureaucratic structures.

Learning Organisations: An Alternative Philosophy

The concept of the "learning organisation" is not new, having been widely discussed in the human resource and organisational development literature throughout the 1990s (Field and Ford, 1995; Argyris and Schon, 1996; Hase, 1998; Hase 1999). Arising in part from an increasingly turbulent environment requiring responsiveness to change and a renewed focus on development and learning, this concept can be viewed as a paradigm shift from the more traditional management models.

The concept of the learning organisation repositions the focus away from "management" and onto "leadership". The learning organisation favors empowerment, individual capability, teams, learning and flexibility, over the more traditional models of management (Hase, 1999). Learning (and consequently staff development) is not seen as something which has to be organised by others. Rather, individuals have the capacity to learn continuously and in real time by interacting with their environment (Hase, 1999). The learning organisation thus embraces concepts of action learning and reflective "praxis"³. Action research is described as:

... a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out.... The approach is only action learning when it is collaborative, though it is important to realise that the action research of the group is achieved through the critically examined action of individual group members (Kemmis, 1988).

As has been outlined elsewhere, action learning and action research can play a significant role in both professional development and organisational change (Zuber-Skerritt, 1991; 1992; 1993; 1996; Limerick, Passfield and Cunnington 1994; Bourner, & Flowers, 1999).

It is thus proposed that a more appropriate central methodology for online development rests with action learning. Under such an approach learning is intrinsic to the process and there is no expectation of a beginning and end to the process. Staff development is integral, as are processes of evaluation, documentation and shared growth towards improved practice. All individuals need to be responsible for documenting their own learning and sharing this learning with others. With such a model responsibilities are delegated and assumed by all, thus fostering collaborative goal setting and achievement and building internal attribution. In the learning organisation, success and failures are both valued as learning opportunities. Existing culture is embraced and built upon. Individuals are respected as contributors and co-participants, and transition and change is embraced.

We would argue that the notion of the learning organisation is more congruent with the culture of universities and is thus more likely to be embraced by academic staff.

Achieving the Balance

We are not arguing that there is no place for "management" in the process of online development. Of course online development requires planning, organising, budgeting and reporting, as well as goal setting and risk management. There are in fact aspects of online development for which project management may be highly appropriate, particularly with regards establishment of infrastructure.

³ The notion of "praxis" has been widely discussed in the literature, but is well defined and discussed by Grundy (1982) who sees it as action based on practical judgement. It is characterised by choice and deliberation.

We acknowledge that there are definite advantages in the Project Manager's role. The hierarchical position of this person, having direct contact with the Head of School and other upper echelons of University management does bring with it advantages. Furthermore, from an organisational point of view, having one person with sole responsibility ensures that that person gives the project their undivided attention and ultimately ensured that the objectives are achieved. The "Projects" did raise awareness of a large number of issues associated with the advent of online development, and did initiate subsequent action to address these issues.

We certainly feel that there is an important coordination role to be played in initial and ongoing unit online development, and that the appointment of an individual responsible for this coordination is important. However we feel that this process should be viewed as one of facilitation and coordination rather than "management". The distinction may seem in part linguistic, however culturally this terminology would be more acceptable and appropriate.

Ultimately the success of any endeavor depends on the good will of the people involved, and the greatest problems are created by those without goodwill, organisational or goal commitment or motivation. And in our experience, these people are more likely to be outside the direct control of the project manager.

Of course, every institution is different and in fact each school or faculty within a university will also have its own cultural differences.

There will be considerable institutional variation in the scope, complexity and time frame of online course development projects undertaken by individual universities and colleges. Similarly the resources available are likely to vary widely from project to project sometimes even within the same institution. The key to successfully providing instructor support hinges on the development of motivation and the provision of knowledge and skills at the appropriate time, at an appropriate level and in an appropriate way (Ellis, In Press).

We acknowledge that our experiences may be less relevant in other situations or in other institutions and that the balance in emphasis between project management and action learning may quite justifiably vary. That said, we feel that there is always a place for formally recognising the evolutionary nature of organisation development which online development evokes, and the value in fostering a learning organisation.

Conclusions

All three of us have appreciated the opportunity to perform in the role of project manager. We acknowledge the trust placed in us by our colleagues and thank our organisation for the opportunity we have been given to develop our skills and experience. Our experiences has given us an insight into the many benefits, together with the issues associated with project management in University environments.

Finally, we would like to conclude that by presenting this paper we feel that we are in fact contributing to what we see as a culture of learning. By documenting and disseminating our own reflection on practice (praxis) we present a challenge not only to our own organisation but to others, to reflect critically upon their processes, practices and values.

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