CHANGE MANAGEMENT IN HIGHER EDUCATION: AN EMPIRICAL APPROACH

Stephen Brown
De Montfort University
Visiting Fellow, University of London
United Kingdom

Abstract

It is particularly difficult to change universities.   The JISC Curriculum Design and Delivery programme was designed to enable UK universities to employ technology to deliver major, sustainable change.   Emergent findings cover themes of interconnectedness, feral systems, project drift, resistance, planning imperative, staff turnover and dependency failures.   Collaborative approaches to project management were employed to achieve effective large-scale rather than either management-driven top-down, or more champion-led bottom-up methods.   While some diminution of control over project outcomes is inherent in this approach, this is outweighed by the potential benefits of lasting and widespread adoption of agreed changes.

Introduction

Universities are peculiarly resistant to change (Marshall, 2010) and managing change in universities is perhaps the most daunting challenge facing senior managers in organizations today (McMurray, 2001, p.74).   A key feature that distinguishes successful change management is effective "stakeholder engagement" (Argyris, 1999; Fullan, 1993; Vidgen, 1997).   Stakeholder engagement can mean different things to different people and can range from the most superficial (telling people what is going to be done to them, i.e., top-down) to inviting them to define the problem in their own terms and encouraging them to develop and implement their own solutions (bottom-up). Top-down approaches tend to work best where outcomes can be predicted with confidence and there is consensus about what those outcomes should be (Dearlove, 2007).   The benefits of top-down include efficient time and resource management and tight control over project outputs.   However top-down management does not necessarily guarantee adequate control over outcomes.   Outcomes differ from outputs in that outputs are what the project produces (reports, IT systems, procedures, etc), whereas outcomes are how people use those outputs and how they feel about them.   A tightly controlled project that produces a technically workable solution on time and to budget is likely to run into implementation and sustainability problems if key stakeholders feel aggrieved about lack of involvement and do not believe the solution meets their needs.   While there are many different types of universities, they nevertheless tend to share a culture within which managing works by consent and incrementalism and high value is placed on dialogue and the legitimacy of critique.[1]   These are not ideal conditions for top-down

methods.   At the other end of the spectrum, project outputs that are generated by localised bottom-up initiatives (Dearlove, 2007) are likely to be enthusiastically supported by their progenitors but largely ignored by the rest of the institution (Brown, 2002; Marshall, 2010; Rogers, 2010).   A third possibility is "distributive" leadership in which the change process is a joint enterprise between stakeholders (Keppell, O'Dwyer, Lyon, B., & Childs, M, 2010).   Distributive approaches entail development of an open sharing culture that values dissemination of information and building of trust between participants, (Brown & Littrich, 2008) and that therefore is better suited to the organizational culture of universities.

The Curriculum Design and Delivery Experiment

The remainder of this paper examines the experience of the JISC Curriculum Design and Delivery programmes.[2]   Taken together these are the single largest coordinated programme of innovation and change management in UK Higher Education to date, comprising an investment of £8m over four years (2008-2010).   In all, 27 projects have been exploring how technology can help address some of the major curriculum challenges faced by the sector, including: learner engagement, widening participation, personalised learning, engaging external stakeholders, employability and workforce development, responsive and agile curriculum design, and flexible delivery.

New technology has long been championed as both a driver and a facilitator for change in universities (Bates, 2001; Cuban, 2001; DfES, 2003; Oppenheimer, 2003; Ryan, Scott, Freeman, & Patel, 2000) but, despite some successes, has rarely or for long lived up to its proponents' promises (Bell, Bush, Nicholson, O'Brien, &Tran, 2002; Carr, 2003; Chester, 2006; Hannafin & Kim, 2003; Marshall, 2005; Means, Toyama, Murphy, Bakia, & Jones, 2009; Oliver, 2005; Salmon, 2005; Sharpe, Benfield, Roberts,& Francis, 2006). The Curriculum Design Programme in particular differs from earlier experiments in a number of important respects. The focus has been on:
- Technology to support curriculum design rather than pedagogical practice.
- Large-scale, institution-wide processes.
- Sector-wide collaboration.

Participating institutions represented all regions of the UK and a broad spectrum of institutional types.   Here we are concerned primarily with the experiences of one cluster in the Curriculum Design strand, Design Cluster B, comprising Birmingham City University, City University London, Cardiff University, Cambridge University and Greenwich University.

Feral Systems

A baseline review revealed the presence of informal systems developed as workarounds to bend official systems to local needs and preferences.   This

highlighted the importance of doing more than choosing and implementing new systems and applications.   It was necessary to think about how users would respond to those systems and applications and to engage fully in defining the problems as well as the solutions. This is a well-known phenomenon (Bell, 2004), but it still necessitated adjustments to the project plans to accommodate a more than participatory and collaborative approach. According to Eustance (2012):

> At the same time staff based in central services – notably information services and systems faced significant challenges since the devolved model over time resulted in a proliferation of school-specific processes and massive inconsistencies. School-based shadow IT - referred to by some as "feral systems" were the norm rather than the exception – a situation that was tacitly accepted by many as part and parcel of the highly devolved organisational model. (p. 4)

Interconnectedness

The baseline reports included not only quantitative metrics such as numbers of students undertaking certain kinds of courses, length of time required to approve new courses, numbers of uneconomic courses, but also views of stakeholders about the systems and processes targeted for revision by the projects. These baseline reports revealed that the systems the teams were dealing with were more complex and interconnected than they had realized. Figure 1 shows a collective effort by the five projects to describe the institutional context of the curriculum design and approvals process. It clearly illustrates the pervasiveness of the process and the complexity of the interactions between the stakeholders.
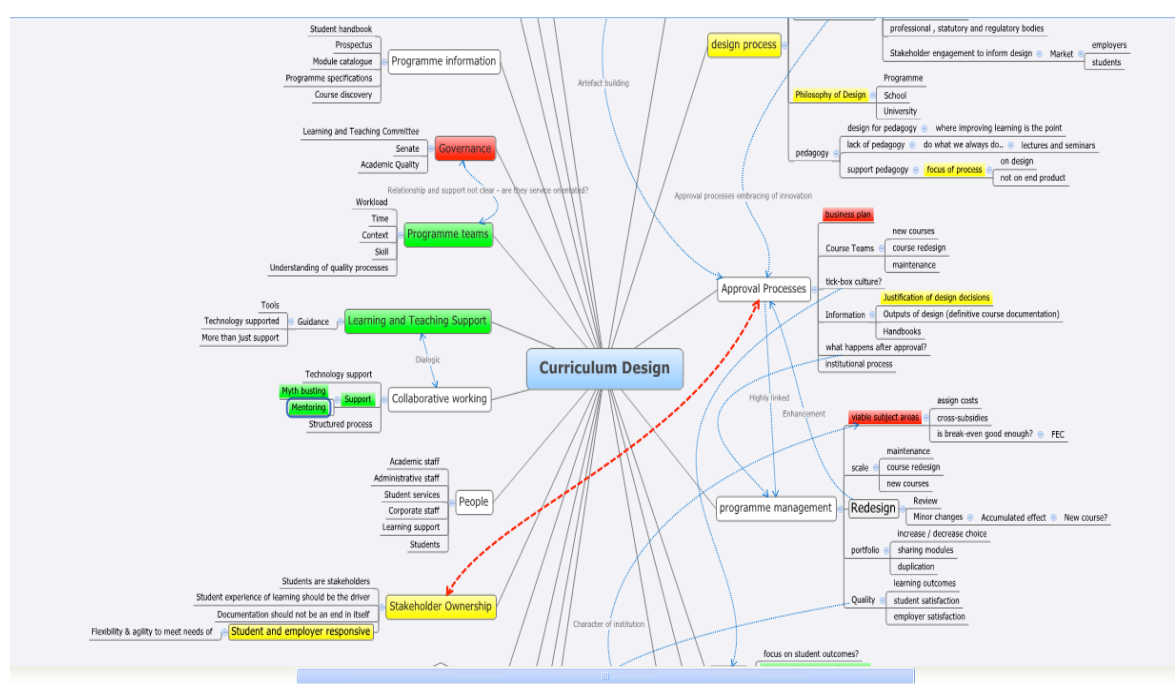

Figure 1. An overview of the institutional context of the curriculum design and approvals process. Source: Author.

This in turn led to the realization that in order to implement new systems and applications each university would have to be prepared to undergo much more widespread transformation than originally envisaged.   This is not a completely new insight (Buchan, 2011; Keppell et al., 2010) but it required project timescales and plans and in some cases relationships between the project teams and other key stakeholders to be revised.

Planning Imperative

"It is far easier to change policy and implement technical innovations than it is to bring about cultural changes" (Jenkins, Browne, Walker, & Hewitt, 2011, p. 448).   As projects developed it became apparent that systems and processes were more interconnected, that change would need to be more widespread and that more time was required to engage stakeholders in a more inclusive and participatory manner than originally anticipated.   Three of the projects in particular came under pressure to proceed without delay to solution building as specified in their original plans.   It was a major challenge to convince key stakeholders of the need to hold off from delivery of technical solutions in order to develop the cultural readiness required to implement them. Bartholomew (2012, p.12) noted:

> At the start of the project, the development of a formal Project Initiation Document and a push from the JISC towards waterfall methods of project management (such as PRINCE2) offered a useful opening structure to begin work.. However, after a fairly short time, this way of working became too restrictive – the expectation to declare dates, identify prerequisite activities and to develop 'work packages' was not well-aligned with the needs of a project that was trying to deliver against a continually emerging set of requirements from our stakeholder groups..

Resistance

Resistance to innovation is well known (Gunn, 2010).   As the true extent of interconnectedness became apparent, there was growing resistance to change from some stakeholders as they began to see how the project outputs were likely to impinge on their operations.   Three of the projects felt it necessary to adopt a low profile to diffuse tensions, rendering themselves as invisible as possible and working from behind the scenes through other agencies. According to Griffiths (2012):

> The PALET Project adopted this approach about half way through and in doing so acknowledged that it might have been better if this approach had been adopted from the start. This would have allowed for more flexibility in scope, a better-connected and more focused project team and easier and pragmatic links into other university initiatives. (p. 23)

Dependency Failures

All of the projects were critically dependent on other parties to help them develop the technical infrastructure needed to implement their proposed changes. This did not always work out.   The Birmingham T-SPARC team found it a challenge to engage effectively with the central university software developers. In hindsight it was recognized that earlier engagement with developers might have been beneficial, treating them more as stakeholders than as suppliers. The Cambridge University CourseTools project planned to employ the Sakai project's Kuali Student Learning Unit Management Module to store information about courses, and to enable curriculum flexibility and innovation, in particular workflows for a variety of course development and approval processes, and also timetable generation.   However Kuali development did not proceed as rapidly as expected and hopes that it would provide a revolutionary new approach to building a Student Information System were not able to be realised.

Project Drift

An almost inevitable consequence of engaging more widely with potential stakeholders was the phenomenon of "project drift."   As more colleagues became more aware of the projects and how they impinged on their own areas, there was a tendency in some of the institutions to ask/expect the projects to widen their briefs to address more local issues.   To maintain credibility and goodwill, projects were obliged to enlarge their remits and to adopt a more flexible attitude towards project plans. Griffiths (2012) explained:

> The project learnt that it was important to carefully monitor and manage the scope of a project that crosses into a range of domains of the University. To ensure that sensible and practical decisions are reached, projects should explore the full range of potential benefits, risks and impact that a change in scope may have for all stakeholders. (p.23)

Staff Turnover

Change projects need sufficient time for a complete transformation to take place (Roche, 2001).   However, the unusual length of these projects (four years) also allowed time for problems to occur that might not have been experienced in a shorter timescale.   Not surprisingly all of the projects lost key individuals for various reasons including promotion, maternity leave, resignations and, in one case, unexpected cancellation of a work visa.   In one institution, the number of project manager replacements (four) was too many to sustain and the project was terminated.   All five of the institutions also experienced churn at executive management level.   Strategic change projects need a political power base, and the departure of key senior stakeholders presented projects with the challenge of re-engaging political support.
In some cases this resulted in a shift in the project goals as institutions revisited and revised their strategic priorities.

Conclusions

These projects set out with clear technology oriented strategies to achieve major strategic changes to the way their universities operated. These strategies were largely top-down, designed to deliver management-defined goals according to specified schedules.   In practice all of the projects deviated from their original plans, revising schedules, modifying their intended way of working, significantly altering the technical solutions they implemented and in some cases even changing their overall goals.   In particular, all of them shifted to a more participatory "distributive" approach that engaged stakeholders as active collaborators in the change process rather than passive recipients.   This was in response to recognition of the tendency for feral systems to replace and subvert official ones if the latter are not truly owned by stakeholders; awareness of the essentially interconnectedness and pervasiveness of core university systems that made it necessary to engage with a much wider constituency and resistance to change that necessitated less direct interventions.   It was also a pragmatic response to practical issues, namely technology does not always work as or when you expect it and people cannot always be relied upon to deliver to agreed schedules, necessitating a more flexible adaptive approach.   Lastly, four years is an unusually long time for Technology Enhanced Learning projects.   There were inevitable personnel changes in this period and on the wider stage the higher education landscape altered dramatically, prompting in some institutions changes of direction.

The overarching conclusions to be drawn from these experiences therefore are that change is particularly difficult to effect in universities because of their culture and that top-down innovation strategies are unlikely to be effective in the longer term.   A distributive approach that engages stakeholders as active participants and owners offers a more sustainable basis for large-scale change. However, if stakeholders have a say in defining the problem and developing the solutions, then they may come up with ideas that differ from management. How much does this matter?   The answer probably depends on what those outcomes are, but it is worth considering where the balance of risk lies: a system that may be rejected by a significant proportion of stakeholders, that makes them feel disempowered and which spawns numerous "feral" alternatives; or something that, although not originally envisaged, is widely regarded as appropriate and worthwhile because it is owned by the majority who played a part in creating it.

Postscript: Practical Tips

Some practical tips for running large scale distributive innovation projects were presented via a JISC Webinar on Mon 14th May 2012 entitled "Managing large-scale organisational change: lessons and approaches from the JISC Curriculum Design programme".[3]

Starting a project

1. Make sure everyone's role is clear and all participants are fully committed to their role.
2. Don't rush into problem solving and building solutions. Give people permission to spend a significant amount of time at the start of the project to explore its scope and boundaries, gather requirements and test the veracity of beliefs/ myths such as "Quality Assurance Agency/registry wont let you do X".
3. Manage the expectations of stakeholders, who will be expecting things to be done in a particular way and for tangible outputs to appear quite soon.
4. Allow enough time to build trust among stakeholders that things will not be foisted on them.

Running a project

5. Minimise formal reports that create opportunities for spin and obfuscation. Encourage open dialogue and demonstration of achievements via publicly available channels (vox pops, blogs, twitter, people telling the stories…) If you are open about challenges and negatives people trust you more.
6. Engage Stakeholders and keep them on board (use formative evaluation outputs to reassure them).
7. Tolerate changes in deliverables/outcomes and allow for an emergent strategy.

Finishing a project

8. The product isn't the system that you build. The product is what people do with it. It's the user experience that counts.

Notes

1. LTSN Guidelines for Promoting and Facilitating Change: 7. Access at http://www.heacademy.ac.uk/assets/documents/institutions/change_academy/id296_Promoting_and_facilitating_change.pdf.
2. http://www.jiscinfonet.ac.uk/curriculum

3. http://jiscdesignstudio.pbworks.com/w/page/53679069/Managing%20l arge-scale%20organisational%20change%20webinar).

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Author Details

Stephen Brown
sbrown@dmu.ac.uk