

The Challenges and Rewards of Executive Education for Interdisciplinary Project and Programme Managers

**Andrew Edkins
Senior Lecturer
The Bartlett
UCL
London WC1E 6BT**

Abstract:

In early 2005 The Bartlett, UCL's faculty of the built environment launched a truly ground-breaking executive education style course designed for mid-career high performance / high potential students who were concurrently full-time employees in project based organisations (PBOs). The course sought to achieve a number of objectives, but the primary aim was to prepare the future senior project and programme managers for the levels of complexity in terms of management that modern projects are tending towards.

The course was proposed to be custom designed for a range of leading corporate stakeholders that wanted to be able to ensure that they would be placing some of their most promising senior management prospects into an 'academic cauldron' that would stretch them in terms of their ability to think both broadly and deeply. This was to be achieved through immersive, high contact pedagogical events that would be run in the heart of London, a core city in terms of project and programme expertise.

The UCL course brought together a range of initial companies and offered the potential to link the best in academic theory with that of industry best practice and learning from other sectors beyond the immediate focus of construction. Although the course's main sponsors were all UK based, the course was to look beyond the UK for lessons available internationally. In its teaching, the students were continuously exposed to new perspectives as the delivery mode involves a high number of guest speakers, marshalled by individual modular subject matter experts, all operating under the guidance of a single course director. This represented both a major investment, and a major potential risk to the sponsors, the university, the students, and their families.

The results of this educational experiment have been surprising. The course is still running and is now in its fifth year. It has stayed true to its original educational aims, but has shifted emphasis to be less sector specific and adopt a more generic set of project and programme management principles thus broadening its potential market appeal. This broadening of perspective has generated significant new insights between sectors that deal with complex projects and programmes that ranges from the complexity of domain specific terminology and approaches to the immediate application of academic theories into practice.

There are a number of lessons to be learned from this experience. These range from the diversity of demands that such an intense course makes on all the players and parties involved, through the difference in educational approach needed by the academics involved, to the unexpected developments that deliver the success that justifies the course's continuation.

Introduction

This paper sets out the ex-ante rationale for setting up a post-graduate course that is firmly located in the educational suite as being ‘executive’ education. The paper will explain that UCL, being a university without a dedicated business school, has a great deal of applied understanding as well as theoretical understanding, making the initial mindset or *weltanschauung* (Checkland, 1989) one of full engagement with the industrial and commercial players that are actively engaged in the areas that UCL researches and teaches on in its various faculties and departments. The particular focus in this case is on the education of project and programme management.

The paper will relate to the work of Mintzberg (Mintzberg, 2004) and others who have a strong and clear view about what is needed for ‘business education’ and will then describe the experience of establishing the course that was originally titled *Interdisciplinary Management of Projects (IMP)*, and which transformed into *Strategic Management of Projects (SMP)*. The paper will then move to the analytic and concluding stages by reviewing the results against a framework based on the Office of Government Commerce’s (OGC’s) view on achieving benefits (OGCa, 2009).

The Existing Knowledge Bank

There are two sections of literature relevant to the focus of this paper. The first is the literature that charts the rise of interest in projects and programmes and their management and the second is the literature that looks at the experience of educating business-related subjects to practitioners.

The first section of the knowledge library to be considered is our current understanding of what projects comprise, the challenge they present, and the solutions that are proposed and implemented. For the purposes of condensing a rich and expanding literature in this field of study, we will be considering projects and programmes to be sufficiently similar to be captured under the one term, but it is important to note that project and programme management are becoming distinct and readers interested in this distinction will find separate literature on programme management available, but with the very significant majority of the literature dominated by projects.

Given the size of the literature, it is foolhardy to try to summarise it in this paper, but if we take an evolutionary perspective we can begin to understand one of the drivers for the establishment of the course at UCL (Morris, 1997). Whilst there was never an officially recorded start to mankind’s involvement in projects as we as a species have always carried out projects, we will take the view espoused by Morris that modern projects, and in particular project management, took place in and after the Second World War. Critics may argue that the precursors to the Gantt chart had existed since the first decade of the twentieth century and the Gantt chart was used from the 1930s onwards, but it was the Manhattan Project and then various defence and aerospace projects in the 1950s, together with the rise of post WWII industrial engineering giants that mark out the starting point (Morris, 1997). It is therefore important to note that the academic study of project management was triggered by the rise of sophistication in the area of projects and their management.

From that starting point some 60-70 years ago, we have carried out innumerable projects, and studied them. Along the way we have increased the project manager’s armoury of tools and techniques, have coped with a variety of management paradigms and environments, have grappled with ever increasing complexity of technology, particularly of the information variety, and have established quasi-professional membership bodies to act as the custodians

of the body of knowledge, albeit in various geographically spread forms (Morris & Pinto, 2007b). The key message at this point of interstitial summary is that there has been a lot of development in the tools, techniques, and sophistication of projects and their management.

However, the nature and interest in projects is enduring, so the issue of project success and project failure is one that draws the attention of a wide audience. Indeed, the most major of projects can become highly significant news items, particularly when the project in question is linked in some way to the prospect of failure. It is therefore not surprising that a significant number of authors have been drawn to the area of project success and failure, with a range of authors charting the cases of projects (see for example the work of Flyvbjerg, 2003, Miller & Lessard, 2001, Morris & Hough, 1987). As well as these academic investigations, governments have a keen interest in the performance of projects as they are typically either the enablers or catalysts for change, with social, economic, and increasingly environmental agendas to be fulfilled. This then leads to a rich source of further investigation as official organisations associated with the performance of government-funded projects, such as that of the National Audit Office (NAO) in the United Kingdom and the Government Accountability Office (GAO) in the United States, provide access and insight to major public sector projects.

Whilst single projects may be of sufficient importance to generate specific investigation, there is also interest in the various sectors, and two can be singled out for closer scrutiny. These are construction and IT. The UK has been a major player in grappling with both these sectors, with various reports, initiatives, and bodies all seeking to resolve problems and enhance performance. The evidence to support this is abundant, with the older construction sector having been the focus of seminal reports such as those produced by Banwell (Great Britain. CPMCBCW., 1964), Latham (Latham, 1994) and Egan (Great Britain. DoE, 1998). In IT, the serial failures of projects was the catalyst for the creation of the OGC's PRINCE2 methodology (OGC, 2009b) and later their Managing Successful Programmes (MSP). The key takeaway here is to note that many were aware of problems in the performance of projects and significant time, money, and effort have been expended in the pursuit of improvement.

If our attention is now moved to the area of education and in particular the education of those who are involved in business at the point beyond first degree (i.e. post-graduate or similar), there are a set of factors that one needs to consider. First of all there is the examination of the environment that the education is conducted within, and this is the domain of the Business School. These appear in two variants, the original and stand-alone (an example being the founding business school in France - *Ecole Spéciale de Commerce et d'Industrie* of Paris founded in 1819) and those that are part of a larger University – such as the Said Business School (University of Oxford, UK) and Harvard Business School (Harvard University, USA).

With business schools firmly established as part of the institutional framework, an equally firm part of the qualification landscape is the MBA form of degree, and the variant taken by students who are senior in their employing organisations – Executive MBAs or EMBA's. The next component of the business education is the members of academic staff that are responsible for the teaching. Here again, we see a mix of approaches, with those that are pure academics, and those that have crossed the boundary between being a practitioner and being an academic. Clearly, many are able to enjoy the fruits of mixed mode, being part business school academic and part practitioner or consultant. We move to the penultimate factor to be considered here, namely the syllabus, which is where the selection of topics to be taught is made. This again has grown rapidly and is now diverse, with business schools offering a heterogeneous selection of degree courses, with an ever greater mix of subject matter.

Finally, we come to the audience and student body. These individuals are going to represent a diversity that mirrors the range of business schools, courses, and syllabus content, but there has been an allure about the prospect of such educational offerings, often linked to the enhanced level of financial reward and career prospect.

The above paragraph attempts to summarise the world of business education as considered from the post-graduate education perspective of business schools. This provides the backdrop for the comments made by Mintzberg (Mintzberg, 2004) and Bennis and O’Toole (Bennis and O’Toole, 2005b). The basic argument put forward by these authors is that much is wrong with the model that MBAs and similar seek to represent. The arguments are many, but one key tenet made is that business schools have, for many reasons, sought to make the world of business and management a subject area worthy of the purest academic endeavour, and in particular treat it (the world of business) as one does the hard natural sciences. The result is a disconnect between the pure and sometimes deliberately sterile world of the business school classroom, and the ‘messy’ world of modern business. Mintzberg is quite brutal in his comments and, as a highly respected management author, will have no doubt provided much for others to ponder. Clearly, Bennis and O’Toole as two other respected members of the business school community felt sufficiently motivated to develop this line of argument and achieve some degree of success in their quest as they were published in the Harvard Business Review (HBR), a journal recognised for its ‘thought leadership’ if not its academic rigour.

It is to be noted that Mintzberg and Bennis and O’Toole have provoked a subsequent debate in the literature¹ and this paper may well fuel the flames of any such fire raging. However, what follows in this paper is the independent account of a course that was not seeking to take sides in this argument, as at the time of the course’s creation the views of Mintzberg and others were not in the public domain. A relevant set of associated literature that was in play at the time of the course’s creation was the work of Donald Schön (Schön, 1991) as his persuasive argument is that there is a clear need for those that are professional in their approach to being a practitioner, but with the needs of the modern world crowding out time to reflect and ponder, so there are too many repeated failures and lost possibilities to improve.

The Origins of the Interdisciplinary Management of Projects (IMP) course at UCL

As noted, UCL does not have a business school. It enjoys a relationship with London Business School (LBS), a truly world-class player in its market place, but both UCL and LBS have their own established positions with a great many independent strengths and so continue to exist largely on independent remits and with largely separate agendas. This is relevant as UCL is where the idea of the Masters course came to, but was not born in. This meant that UCL did not, at the time, deliver or award MBA forms of courses or that type of degree.

The idea for the IMP course has its roots in the post Egan world of the late twentieth and early twenty-first centuries. The Egan Report (ibid), following on relatively closely from the Latham Report (ibid), fed into a range of construction initiatives. Indeed, so many ‘post-Egan’ forums and official bodies were established that it became optimal to create a new umbrella body to orchestrate and inter-link these other bodies. This new body, *Constructing Excellence*, was one of the catalysts for the course, as it was to be in part driven by key individuals that were keen to drive change through the UK construction industry.

¹ A review of the Web of Science journal database carried out in May 2009 revealed that the Bennis and O’Toole article has been cited by 68 other articles. A selection of these subsequent articles is given in appendix 1

One of the senior individuals in this new organisation was also highly successful in the business world, running a respected management-based company that was seen at its time of creation and immediate impact as being a paradigm-breaking approach. This courage to create a new type of company was itself down to the experiences of the founder members who worked on a major project that tackled the project management challenge in a very different way from that accepted at the time. The resultant success led to the recognition that it may be possible to build upon this project success with a new company.

The success and reputation of this company provided the remarkably important, but equally difficult to measure issue of *credibility*. As such, the views of a credible person are considered. The receiver of the views may find the ideas to be non-credible and thus diminish the credibility of the proposer, so for continuously credible people, there has to be in place some form of explicit or tacit filter. The example of Gerald Ratner and his speech of 1991 exemplifies the risk that is run by people who are seen as both respected and credible when they state something that, in Ratner's case, questioned his and his organisation's credibility.

In the case of IMP, the credible person had some existing links with The Bartlett, UCL's faculty of the built environment and UCL's emergent focus for project management research and teaching. This link allowed for an idea to be suggested by a non-academic, business-orientated, credible, and respected person, to a senior set of Bartlett academics. The idea was for a course that would seek to do something that was not known to exist elsewhere. This was to establish a course that was going to make existing project managers better and in so doing act as a catalyst for change in their employing organisations. The course was to be rigorous in its academic structure, so leading to a qualification that was respected. In this case it was a Master of Science degree.

The objective of the course would be to foster the improvement of projects and their management through the creation of a set of inspired and inspiring individuals who would:

- all be of relatively equal status, being sufficiently senior and experienced to be able to challenge what they hear and to offer and defend their own position;
- be sufficiently trusted by their employing organisations that they could receive the organisational investment that attendance on the course represented;
- be drawn from the various different domains of expertise that exist within the construction sector;
- be nowhere near the zenith of their career potential.

The next stage of the idea was the focus of the course, and this led to the areas of the syllabus and the course faculty. The syllabus was to be the richest mix of 'best'. The ambition was to in some way fuse the best of what academe was generating by way of theory, models, concepts and similar, and then link them with what was best practice from the relevant areas of construction project management, project management, or other associated activities. To deliver this syllabus, it was recognised that no one individual could have domain expertise, so a rich mix of content providers was envisaged.

For those at UCL receiving this idea, the key question was one of credibility. It was at this point that a series concerns and issues were raised. The first was one of precedent, and it quickly became clear that the kind of ambition set for this proposed course had not been realised in the Bartlett, or at UCL. This lack of precedent is both upside and downside risk laden (what if it goes wrong verses what if we achieve success). UCL is well known as being radical and so could be considered as relatively risk loving, but is far from foolish, so also

seeks to confirm that it is acting with appropriate safeguards. It therefore was not immediately dismissive of the idea, but sought to test some of the pre-requisites. Of these, the major concern was that a course proposed by one individual, notable as that individual was, did not demonstrate that there was a market for such a course. So the first and indeed most major test of credibility was to see if there were other senior players from within the construction sector that could be tempted by the prospect of such a course. In simple business language this was the market research phase.

The initial results were sufficiently promising to justify further investment in moving to the next test of credibility, namely could a course as imagined be detailed to pass UCL's strict standards for inclusion on its books as an accepted Masters degree? The affirmative answer was for a modular course that would draw in all cases on rich and varied academic literature, would take the required amount of time to study from suitably intellectually able students and would be delivered in a structure that would allow the post-experienced students to remain in their employment.

Results - Initial phase (2004 – 2007)

A total of 11 private sector companies were willing to support the idea after it had been refined and provided seed-corn funding to allow the necessary sponsor interviewing, academic due diligence on the written proposal for the course, and general raising of groundswell support. A course director was recruited who had both professional academic and professional project management credentials, and the IMP course was launched in the academic year 2004-5.

The IMP course delivered its content in ten intense 4-day modules. Students were expected but not required to take local hotel accommodation when on modules as there was normally overnight work to complete. The expectation (and the reality) was that students would spend a great deal of time both studying and researching independently. The approach taken was for a very high impact educational programme.

The delivery mode required a number of experts to present as part of the modules, so the range of speakers on the course is high, with typically circa 100 speakers per two-year course cycle. This very high number illustrates the sheer diversity that constitutes project and programme management. The challenge was therefore of a logistical nature but, as important, was getting the coherence of the various messages to become clear, rather than discordant.

The objective for the student on the course would be to become more potent in their ability to take on senior roles in managing projects and programmes as:

1. they would know the best of academic theory and applied best practice;
2. they would have been able to reflect and debate with others who receive the same information, but interpret it differently;
3. they would have carried a wide range of analytic investigations of aspects of their organisation and its approach to projects via the various coursework essays and major research report.

The nature of the course resulted in fees that were above the UCL average, but reflected both type of demand (corporate investment in key asset improvement) and the small class size to allow high levels of interaction.

Current (2007 – 2009)

In response to a separate enquiry to UCL, in 2007 links were forged between UCL and a major corporate player in complex IT system-based services. The results of the subsequent discussions resulted in the decision to alter the IMP course from construction specific to generic and carry out a partial name change – from *Interdisciplinary* to *Strategic Management of Projects* (SMP). This change of emphasis has resulted in a course that now considers the senior and strategic management challenge on major and complex projects and programmes generally, rather than sector-specifically.

Analysis

The primary objective sought was and remains for companies that are involved in projects and programmes to become better by having amongst their ranks a relatively small number of what could be considered as *agent provocateurs*. However, this benefit has not been realised in all cases and the observation, based on a small sample size, is that the nature of these organisations' business (projects and programmes) results in a range of challenges that can significantly impact on the implied realisation plan. It is clear that there is a challenge when a student from the course moves away from the immediate and operational focus of their 'here-and-now' responsibilities, to focus on the more strategic and long-term issues. Where there has been this 'head-room' the results have been positive. For example, a number of the graduates from the course have become involved in the organisation's strategic planning exercise and as well as new areas of activity, such as complex procurement and business development. For those students involved on the course since its change in 2007, the benefits have been different from earlier cohorts as there has been wider consideration beyond the student's own sector. Indeed, it is striking to see the entirely different approaches to project management taken by a relatively ancient project industry such as construction in comparison to a relatively new industry such as IT. The former is far more dominated by roles and procurement, whereas the latter is dominated by process and methodology. The ability to learn from each other's experiences and critiques is therefore significant.

For the sponsoring organisation, and its strategic objective of improvement, it has become clear that to leverage the benefits it has to establish and resource itself. Whilst it is obvious that the organisational cost of placement of a prized employee on such a course is high, some of the most critical costs are not obvious and can be significantly under-estimated. The most significant latent cost is the requirement to extract the new knowledge and opportunities that a student on the course offers. This can be considered as the need to develop some metaphoric equivalent of an organisational knowledge magnet. Such a magnet would provide attractive forces to pull the new knowledge and ideas from the student both during and after the course. It has been revealing that where such a pull-force has existed, through say regular mentoring, the results have been positive, with new initiatives resulting. What has been as revealing is that when there is a lack of the pull-force from the organisation, the person who is or was a student on the course will merely continue to do their job, with a resultant lost of ideas and opportunities. This raises a number of issues such as motivations, incentives, and organisational maturity.

Conclusions

This paper has attempted to describe the background and context of a new post-graduate course that was borne out of the needs of a project-based industry. The relatively brief history of the course to date has already revealed the scale of the challenges that were faced, not least of which were the demands placed by businesses on a university to return to the business, a trusted and potent employee who would be capable of even greater success in the future. This responsibility is not, however, placed solely on the academic partner, but requires rich levels

of organisational engagement. It is therefore noted that there is the need for significant investment in the implicit infrastructure to allow the benefits to be realised.

To face this challenge, the course delivered at UCL has been custom designed and resource intensive. The results are for success to be achieved, but for this success to be dependent upon a number of parameters. Such a course can make very significant differences to the student, their employers, and the university, but it requires maturity on all sides to be able to leverage the potential benefits.

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