

## **An Evolution in Project Management Education**

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### **Introduction**

The study of project management has advanced considerably in Australia over the past two decades. Currently, Universities offer project management courses in each Australian State capital (except for Hobart and each of the Territories). These are offered, as postgraduate courses, reflecting the maturity of understanding required of participants of the business process and their exposure to project management roles. Increasingly, they are seen by those involved in managing projects as a more appropriate study program than for example the Masters of Business Administration (MBA). A new fully-fledged doctoral program, the Doctor of Project Management (DPM) has recently been developed by RMIT and QUT. It is designed to meet the needs of senior project managers who wish to develop and formalise their special insights into project management in their workplace while achieving recognition of attaining the highest qualification that any university can offer—a doctorate.

### **Project Management Postgraduate Courses**

Project management has long been recognised as more than mere technique. The project management body of knowledge (PMI 1996) has been developed since the mid to late 1980s and while it has been criticised as not fully meeting the needs of today's project managers (Themistocleous and Wearne 2000; Turner 2000) it has served the expanding realm of project management well enough to prepare many for the complexity and difficult role of managing teams to get projects completed. However, more needs to be done in improving project management education.

There has been a natural academic progression in preparation for project management. Undergraduate study plus exposure to relevant project management experience meets a foundation or technician level. However, this only provides a launching point for further study. Widely available postgraduate courses take practising and aspiring project managers further towards competency. The Master of Project Management qualification for example has two intermediate stages. These are the Graduate Certificate and Graduate Diploma. Each represents the equivalent of one year of half-time study.

The Graduate Certificate generally provides a sound grounding in project management techniques as well as an introduction to project management and specific legal obligations that project managers are subject to. Typically, entrants at this level may be engaged in project management as technicians, planning, managing budgets or quality or perhaps assessing and coping with risk. This provides a foundation management rather than foundation functional level. Graduates of this level may generally have a first degree or be drawn from those without undergraduate qualifications but considerable and valuable project management experience. These people may have some overall knowledge of where project management fits into their life but they are often close to the technician level though they often are embarking on a project management leadership role. The Graduate Diploma level is designed to provide project management leadership formation. It generally allows those studying at this level to broaden their project management knowledge. This is accomplished through elective subject studies taken from either a narrower perspective of project management, perhaps encompassing business or specialised engineering/IT subjects or may be more broadly based on wider project management topics, perhaps in the humanities or arts area. This level may also allow case study work to be tackled through rigorous investigation of project management experience ranging across elements such as planning, risk management, quality management and management of teams on live or simulated

projects. This study provides insights and lessons learned that form leadership potential—preparing project managers for a 'helicopter' view of project management. The third stage of this postgraduate level is the Masters level that should require participants to undertake an equivalent of 1 year of half-time study that includes undertaking an academic-level research project on their own into an area of project management. This level provides project management leadership (or mastery) because participants have to internalise their previous studies and apply this knowledge to a problem or topic that consolidates their own worldview of project management. They would have experienced the rigour of logically setting out their knowledge and applying it communicating in a concise and credible form that ensures consistent arguments presented are well substantiated with validated evidence. The minor thesis/research project forces these project management aspiring experts to justify their arguments and move well beyond the 'spin-doctoring' and unsubstantiated 'hype' that is often accepted in business communication without question or serious criticism of content quality.

## **Moving Beyond Mastery**

The term 'reflection' is a much-overused word these days. Too often it is seen as a somewhat shallow activity where brief thought is applied to the past and shoulders are shrugged and people move on with their lives without internalising lessons learned. The master craftsmen of old would take a lot of time in creating their work and would also contemplate their craft and be required to explain and justify their approach to their apprentices to whom they would provide mentoring support. This act of explaining, justifying and teaching adds considerable depth to one's work. In making the undefined defined, in explaining the how and why of the way work was tackled, one develops wisdom. This transcendental and transformational quality has largely been missing from professional development of project managers in their attempt to move from leadership mastery to wisdom. In limited cases a useful mentoring program may be available to allow such people to truly reflect AT LENGTH on their experience, however, often there is an incomplete exposure to literature and learning on the experience of others at this level. The result is an incomplete process of learning to achieve self-actualisation. A hunger for greater depth and opportunity for exploration is perceived but not satisfied. Some remedy may be found in further higher degree study but this has been difficult for the busy practising project manager. Often, additional subjects taken in say an MBA or other Coursework Masters degree course unfortunately does not provide the necessary depth. Taking on a PhD requires a minimum of 6 years of half-time study and is wholly research-oriented, at least in the UK and Australian tradition. While such in-depth investigation and discovery is rewarding it is often a lonely experience that leaves many potential PhD candidates isolated from the kind of immediate feedback that mentoring that is craved. Fortunately, there are PhD level programs available that combine coursework study at the necessary depth with action or case study research that meets this very special kind of need. These are the professional doctorates. They are highly demanding and are not suitable for the faint hearted or those who are not prepared for the rigour and intensity in combined in-depth reflective learning and high level theoretical study over a minimum three year period. The doctor of business administration (DBA) and a limited number of other such professional doctoral study programs have slowly been emerging from the university system.

## **The Doctor of Project Management**

In 2001 both RMIT University and QUT will offer the first Doctor of Project Management (DPM). Professor Derek Walker from RMIT has principally developed it, with considerable mentoring and exploration with Professor Tony Sidwell of QUT. The course, jointly operated by both RMIT and QUT enables it to be offered to mastery-level project managers for them to realise their 'wisdom' potential.

Entry level to the course will be selected from only those with a first class honours degree or, preferably a coursework master's degree in the project management field with recognised

extensive project management experience. These pre-requisite courses ensures that candidate have the research training and practice essential for writing a thesis. It is intended that only a very small intake will be recruited to the DPM each year. This will provide the intense personalised high level interaction required. The DPM incorporates interesting features to satisfy the educational need identified for this level of learning and discovery. It will radically extend the ability of candidates to research, communicate and write about their case study work based upon reflections of project management practice.

The course is primarily a research degree with an important innovative difference. It shares similarity with the USA style PhD with some important differences. The course, undertaken over three years, builds upon the candidate's workplace experience. This facilitates a true reflective learning environment to be developed to convert project management mastery into wisdom. Further, four advanced level project management subjects will be undertaken together with accompanying reflective-learning subjects. These will lock together to provide a mechanism for in-depth learning to take place. Further reflection, study, research and investigation on project management fieldwork will supplement study to more deeply consolidate project management knowledge. It will provide the mechanism for project managers to interact with the course mentors and other DPM candidates to really deeply explore their experience, new knowledge they discover and to provide in-depth case study research concerning projects they are involved with.

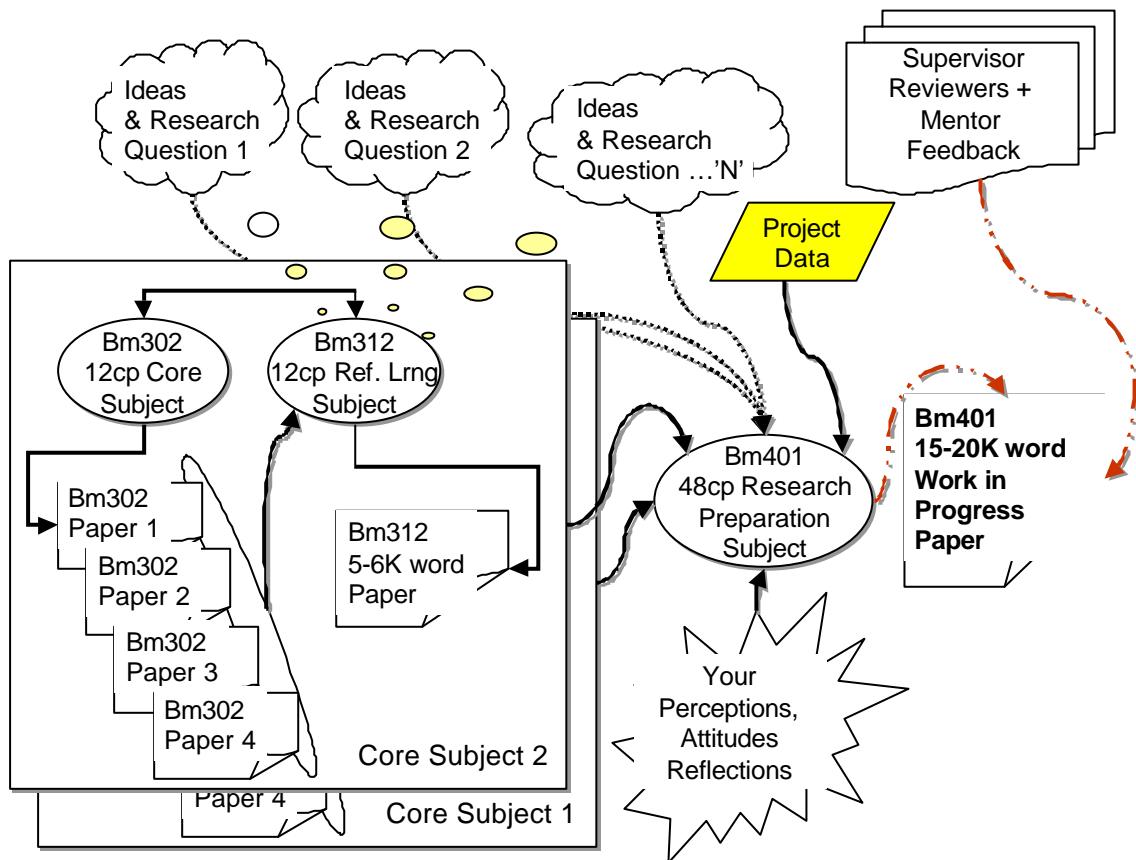


Figure 1 - Coursework and Reflective Learning Subject Coupling

Figure 1 illustrates how the first year of study would be undertaken. Core subject 1, Knowledge Management and Project Management Leadership would be studied along with their companion reflective learning subject. Figure 1 clearly illustrates BM302 Project Management Leadership, which requires 4 papers of about 3,000 words to be prepared by a syndicate of 4-5 project management students on well defined advanced concepts of leadership in project management. Each DPM candidate will prepare a fifth paper individually

summarising and extending group ideas and that of other groups participating in the subject<sup>1</sup>. This fourth paper provides an initial reflective learning level. The BM302 subject is linked to the reflective learning subject BM312 that is undertaken concurrently. This subject requires the DPM candidate to maintain a log of notes and reflective journal entries. These will focus on what they have discovered through their learning, how they have been affected by this insight, what impact that has had on their attitude towards project management practice and how these ideas may be incorporated to improve project management practice. These reflections will be used to extend the core subject knowledge and will be used to write a 5,000 to 6,000 word paper with the course mentor responsible for the BM312 subject. This will involve taking these ideas and applying them to a case study project that the DPM candidate has intimate knowledge of. The role of the course mentor is to closely work with that candidate on a one-to-one basis to help tease out the core meaning from the learning. This provides a unique opportunity for the DPM candidate to be both the guide to the apprentice (the course mentor who is not familiar with the details of the project case study) and be the apprentice guided by the course mentor. The course mentor will have a PhD level qualification and be expert in research and analysis techniques with a world-class publications record.

The core and reflective learning subject combined in this way provides a unique learning experience of discovery. This is further expended by linking it to the second group of core and reflective subject taken during that year. This is then applied to the workplace in a further case study of a project while also developing theory and testing the theory on how these two subject areas are also inter-related to other aspects of project management theory. The subject BM401 provides the subject mechanism for this to be recognised. BM401 is undertaken at the workplace as part of the DPM candidate's research activities in the workplace. The input to the subject BM401 is knowledge gained and refined through the year's coursework and reflective learning subjects together with the DPM candidates perceptions, attitudes and other inner resources together with project data and valuable feedback from and to the BM401 subject mentor. The output is a substantial progress towards the final doctoral dissertation as a work in progress document of some 15,000 to 20,000 words. The second year of the course is similarly structured. In the final year of the DPM, candidates consolidate their research papers and further refine them linking these and further modifying them to suite additional insights from other stimulation and data gathered during their research. The final thesis will be 40-50 thousand words long.

Learning stems from a number of internal and external sources. Theoretical knowledge is recorded in a variety of forms. Rigorously peer-reviewed books and literature form a highly validated and consistent source of knowledge. Less rigorously validated sources include general non-peer reviewed literature such as magazine articles, articles in the popular press and anecdotal accounts. These learning resources are filtered through the lens of the DPM candidate's experience, observation of practice and case studies and their own perceptions, attitudes and reflections. All this input data, information and intuitive knowledge is further refined through structured and rigorous reflection. The aim is to delve deeply into reasoning why certain phenomena appear to either conform or conflict with expected behaviour or theoretical propositions. Ideas are tested against practice either through a case study approach or through experimentation using action learning. The process is deep and rigorous and should develop robust practical yet academically tested new insights and codified knowledge that can be captured and passed on to the profession and/or company that the DPM candidate is working with. This will provide a new and useful stock of knowledge that can advance the project management profession.

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<sup>1</sup> The four core subjects will be open to other students as elective subjects for those undertaking other Master's level degrees.

## Expected Gains from the DPM Program—Discussion

The program does cater for a small number of highly qualified and privileged professionals. The justification for its development is that society in general, and clients in particular, should benefit through a better-prepared project manager of projects who can maintain and improve high professional standards. The course fee will probably be provided through sponsorship of DPM candidates by their employers. The course fee of \$36,600 for the full three years is not insubstantial, however, the research results—knowledge gained from lessons learned—will be of value and if properly harvested could represent immediate returns to organisations sponsoring DPM candidates. The individual DPM candidate will certainly bear a significant commitment in terms of possible cost (perhaps fees being part of a remuneration package), considerable time commitment of energy and private study time, and opportunity cost of time spend that could be used on alternative demands. It is, however, expected that DPM candidates will be satiating their thirst for knowledge and that the one-on-one support of their research will provide some benefit of a personal nature.

The DPM program provides an strong element of additional high level stretching coursework, continuous feedback and one-to-one mentoring. This should help DPM candidates get through the roadblocks faced by PhD students. The end products are similar a deep and rigorous research dissertation will be produced which will add to the body of useful and valuable knowledge. The DPM program should, however, provide more continuing benefits to society. The program delivers higher order project management subjects by focussing on advanced study areas—subjects represent areas of concern which project management should be addressing. There is a desperate and pressing need for project management organisations to continually reflect on their practice and to internalise lessons learned. They also need to engage in their staff's development to raise standards of service and continuously improve service delivery to clients and society in general.

## References

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