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Andrew Edkins, The University College London, UK
Efrosyni Konstantinou, The University College London, UK
Peter Morris, The University College London, UK
Sarah Earl, The University College London, UK

Proceedings Editors

Paul Chan, The University of Manchester and Robert Leicht, The Pennsylvania State University



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ACADEMIA AND THE PROFESSION OF PROJECT MANAGEMENT – THE CASE FOR A MORE ACTIVE RELATIONSHIP

Andrew Edkins, Efrosyni Konstantinou, Peter Morris, Sarah Earl The Bartlett School of Construction and Project Management UCL

INTRODUCTION

Project management has grown over the last 60 years from being a practice based management approach for delivering outcomes efficiently into a discipline that aspires to being a profession. For approximately the last 30 years academia has provided teaching and undertaken research to further our knowledge of this field.

How satisfied should we be with the state of play now, some 50 or so years after the proto professional project management associations were set-up in the late 1960s/early 1970s? Well, many people are and will be very happy, for the growth in its popularity has been enormous – wide-ranging and with significant impact. Others will quibble at certain areas that are perceived as being troublesome. For example, some see the discipline as primarily an execution oriented one whilst others emphasise the importance of managing the whole project, particularly the front-end. Many differentiate organizational change and strategic implementation as being different from 'hard' engineering type projects, often promoting program management as a more appropriate delivery vehicle for these 'softer' types of undertaking than traditional project management. In fact there is continuing debate and potentially confusion about the differences between project and program management. And there is also conceptual confusion regarding the success measures that should be employed: should we be using effectiveness measures such as benefits and value in addition to the classic 'iron triangle' efficiency ones of cost, schedule and functional performance (Atkinson, 1999; Levine, 2007)? Should 'people' as a knowledge area or functional resource be automatically included as part of the project management tool-kit? And so on (Morris, 2013: 111). Meanwhile, many feel that academia's research is too often too self-referential, otiose and incapable of providing the kind of real help and guidance that practitioners seek.

Thus, while the premier project management societies grow and grow – PMI, centred in the US, has over half a million members while APM, the UK organization, is near to receiving a Royal Charter of professional incorporation – intellectually neither they, nor academia, nor the experience of practitioners, totally fit one with another. PMI's *PMBOK Guide*, for example, is out of line with aspects of practitioner experience and commonly accepted conceptual knowledgeⁱ. For such a supposedly important field (18% to 22% of OECD GDP is in Gross Fixed Capital Formation and is therefore effectively delivered by projects¹) this conceptual confusion is surely unacceptable.

Despite the current emphasis on its professionalism, it is by no means evident that project management works naturally as a profession, at least insofar as professionalism is used to mean the rigour and principles by which those engaged in the discipline pursue it. This is not least because of the nature of its knowledge base and the debate on the

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¹ According to the European investment Bank: "The average share of gross fixed capital formation (GFCF) in GDP over the past 20 years has been about 20 per cent in the EU-27. This level is about 1½ percentage points higher than in the United States and about 4 percentage points lower than in Japan". Source: EIB, 2013

legitimization of this knowledge. And in this regard, particularly problematic is the role of academia, which traditionally in professions is seen as the body of experts who would define, legitimise and maintain the profession's knowledge base whilst actively participating in its practical application.

The purpose of this paper is to propose that academia does have a pivotal role in supporting both practice and the professionalization of project management, but that it is limited in what it can do unless it engages more meaningfully and more directly with both project practitioners and the bodies responsible for its professionalization. The aim of this paper is to encourage reflection and generate comment on these propositions.

PROJECT MANAGEMENT AS A PROFESSION?

Many feel strongly that project management is, or should be, a profession. Yet is it appropriate to do so? Johnson (1972) defines the term professional as "a specific way of organizing work." A profession is "an occupation that exercises a significant degree of control over its own works, including its definition, regulation, execution, and evaluation, with the joint aim of enhancing the quality and perceived value of such work" (p.31)

The traditional professions such as medicine and law are characterised by an overarching expectation to perform at the highest level, paying due regard to the expectations that others have of them and their conduct. This can then be disaggregated to a number of attributes: a well-established and systematic knowledge and skill base; a high level of training and qualification; an accrediting body giving a licence to practice and guarantying competence; the ability to practice alone, unsupervised; a commitment to publicly-spirited service and adherence to a code of conduct; autonomy and independence of judgment with the possibility of being removed from the 'licenced' status if standards and codes of conduct are breached (Bines and Watson, 1992; Hodgson and Muzio, 2011; Watts, 2000). In reality different domains fit these criteria differently, giving rise to a spectrum of officially recognized professional bodies that range from the traditional and familiar (e.g. law and medicine) through to the modern and specific (e.g. computing, marketing, purchasing and supply). The essential point about a professional status is, however, that it conveys obligations on both the body holding the charter and those individuals that are awarded chartered membership status to maintain standards and ensure the upkeep of codes of conduct.

It is by no means unquestionably the case that all these conditions hold for those responsible for managing projects. Projects are heterogeneous in type and form and their management should be adapted to their differing contextual needs and circumstances. Many project managers work for organisations rather than alone. While traditional professions such as medicine and law have built and retain their status and legitimacy by virtue of their contribution to public service and the greater good, and by compliance with a code of ethics, these aspects are rarely mentioned in project management. Nor, unlike the legal profession or medicine say, are we sure what the necessary standards of attainment should be and why they are appropriate? Given these corporatist characteristics, Hodgson and Muzio (2011) refer to project management as an 'organisational profession', according to Reed's (1996) taxonomy: as such, it is characterised by technical, tacit, local and political knowledge bases, working within a credentialist power strategy (where practitioners' status and influence are gained

through the possession of credentials that may be awarded by professional bodies), frequently under a bureaucratic organisational structure.

PROJECT MANAGEMENT KNOWLEDGE

The use of specialised knowledge and the administration of sound judgement is one of the most important attributes of professionalism. A professional's judgement is taken to be deep-seated and sound so that one can rely on the professional to make authoritative, reliable judgements ("refined subtle discriminations" Dreyfus and Dreyfus, 2005). Such personal professional knowledge is typically grounded on an academic base, which is shaped in the midst of action. Is professional project management knowledge indeed grounded on an appropriate academic and practical base? Is it appropriately defined at all?

PMI is the largest of any of the project management 'professional' bodies by a long way, both in terms of numbers and of global reach. Its view - its guidance - as to what constitutes the knowledge that is distinctive to project management is enormously influential. Yet is it convincing? The PM BOK® Guide was created 30 years or so ago, with no formal academic input. Though there has been significant change in theory and practice since then neither its structure nor much of its content has since changed dramatically. New concepts have arisen such as 'the management of projects', 'critical chain', 'supply chain management', 'emotional intelligence' which are hardly if at all referred to. New roles have appeared, such as 'the sponsor' and 'the project director' yet there is no guidance on what knowledge these roles require. (In fact they are hardly even mentioned.) There is little linkage between research and professional training and development, or indeed between research generally and the project management bodies of knowledge that have been developed by professional bodies. There is no guidance on how to contextualise the 'contingent' knowledge of project management and yet we have observed the fragmentation of project management into many sector specialisms: for example construction, ICT, oil and gas, defence and aerospace, organisational change, creative media.

If the knowledge that is needed for managing projects is both situated and theoretical, as it is generally agreed to be (Morris, 2007), how do we know if this knowledge is right or appropriate? The problem is made worse in that there is a worrying disconnect between what the project management practitioner community sees as the knowledge required to be a project management professional and what the project management scholar community considers that to be. This gap clearly raises a problem about the robustness and legitimacy of the discipline's body of knowledge.

Classically, academia has provided the legitimisation of the professions' knowledge bases (Abbot, 1988). But in the case of project management it is by no means evident that academia has the necessary answers, nor is it seen by the practitioners who see themselves as professionals as having this role. Indeed, academia clearly has not got all the answers! There is not even a widely agreed definition of what we mean by the term 'project management' from which other definitions may emerge and be developed. Instead, there appears to be a great tendency for academics to specialise in some aspect of project management, with relatively few academics, who really study, or who are recognised as being expert in, the discipline as a whole – a statement which, if true, is very important.

LEGITIMISING PROJECT MANAGEMENT PROFESSIONAL KNOWLEDGE

A closer look into the role of academia in legitimising the knowledge that is relevant to the project management profession suggests that its role is narrowly defined. Theory as a system of ideas or a set of general principles which explain a phenomenon – in this case project management – and against which practitioners can be evaluated is seen almost as irrelevant to project management practice, almost ubiquitously.

There are several explanations for academia's low status in this crucial area. One could be that in its current formulation project management is not able to call on robust theory to explain its action. Another explanation is that academics are increasingly required to produce publications of the highest academic calibre which keeps their attention within the academic community and allows very little time or resources to be allocated to engaging with the practitioner once data have been collected. An engaging, thoughtful and meaningful relationship that enriches project management practice is rarely a priority, and the academic who specialises in project management rarely manages significant projects.

The void this creates has been filled, to some extent at least, through the rise of the consultancy firm. These however have a tendency to focus on 'quick fix' solutions and on the latest management fashion, which may not only distract and create noise but may also introduce a significant level of ambiguity around business and project practice (Scarbrough and Swan, 2001). Clarity that has been developed in an academic environment is not always taken into consideration.

In fact, the socially constructed nature of projects is frequently seen as the key reason why generic theory about the management of projects is often seen as being of limited use in practice. Here the argument is that 'one project is not like the next', and further knowledge, beyond basic concepts, tools and techniques, is acquired from learning-in-action. Yet, socially constructed and situated concepts and phenomena in general, such as human and organisational behaviour and relationships, have always been studied and explained through theory. Why isn't the discipline of managing projects seen in such a way?

An Example From Medicine

So can project management be professionalised and who decides what the knowledge is that is necessary and useful in its practice? An example from the profession of medicine – a classical profession – may provide some useful insights. In medicine, a professor of a particular specialism – say paediatrics – will have undergone elaborate instruction and training where – as novices – he or she was exposed to and tested on both the abstract, systematic knowledge of scholars (i.e. theory) and the practical application of that knowledge (e.g. the reality of treating a patient in hospital on a say a typical Tuesday morning after filling in a couple of forms and a meeting with the rest of the team). In the process of becoming an expert, the novice will have shadowed senior practitioners and professors in order to study:

a) how theory is applied in practice – here theory is not seen as strictly detached, objective knowledge. It is not assumed that there is exact science that needs to be applied from one patient to the next irrespective of their particular circumstances. Similarly, it has been argued that 'tacit thought forms an indispensable part of all knowledge, [and] the idea of eliminating all personal elements of knowledge would, in effect, aim at the destruction of

knowledge. The ideal of exact science would turn out to be fundamentally misleading and possibly a source of devastating fallacies' (Polanyi, 1983: 20).

b) the 'refined subtle discriminations' (Dreyfus and Dreyfus, 2005) that more senior staff members make in action.

This extensive instruction and training period socialises the junior (novice) medical doctor into the profession of medicine and within it (in our example) the specialism of paediatrics, and instils the code of ethics and behaviour that the profession dictates. Theory, code of ethics and behaviour reflect a set of established rules and norms that guide practice and are ultimately tested before full and final entry in the profession is granted. At any one point in time, the judgement, actions and behaviours of the training paediatrician can be deemed inappropriate by expert paediatricians many of whom will be professors.

In this way professionals, whether they go on to choose to be more focussed as scholars or practitioners, first learn the theory in class at university and then go on to apply it and evaluate it in practice,. Both scholars and practitioners are dedicated to the improvement of practice — not to the isolated pursuit of theory. Their aim is the improvement of the profession and of the ideals, ethics and values around which the profession is organised. Theory and more general abstract and systematic knowledge is a) relevant to both, and b) the basis — the root — of practice for both the scholar and the practitioner. The difficult part of the job is how theory and generally abstract and systematic knowledge is and can be tailored to particular cases whilst still maintaining a set of ethical principles and behaviour that frame — define and bound — all action. Together the scholar and the practitioner observe, focus, pay attention to, analyse, empathise and critically evaluate each particular case in a spirit of understanding and responsibility towards - in the case of medicine - their patient. In this sense they are both responsible and accountable for what happens in practice, and they both review and legitimise the knowledge that is most useful for the profession.

In contrast, in the area of project management, extensive education at university level in the study of project management is optional for practitioners. Scholars who study projects and their management may have never applied and tested their knowledge in or on real projects in practice. And practitioners who actually run projects may do so without any theoretical underpinning. In other words, neither scholars nor practitioners may be fit to legitimise the knowledge that is relevant and useful to practice.

BUT WHAT OF CERTIFICATION?

If the knowledge that is supposed to be the cornerstone of the profession cannot be legitimised, then what value can there be in 'professional' certification? The growth of recognised project management 'professional' certification qualifications has emerged from the world of the project management practitioners, curiously, and alarmingly, with limited and in some cases no academic scrutiny. In many instances meeting these qualifications' standards requires only undertaking relatively short duration courses and displaying rote learning. This would suggest that there are gaps in the knowledge and skills being imparted and tested. For example, the importance of being critical and reflective, which is a core attribute of professionalism, is neither widespread nor embedded in much of the project management practitioner community as it is not a key objective of these certification courses. A qualification of competency, in effect a licence to operate unsupervised though regulated

by professional norms, is one of the most important attributes of being a professional. Yet how seriously do we evaluate how useful having this specialist knowledge is? One would expect that there should, at a minimum, be an assessment of project management education and training in terms of outcome performance (Swenson, 2003). Remarkably, there would seem to be little academic involvement in assessing the aspiring profession of its distinctive knowledge.

Along with the above, the lack of clarity about the definition of project management and what this comprises amongst academics raises the question as to what is being certified?

SUMMARY

We have presented a situation where the very notion of project management as a profession sits uncomfortably. We base this on the following:

- there are different definitions around of what we mean by project (and program and portfolio) management;
- one cannot be confident that the profession's body of knowledge properly reflects the knowledge that is needed to manage projects, or adequately represents the domain;
- several of the traits we associate with professionalism do not fit in project management, particularly those to do with operating alone, and ethical behaviour.
- there are deep doubts as to the relevance and reliability of project management certification and if project management is to be considered as a profession.

Embedded in this view is the argument that academia fails to perform its traditional legitimizing role of the knowledge required to manage projects, partly because of the type of knowledge being called upon, partly because it has not been invited to, and partly because it is often not qualified to do so. Yet independent, robust and expert credibility is essential in legitimising a profession's knowledge base. If it's the case that academia could not be trusted to do this properly, who should do it?

Despite this, we argue that academia has an obligation to engage as fully as possible with both practice and the profession. Critical activities probably done better by no one other than academia include the following:

- Question and challenge (as this paper is implicitly doing), e.g. what are the theoretical justifications for the distinction and the standards associated with program management?
- Build and review credible domain knowledge.
- Advise practitioners on the validity of their p³m/mop knowledge with academics taking the role of coach, acting as a critical friend, and instigating action research.
- Identify new issues/roles/topics that are emerging and which need investigating (aka research), reflecting, or promulgating e.g. the need to reflect more knowledge on areas recognized as important such as managing outcomes, benefit realization, or 'the front end'; and the need for guidance on 'new' roles such as the project sponsor (or owner), project director, program manager, front-end manager.
- Work with the professions to make sure research and practice insights are recognised as valuable and are then fed into the professions' bodies of knowledge. (e.g. reviewing the merits and impacts of both PMI and APM funded research).

We propose that only by engaging in these ways will academia build the credibility it needs to provide the expert legitimisation for project management to be professionalised. But the situation is urgent: 90% of UK government policy is now delivered by projects Project management delivers the national infrastructure for economic prosperity as well as all that is needed for health, education, justice, and well-being.

Projects have shaped our past and they will shape our future. If we see ourselves as part of the community responsible for the management of these projects shouldn't we reflect on the work still to be done in professionalising the discipline?

Thus we are left with a number of questions about the professionalization of project management which we would ask EPOC to discuss:

- 1. Conceptually, theoretically, should project management be considered as a profession or not? (Since it is clearly being successfully presented as one, what does this conceptual-reality gap tell us?)
- 2. What can one do if the 'professional' body will not modify its [arguably inadequate] definition of the profession's knowledge base?
- 3. If, as seems to be the case, academia is not currently qualified to do so, (a) who should legitimise the project management professional knowledge base; (b) what should academia be doing to make itself credible as a legitimising agent?
- 4. Does all of this matter and, if so, how much does all this matter? How energetically should the academic project management community be involved in the debate?

REFERENCES

Abbott, A., 1988, The system of professions: An essay on the division of expert labor, University of Chicago Press.

Atkinson, R., 1999, Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria: International Journal of Project Management, v. 17, p. 337-342.

Bines, H. and Watson, D. (1992). Developing professional education. Buckingham: SRHE.

Dreyfus, H. L., & Dreyfus, S. E., 2005. Expertise in real world contexts. Organization Studies, 26(5), 779-792.

European Investment Bank, 2013, Investment and Investment Finance in Europe, Luxembourg, EIB.

Hodgson, D. & Muzio, D., 2011. Prospects for professionalism in project management, in Morris, P. W. G., Pinto, J. K. & Soderlund, J. (Eds.), The Oxford Handbook of Project Management, Oxford University Press, Oxford, pp. 107-132.

Johnson, T. J. 1972. Professions and power. London, Macmillan.

Levine, H. A., 2007, Project portfolio management: A practical guide to selecting projects, managing portfolios, and maximizing benefits, John Wiley & Sons.

Lundin, R. A., and A. Söderholm, 1995, A theory of the temporary organization: Scandinavian Journal of management, v. 11, p. 437-455.

Morris, P.W.G. (2007) 'The validity of knowledge in project management and the challenge of learning and competency development' Chapter 9 in Morrris, P.W.G. and Pinto, J.P. The Wiley Guide to Project Organization and Project Management Competencies John Wiley & Sons, Inc., Hoboken, N.J.

Morris, P.W. G., 2013. Reconstructing Project Management, John Wiley & Sons, Ltd, West Sussex.

Polanyi, M. (1983). The Tacit Dimension. USA: Doubleday & Company Inc.

Reed, M. I., 1996. Expert power and control in late modernity: an empirical review and theoretical synthesis. Organization Studies, 17(4), 573-579.

Scarbrough, H. and Swan, J. (2001). Explaining the diffusion of Knowledge Management: The role of fashion. British Journal of Management, 12, 3-12.

Swenson, J. (2003). Transformative Teacher Networks, On-Line Professional Development, and the Write for Your Life Project. English Education, 35(4), 262-321.

End Notes

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ⁱ There is little or nothing in the PMBOK®Guide on why or how fundamental principles or practices of project management should be applied, only guidance on the sequence of actions that should be followed. There is no substantive discussion for example on such core topics as change control, estimating, fast tracking, matrix management and so on, let alone project management's responsibilities with regard to requirements management. The project lifecycle is a crucial example. Though this is central to distinguishing projects from non-projects its only treatment in the Guide is as a plan->organize->mobilize sequence which is said to apply

equally generically both to the project as a whole and to individual project stages. In fact the nature of management's work is both crucial and crucially different at each of the different stages (phases). The wholly process-based structure of the Guide mitigates strongly against the inclusion and explication of substantive research findings. This is particularly significant regarding the management of the project front-end.