

“The unexplored territory of distance education for multi-national professionals in project management”

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Abstract

This paper examines research into the development of a pedagogical framework for distance education (DE) in postgraduate project management studies at an Australian university as part of its strategy to deliver ‘transnational’ education. Project management requires development of technical, strategic, organisational and leadership competencies, but strategies to foster these professional competencies in a DE environment require investigation. Conceptual models are being used in a case study approach to identify ‘disturbances’ and ‘contradictions’ in relation to project management education, postgraduate students’ educational needs, competency-based standards for management education and development of professional competencies, and to facilitate the development of a theoretical framework and program guidelines.

Key words

Project management, distance education, postgraduate education, professional education, theoretical framework, activity theory

Introduction

Often referred to as an 'accidental profession' (Stretton 1994), the discipline of project management has yet to define a pedagogical framework for education and the development of professional competencies, let alone evaluate its effectiveness in the context of distance education. This paper provides an overview of a current research study being carried out by the author to develop such a framework together with guidelines for evaluating the effectiveness of an existing distance education postgraduate program. The setting of the research case study is a regional dual-mode university where technological developments and an increasing focus on multi-national markets are challenging its historical practices. The paper examines the research problem and objectives, the research methodology, the development of a pedagogical framework, and the case study context of the learning setting and the learner.

Research problem and objectives

The existing project management program at the University started in the 1980s as an on-campus Master of Business program, was changed to a distance education program as part of an MBA program and is now offered in distance and online modes as a Master of Project Management predominantly to multi-national offshore students. As the program coordinator, the author has concerns that the pedagogical model is no longer appropriate for the development and evaluation of graduate attributes of project management professionals, and that there are 'disturbances' (Engstrom 1987) or conflicts between the educational

and professional needs of the students and the constraints imposed on the program by the policies and processes of the learning institution.

The research problem is stated as 'the need to define an effective learning environment for the provision of distance education for project managers at postgraduate level' and the study's objectives are:

- to integrate existing pedagogical frameworks and Activity Theory to undertake an holistic investigation of the selected case study environment; and
- to formulate a pedagogical framework as a guide to the development of an effective learning environment for postgraduate project management distance education.

Research methodology

Dinham and Stritter (1986) suggest the following framework for development of theory in professional education:

- What are the attributes of students that will result in better-prepared professionals?
- What are the aspects of professional education for students to master?
- What are the characteristics of effective practical instruction?
- What are the optimal characteristics and locations of sites in which practical learning takes place?
- What are the most efficient and effective methods of evaluating a learner's practical performance?

- What is the most effective approach for assessing clinical instruction for improvement?

Using this as a guide, the research methodology has been formulated and is summarised below. Following completion of the literature review, major stages of the research design comprise the *auditing* process and the *conceptualisation* process.

STAGE 1: LITERATURE REVIEW

Process: This has established the context of the study and generated the preliminary conceptual frameworks. This stage is ongoing throughout the study.

STAGE 2: AUDIT

Stage 2.1: Document analysis of a comprehensive range of documents to establish the context of the organisational setting and the learning setting.

Stage 2.2: Semi-structured interviews with representatives of the learning community.

Stage 2.3: Focus groups with staff and students to examine the themes and contradictions identified in previous phases.

Stage 2.4: Survey of the project management student population to collect data on student attributes and attitudes.

STAGE 3: CONCEPTUALISATION

Stage 3.1: Development of preliminary conceptual model based on data from Stage 2.

Stage 3.2: Asynchronous online discussion forums held with:

- selected students to investigate the themes and contradictions from their perspective over a longer timeframe, and
- individual students to explore predominant issues and themes over an extended period in a more personal and private environment.

Stage 3.3: The completed conceptual framework will be submitted for feedback from participants in the research project for validation of the development procedures.

Development of a pedagogical framework

Existing conceptual models have provided a valuable starting point for the initial research stages , but the risk is that they 'simplify complex processes and relationships' (Goodyear 1999, p. 4). An adaptation of Goodyear's pedagogical model for open and distance education by Nunes and McPherson (2003) illustrated in figure 1 has been adopted as a preliminary analytical framework and comprises:

- the *pedagogical framework* (consisting of philosophy, pedagogy, strategy and tactics),
- the *educational setting* (consisting of environment, tasks and student activities which lead to learning outcomes) and
- the *organisational context*.

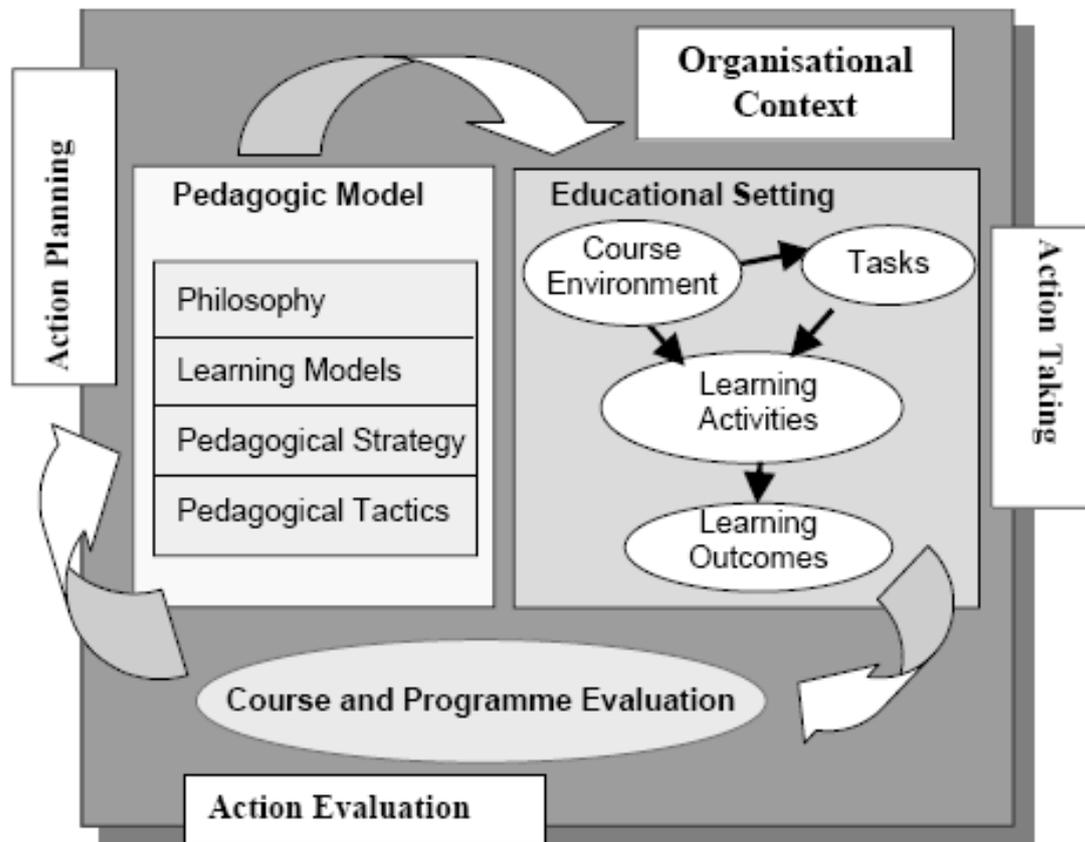


Figure 1: The Continuing Professional Distance Education model

(Source: Goodyear 1999; Nunes & McPherson 2003)

These constructs are then used in conjunction with Engestrom's 'activity theory' (1987) as a conceptual tool for studying developmental processes, and his 'structure of human activity' in an activity system (refer figure 2) is being used to better understand the learning setting and the interplay between members of the learning 'community' comprising academic and support staff and the learners.

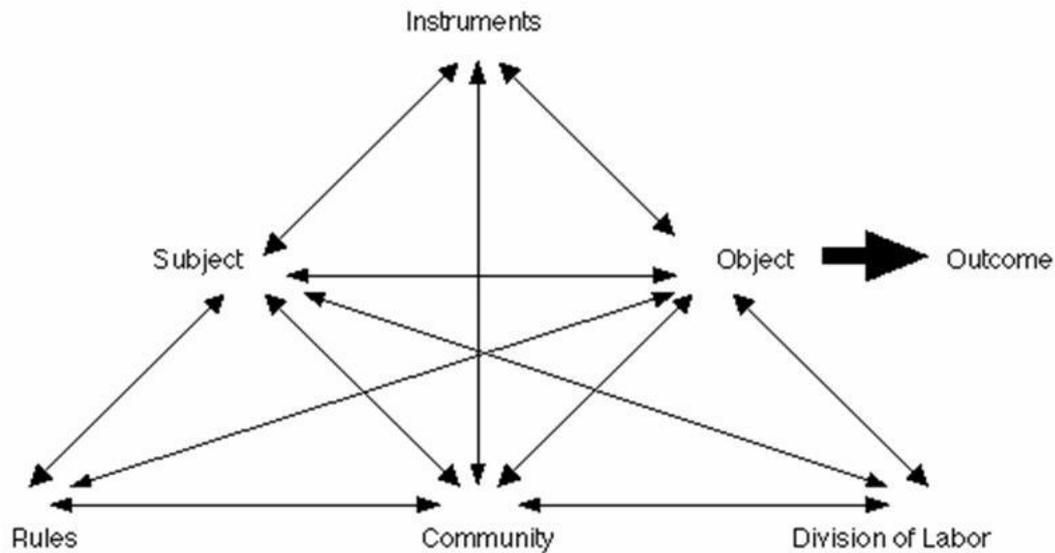


Figure 2: Components of an activity system

(Source: Engestrom 1987)

In the context of this case study:

- '*instruments*' refer to those elements of the distance education environment created for teaching and learning;
- '*subject*' refers to academic staff, students and designers;
- '*object*' refers to the 'problem space' relevant to each subject (in the case of academic staff, this could be learning outcomes, for designers it could be program effectiveness, and for students, learner motivation);
- the '*community*' represents the multiple individuals and groups involved in specific activities related to the object;
- '*division of labour*' is the horizontal division of tasks between the members of the community and the vertical division of power and status; and
- the '*rules*' refer to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system.(Engestrom 1987)

'Disturbances' typically indicate developmentally significant systemic contradictions and change potentials within the activity (Engestrom 1987). The early stages of the study will identify the 'contradictions' and 'tensions' that exist in the context of the learner and the learning environment, using a range of 'subjects' for each facet of the study. The outcomes of these studies will be used to formulate a preliminary pedagogical framework for the specific context of this case study.

The learning institution as subject of the activity system

'Intuitive' analysis of the current learning environment suggests a number of potential disturbances within the system. The purpose of the pedagogical framework is to guide improvements to the existing distance education program but such studies often have a 'continuing preoccupation with the individual learner' (Sommerlad 2003, p. 153) rather than the broader learning environment. Socially-situated theories of learning suggest that 'what one learns and how it is learned cannot be separated out from the groups one belongs to, nor from the wider location in the social structure' and that a 'theory of pedagogy, as distinct from a theory of learning, must encompass all the complex factors that influence the process of teaching and learning' (p. 157).

There is evidence of disturbances between the existing distance education model at the university and the objectives of a vocationally-oriented professional education program which include development of generic, discipline and

societal skills. Like many other universities (Barrie 2004), USQ is currently reviewing its policies on graduate attributes in order to ensure the effectiveness of its programs in producing appropriate learning outcomes for a broader range of stakeholders including students, industry and society. The existing project management program does not provide for the definition, development and evaluation of the appropriate competencies, and this may not be possible with distance education exclusively. Similar programs in engineering and education at the university preclude total study of those programs by distance education and require some form of face-to-face activities for confirmation of the existence of those skills. This constraint is in conflict with the offer by USQ to provide distance education 'anywhere, anytime'.

The nature of project management employment and practice requires project managers to operate from remote locations and postgraduate learning must be made 'accessible at any time and from any place' to overcome the problems of 'full-time careers, family obligations, and community requirements' (Winters 2000, p. 51). As distance education methods and systems converge with those of face-to-face teaching (King 1999; Moran & Myringer 1999, p. 57; Trindade, Carmo & Bidarra 2001, p. 3), the organisational setting must provide flexibility in the provision of access to the learning experience, resources and communication with academic staff and other students.

The University describes itself as 'transnational' (University of Southern Queensland 2005) and has 'embraced the need for change implicit in a global educational environment that is highly competitive and dominated by the

evolution of communications technologies'. Its stated intention is to 'remain fast, flexible and fluid in meeting the needs of learners throughout Australia and internationally' (2005). Gibson (1998) suggests that distance education in the 21st century should mean education anytime, anywhere, for anyone, but that this should happen in an educational paradigm of 'education for each' with a focus on the educational needs and objectives of each student, requiring an almost infinitely flexible model of learning. Given the individual nature of distance learning, this requirement may be best met in this mode of delivery.

Activity Theory (AT) requires multiple perspectives (Jonassen & Rohrer-Murphy 1999) and analysis of an activity system (AS) should start with the key participant/s in the position of 'subject'. In this study, the two key perspectives to be adopted initially are those of the learning institution (refer figure 3) and the learner.

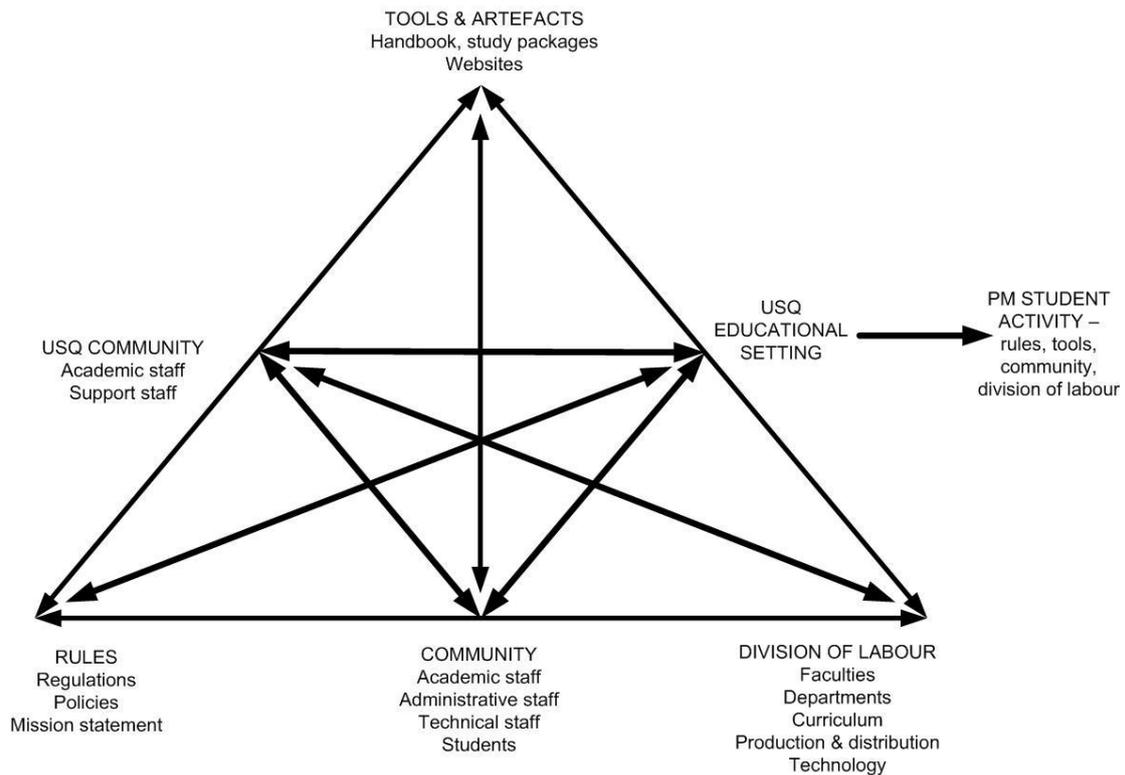


Figure 3: Activity System of the Learning Institution

(Source: adapted from Engestrom 1987)

In the early stages of the study comprising semi-structured interviews with academic staff and students as members of the learning 'community', analysis of the activity systems has identified instances where 'disturbances' exist between various nodes of the model (suggested by the connecting arrows). Those disturbances will be explored more fully in the subsequent stages of the research project involving focus groups and a survey of students.

The learner as subject of the activity system

In this case study setting, the commencing attributes of students are extremely diverse as over eighty percent of project management students are located

offshore requiring consideration of the impact of differing nationalities, languages, cultures, ethnic groups, educational backgrounds, age, learning styles and student perceptions of 'normal' academic behaviour, and leading to considerable examples of tensions within the activity system. How that level of diversity can be adequately catered for in an educational program, and especially by distance education, is one of the questions to be answered by this study.

Most project management students hold a qualification or first degree in an area other than project management thus education is commonly approached as postgraduate study (Turner, Keegan & Crawford 2000). Johnson and Thomas (2004, p. 312) add that '...conceptions of educational effectiveness in the field of postgraduate education...need to be broadened from student attainment to include individual capabilities, individual performance at work, organisational change and capacities generally in the body of development professionals' and that '...opportunities to apply learning are particularly important' (2004, p. 308).

Farivarsadri (2001) suggests that professional education's purpose 'goes much beyond the mere transformation of knowledge' (p. 2) and that 'a holistic university education aims at addressing the whole person, developing the personalities of students in different dimensions, making them know how to acquire knowledge, to communicate, to be aware of his own values, and those of the other's as well' (p. 2). This is seen to be a significant challenge in the context of distance education for multi-national students.

Although there has been an increasing focus on graduate attributes in the higher education sector, there is often no differentiation between desirable attributes for undergraduate and postgraduate students, whose commencing and exiting profiles are significantly different. At postgraduate level, it becomes increasingly important for mature-age and experienced students to situate their learning within their workplace as 'the most 'authentic', relevant and 'situated' site for vocational learning' (Chappell 2004, p. 7) but this is difficult to incorporate into models of distance learning.

A focus on professional competencies is strongly entrenched in the project management profession through the certification model used by the Australian Institute of Project Management as the professional body in Australia, and by the extensive research into project management competencies by Crawford (1997; 2000a; 2000b; 2002) who proposes a conceptual model for project management competence as illustrated in figure 4. Based on this model, for the learning experience to be deemed effective, it would require verification of the input and process competencies, and appropriate measurement of the output competencies.

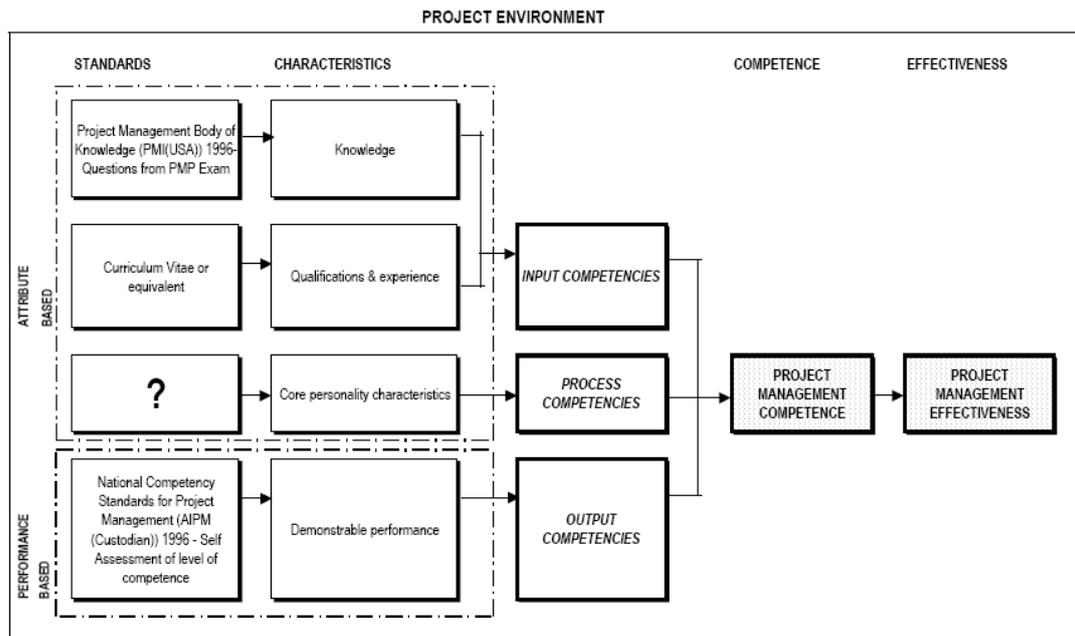


Figure 4: An integrated model of project management competence

(Source: Crawford (2000a))

CONCLUSION

This paper has examined a current research study to define a theoretical framework and to develop revised guidelines for a learning environment suitable for postgraduate distance education in project management. The study highlights a wide range of issues that represent 'disturbances' within the existing learning system related to the use of distance education for professional education, and identifies the necessary steps to address them in an appropriate way. It emphasises consideration of the specific needs of mature-age learners, the higher-order competencies to be achieved as part of professional education, and pedagogical issues relating to the delivery of distance education to multi-national students.

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