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## "I just wanted it finished!": The transitions of a novice project manager

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# “I just wanted it finished!”: The Transitions of a Novice Project Manager

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**Abstract:** How do you identify quality project managers? Is it possible to rate project managers on a scale, and more importantly once their level has been identified, can their skills be improved? These issues are addressed in this case study by observing the development of a research officer as she unwillingly undertook the management of a series of multimedia projects aimed at training and up-skilling tertiary students. The major conclusion from this research is that her skill development can be identified through the use of a four-stage typology derived from the literature on adult learning.

## Introduction

Project management, as a science, has developed some powerful strategies and many effective methodologies but this does not mean that all project managers make equally good use of them all. In fact, novices tend to feel excluded and sometimes complain that those within the industry tend to use the closed language of the initiated. Indeed our experience with teaching and observing novices in project management suggests that those new to project management often find the language confusing and the methodologies not self-explanatory. This led to the obvious question, namely whether it was possible to identify a developmental sequence along which all project managers make progress, and whether this progression could be clearly outlined, so that those starting on the lower end of the scale could be shown how to develop the greater skills of those further along the scale.

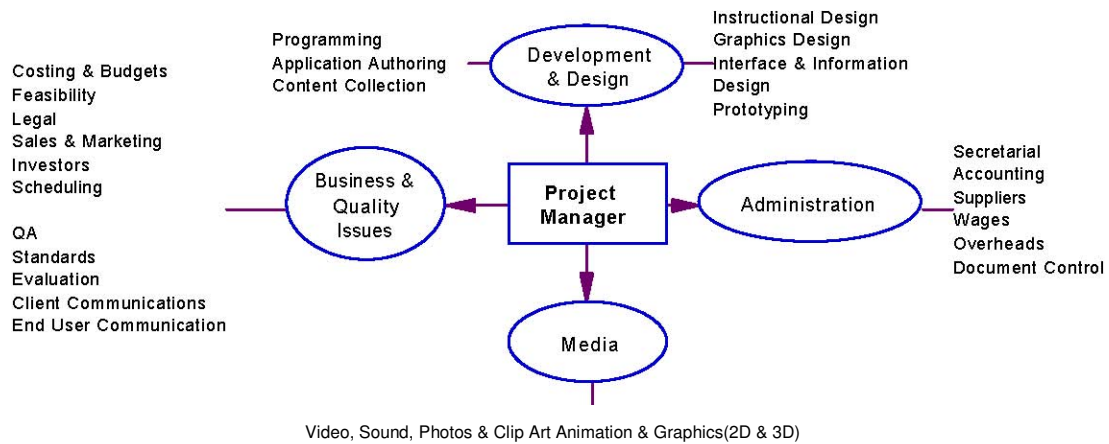
This research initially set out to describe the experiences of a competent tertiary level trainer who found herself in the role of novice project manager. Her frustrations and satisfactions during the initial project were initially sought because of their likely novelty but also because of the opportunity to observe her development over the full life of that project. In hindsight it became obvious that her development over time was part of a pattern, especially as she undertook subsequent project management roles. The pattern was not novel at all, but was strikingly akin to that delineated in the literature on adult learning as a typology of increasing independence from her support systems. This typology is documented in this paper and suggests that it may provide guidance for those interested in improving their project management skills.

## Review of the Literature

Increasingly, project management is gaining popularity within companies who seek to increase efficiency and profits (Thomas & Pinto, 1999). Successful project managers can be difficult to find, and are often required to coordinate various and sometimes competing tasks by striking an effective balance between their roles. How does this translate into job selection criteria? What skills do employers need to consider as being essential for effective project managers: technical expertise in the field; strong accounting and management skills; generic skills; others?

“The key to successful project management is simple...” (Lafleur, R., 1996, p. 25). The literature on project management suggests that the basic competencies required by a project manager can be learned (eg Thornley, J., 1996, Murphy, C., 1996). The technical and personal skills necessary are described in many textbooks and are available to all those who have the inclination. Naturally some people would be expected to show more intrinsic aptitude than others, but the technical processes are not hidden nor are they treated as though they are unachievable.

As with most other occupations, the role or definition of project management can be wide and varied, often determined by the size of the company, size of the project, time required to complete project, number of personnel, nature of the project, and other factors. So, the review that follows in this paper will be couched within the discipline of multimedia project management, with small teams of members, based in small to medium sized companies. As shown in Figure 1 (Luca, 1997), skills needed by a project manager in this context are typically focused on business and quality assurance (management), administrative skills (management), development, design and media skills (technical).



**Figure 1:** Multimedia project management skills

However, recent research is advocating that the skills shown in Figure 1 are not enough for successful project management. Project managers must also have effective generic skills (Ashcroft & Foreman-Peck, 1994; Bennett, Dunne, & Carre, 1999; Marginson, 1993; National Board of Employment Education and Training, 1996). This concept is now also gaining strong support from industry as well as higher education funding authorities, and many reports from around the world are advocating that vocational and higher education institutions need to focus more on improving students generic skills rather than just providing content knowledge (Australian National Training Authority, 1998; Candy, Crebert, & O'Leary, 1994; Dearing, 1997; Mayer, 1992). Another dimension of skills, known as emotional intelligence (Goleman, 1995; Salovey & Mayer, 1990), is also gaining popularity as being required for successful teamwork and management.

The literature on adult learning and management tends to focus on teaching project management phases and process rather than individual skill development. This could be regarded as dismissing the importance of a project manager in the development process, or describing how learners of the project management methodologies progress towards competence. Yet it is self-evident that individuals must grow and progress over time. How many steps are involved in such personal development? A review of the literature on adult learning suggests that there is a variety of possibilities. Perry (1970) presented the results of a major study called *Forms of Intellectual and Ethical Development*, which looked at the development of adults as they learned new content, whether it was a foreign language or a new hobby. His study proposed a series of nine 'positions' that students adopted and which described how they saw themselves and their learning. Curran (1976) proposed a five-stage process that learners move through, which he argued applies regardless of the particular content. The stages were: Embryonic, Self-assertion, Separation, Reversal and Adult stage.

A proprietary model called the Project Management Maturity Model (or ProMMM) describes four levels of project management capability namely Naive, Novice, Normalised and Natural (Hillson, 2001). This model appears to share congruence with some well known four-stage models of adult learning. The first is described by Brundage and McKeracher (1980) - a finely detailed micro level description that identifies states or stages through which individuals pass during their learning activities. They called them the Entry, Reactive, Proactive and Integrative stages. These descriptions were useful but the titles were not as relevant as those next identified by Boud (1988) as Figure 2, which

focused on the adult goal of being an autonomous learner. Such a goal seemed a reasonable description of a competent project manager, suggesting there was potential for this model to be applied to a project management development scenario.

In a review of adult learning, Boud described a goal of autonomous learning as the students becoming interdependent learners, able to work with and help each other. As shown in Figure 2, he explained the attainment of the final stage of interdependence ‘is often portrayed as a process starting from *Dependency*, and moving progressively through *counter-Dependence* and *Independence* to *Interdependence*’ (Boud, 1988, p. 29). *Independence* was aligned to authority figures such as a teacher, whereas *Interdependence* is defined as a more mature or equal form of relationship with those around them. The typology seems relevant in this case as it can be seen as describing adults as they progress with their understanding, skills and intellectual development in project management and are gradually able to work independently and also support others in the field.

## Dependent Counter-dependent Independent Interdependent

**Figure 2:** Four stages for a learner in a learning activity (Boud, 1988)

**Table 1:** Characteristics and behaviours commonly identified across four stages of learning, adapted from Boud (1988) and Brundage & MacKeracher (1980)

Dependent	Counter-dependent	Independent	Interdependent
<ul style="list-style-type: none"> <li>□ Stage triggered when learner enters situation of high novelty and uncertainty, possibly with either personal stress or threat perceived.</li> <li>□ Appears disoriented, observes but may refuse to participate, and show lack of commitment.</li> <li>□ Reliant on external standards and explicit simplistic guidelines</li> <li>□ Needs reliable environment where consequences of behaviours are known</li> </ul>	<ul style="list-style-type: none"> <li>□ Learner beginning to develop sense of self, either learns to act with some independence or perceives that the environment has become unsupportive or unreliable</li> <li>□ May appear reactive, or regard self as autonomous and not needing control by others; may seek high levels of self-understanding, or choose to be more individualistic in a group setting</li> <li>□ Often expresses negative feelings, conflicts with others, claims group is disorganised/confused</li> <li>□ Needs encouragement but minimal adherence to strict standards, norms.</li> </ul>	<ul style="list-style-type: none"> <li>□ Learner feels they are accepted and acceptable group member or actor in situation; thus learns to accept others and their differences.</li> <li>□ Regards self as involved, engaging in mutuality, cooperation and negotiation; developing shared norms in group and seeking understanding about others and their roles.</li> <li>□ Less individualistic, more proactive and productive.</li> <li>□ Responds best to collaborative direct feedback about performance with regard to established objectives</li> </ul>	<ul style="list-style-type: none"> <li>□ Learner able to distinguish between and integrate others perspectives with own.</li> <li>□ Begins to develop sense of balance with group and its individuals and their interpersonal relationships</li> <li>□ Able to integrate perspectives involving multiple interpretations of experience and multiple sources of information</li> <li>□ Best supported by those who encourage high personal and internal standards to guide behaviour, who share information about themselves and act willingly as co-learners</li> </ul>

The point of a developmental model is that individuals or organizations could benchmark the way they manage their projects and hopefully provide guidance towards better processes or set improvement targets. Each of the stages on this project management typology can be distinguished based on the patterns of characteristics and behaviours already identified in these four-step models. Synthesising these descriptions leads to the following four-celled table (Table 1).

Each of these sets of characteristics and behaviours could be used to help benchmark the stages of development of a project manager.

## **Context of Study and Research Method**

Diane was a research officer at a large university who often trained post-graduate students in the use of specialist statistical, analysis or presentation software. When a grant was won to develop a series of standalone materials on some of her teaching areas, she expressed no interest in managing the development of a multimedia product, as she considered this beyond her scope. However, six months later when she realised that another project manager was being quite ineffectual, she became galvanised, and argued she could do just as well, if not better than the current project manager. She set about learning what was involved in producing a series of stand-alone multimedia materials for post-graduate students and recognised that she had to find and commission developers or programmers or whatever it took. Her view was that it could not be all that hard, but that she had a lot to learn, and she decided she was now willing. As a beginner she could be expected to show some characteristics of the Dependent phase.

After some months of frustration as she learned about instructional designers, programmers and how good contractors are hard to find or train, she asked one of the authors for some 'simple and clear advice'. Her seeking of such advice and was seen as another indicator that she was in the Dependent phase of the typology. Thus she was introduced to a postgraduate student programmer called Jerry and he also agreed to participate in this study. Jerry had recently finished units in project management in his undergraduate multimedia course, which turned out to be useful for Diane.

Over the course of the next 24 months Diane undertook four separate projects. She would complete the development of her first project, taking about 100 hours of her time, only to find that the software company for which she had developed a localised tutorial had released an upgrade just as she finished the project. For her next project she then produced two more versions of the CD (taking around 60 hours each, and publishing 1000 copies of the CD each time) matching publisher's upgrades in quick succession. In between these upgrade stages she also produced a further training CD for another software package (around 30 hours—"it was easy") and has just completed the final project, which because of its qualitative nature was much larger (over 200 hours—"huge; larger than the first three project together!"). She used three different sets of programmers over the four projects, and by the time of our last interview had developed some clear ideas on what helped her manage the process.

This case study relied on general qualitative principles to record Diane's development as a project manager. The data were collected at a series of interviews undertaken during and at the end of this research period and through attendance at some of her early management meetings with programmers.

Case studies are a useful research method to look at specific instances of a situation and then interpret the results within the given real-life context. The case study research method has a focus on understanding and interpreting the authentic situation, and can be successfully applied to specific phenomenon (Anderson, 1998). GAO (1990) considers case study research as a method of learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive description and analysis of the instance taken as a whole and in its context. They identify six types of case studies: illustrative, exploratory, critical instance, program implementation, program effects and cumulative case studies.

Within our context, an exploratory case study is most suitable i.e. a shortened case study being undertaken before launching into a larger investigation. Its function was to help develop further evaluation questions, measures, designs, and analytic strategy for a bigger study i.e. it represents an important case in testing a well-formulated theory (Yin, 1994). In our case the theory being tested has a clear set of propositions, developed from a previous large research study on the stages adults pass through as they learn new skills and competencies (Clarkson & Oliver, 2002) and summarised in Table 1 and Figure 2.

## Early Perceptions and Characteristics

One of the packages that she taught to students regularly was EndNote®, a software tool to help students simplify bibliography production in their research papers. This was the first project.

*“EndNote® was the most manageable, or constrained, of the multimedia projects allowed for in the project, so that was where we started. Because I had taught it many times, I had good notes to work from.”*

After the grant was awarded and the initial project manager was appointed, she attended a series of meetings where she reported no progress was made. Diane described this period as ‘totally a waste’, and she was frustrated from the start of the project and quickly became disappointed. She met with and answered questions from two different instructional designers but saw no results. She then took over as project manager, and it would seem reasonable to presume she began at the Dependent stage.

*“After nearly 12 months I was so frustrated with the lack of progress that I started looking around for other approaches. I decided that I did not need an instructional designer, since some of the design was already there, so that wasn’t the problem.”*

Her frustration and the negative expressions, as well as her desire to begin acting in an autonomous fashion, suggest that she was already starting to show some Counter-Dependent characteristics. At this stage, she decided it was time to move towards production, so she started looking beyond the design stage.

*“I couldn’t find anyone who could do the actual work. I wanted a programmer, but ended up with a combination of programmer and designer. So I am not sold on this idea of instructional designer being a separate thing, cos I haven’t seen it work.”*

This was the point at which she met Jerry, and reported two useful developments. Firstly he showed her a scoping document for their work, which was the first time she had seen a project approached in that way. He also showed her how to link pages in Word:

*“A critical step! Jerry taught me about hyperlinks in Word. This then allowed me to assemble the structure I had in reality, since I could link pages together. I tried to be clever and link back as well, but they didn’t all work!”*

These signs of Diane acting with some independence suggest that she was easily moving from the initial Dependent stage and becoming Counter-Dependent. Even at this early stage she understood that project management required some clarity in its aims and was not just about spending money. It seemed that she was gaining some understanding of the underlying principles of project management.

*“We got the money partly because there was so few training materials for the on-campus students; we decided that even though u/grads could use it, that our target was the p/grads. It was too diffuse otherwise.”*

Although Diane was at an early stage in her project management career, it was clear that the novelty and uncertainty were quickly overridden by her frustration with those around her. It would seem that she had already begun to migrate along the typology from Dependent to Counter-Dependent.

## Later development and characteristics

In a later interview she showed her clear focus on multiple facets of the project, considering both the people as well as costs, for example.

*“I haven’t told them how much we had to spend, so I haven’t had to restrict them in that way; but I’ve been talking with all the people involved and they have been producing stuff [on time]. Its not like we’ve had 20 people off for 6 months [without control] as that is the way your costs blow out.”*

A characteristic of the third, Independent, stage is the ability to share norms and engage in shared development. She was meeting with her programmers regularly and apparently they were learning from each other:

*“I’ve been in control but I haven’t put any restrictions on the guys except deadlines.”*

It was evident that Diane was relaxing into the role of project manager a little and this statement was seen as proof that she was allowing the programmers to participate with some equality in the project and its development. This suggests someone using more of the Independent stage characteristics. She was starting to show less individualistic signs and was apparently considering a proactive approach to selling their work to another university. She and another programmer, Engel, had talked about it:

*“We imagine that we might go to mass production and sell it for about \$4 at the Bookstore. We have had offers from other Unis to buy but the CD needs to be tailored; for example it currently uses our site licence version of the software, our style sheets and connect files and so on. Maybe they might give us some specifications and Engel and I might adapt it and charge them for it.”*

She admitted that projects with long closure times could be trying: *“That first project—I just wanted the damn thing finished!”* Nevertheless she has learned some simple lessons, for example she is rather dismissive of instructional designers after her experiences.

*“Well, I wouldn’t waste my time with the instructional design people. I am not an education person or a multimedia person and I come from... well, its one thing producing a course handbook nicely set out, that’s the old style; but it seems to me that this multimedia stuff is totally different and that you need different skills. There are people that are instructional designers and this multimedia stuff is a secondary thing for them; and I don’t think that they have much to offer over a good programmer with a multimedia background. This is just what I have surmised along the way.”*

This wariness seems to have translated after a single project into overall reservations about instructional designers in general. In her case with the type of projects she has managed this makes some sense, but it seems hard to justify as a generalisation, and could be used as evidence that she has not attained the more balanced perspective of an Interdependent project manager.

What is clear is her understanding about the importance of people over everything else. ‘People, every time, are the most important part of any project’ was one of her main conclusions. Such an approach could be interpreted as progress towards the Independent and Interdependent stages. Overall signs of her Independence were in evidence. Certainly she was confident enough to take on four projects over a two-year period after starting with nothing more than youthful exuberance and galvanised by frustration. She had commented initially, ‘If that [doing nothing] was project management, then I can do it just as well!’

In summary it seems that Diane showed a clear understanding of the importance of staff but did not tend to mention the relationships. Her skills on topics of project management were developing, and her development through stages from Dependent to Counter-Dependent could be identified. There was some evidence that she may be progressing to Independent status, best substantiated by her increasing ability to act in a self-directed, competent and therefore ‘independent’ manner.

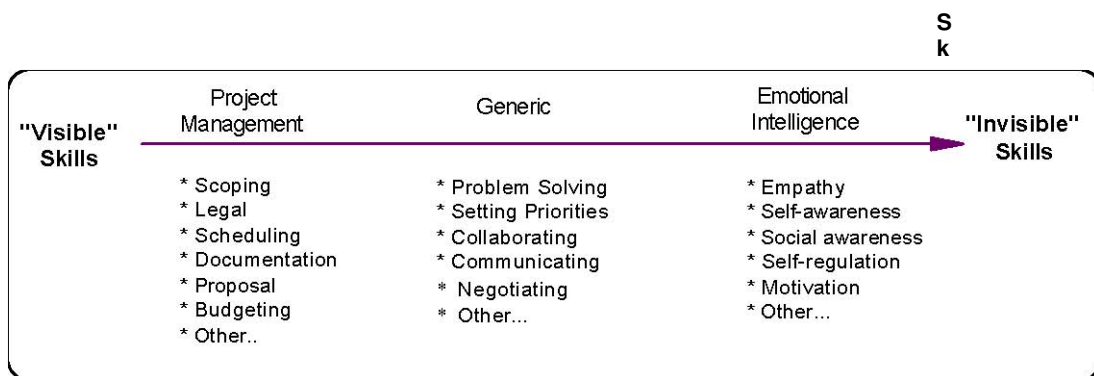
## Summary

From the data collected in this study it has become evident that the stages of development experienced by one novice project manager may indeed be characterized by the early stages of a simple four-stage typology based on the literature of adult learning that considers the transition from dependency, counter-dependency, independence through to interdependence. The progress of one novice project manager was tracked over a two-year period, and she showed clear progress across this typology. Comments that reflected her feelings, beliefs and behaviours mapped readily into the range of characteristics shown in Table 1. Although these characteristics were those of someone learning a new topic or skill, it seemed to have application in the current project management environment. This typology enabled the researchers to consider progress and development that are indicators of project management expertise.

Although there are four stages in the typology it may be that the division in the middle is particularly critical. From our research and previous collected data, it is our judgement that when a novice project manager like Diane makes the transition from Counter-Dependence (stage 2) through to Independence (stage 3), they then begin to exhibit sufficient characteristics to enable them to be regarded as autonomous and reliable project managers. This suggests that the middle transition or hurdle may be an important one in a project manager's development and may warrant further research.

## Further Research

This typology can arguably be a useful indicator in helping organizations determine whether novice or trainee project managers have the capability of managing projects on their own, and without supervision. This study was qualitative in nature, and based on a number of interviews over the two-year period. However, it is the contention of the authors that the model can be extended by a further orthogonal typology of skills. These will include a progression from "visible" through to "invisible" skills (Figure 3) and will be tested during the 2003 academic year. With further research this tool will hopefully provide a valuable benchmark for managers and organizations integrating new project managers into mainstream projects, or trying to determine the necessary training requirements.



**Figure 3:** A spectrum of skills needed for teamwork

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