

Students Experience the Theory: Taranaki Polytechnic's IS301 Project Life Cycle.

Dr Noel Bridgeman

Principal Lecturer and Research Co-ordinator
Taranaki Polytechnic
New Plymouth
noelb@taranaki.ac.nz

ABSTRACT

An IS301 project is usually the last piece of work that a student does to complete their Bachelor of Applied Information Systems degree at Taranaki Polytechnic. It has been designed to provide an opportunity for students to draw together knowledge and skills obtained in other papers, and apply them to an original(to them) piece of work. Various Information Systems Life Cycles have been examined, and a Taranaki Polytechnic IS301 Project Life Cycle has been devised. Its four phases (Defining, Designing, Constructing and Post-Implementation/ Writing-Up) consists of 12 milestones. This Life Cycle includes Technical and Project Management processes to produce Technical and Academic outputs.

Keywords

Milestones , Project , Project Lifecycle.

1. INTRODUCTION

Previous papers (Bridgeman, 1999, Bridgeman 2000) examined aspects of project work for NACCQ's National Diploma in Business Computing and Taranaki Polytechnic's Bachelor of Applied Information Systems. It is suggested that student projects have there own style of lifecycle, which has to take into consideration both industry and academic considerations. This paper is an attempts to addresses the shape of such a lifecycle, as it applies to Taranaki Polytechnic's Bachelor of Applied Information Systems IS301 Project. It is further suggested that examination of student projects in other Polytechnic Information Systems or Information Technology degrees will very likely follow a similar, or slightly modified Project Life Cycle. It is further suggested that within this student Project Lifecycle a functional relationship can be identified between Technical and Project Management and Technical and Project outputs

Figure 1 outlines the relationship between the Project Processes and Outputs, as detailed in Figure 2, which is a diagramatic expression of the IS301 Student Project Lifecycle.

2. THE DEFINING PHASE.

Our experience has been that because of lack of experience, students have great difficulty in identifying exactly what it is that their project consists of. To



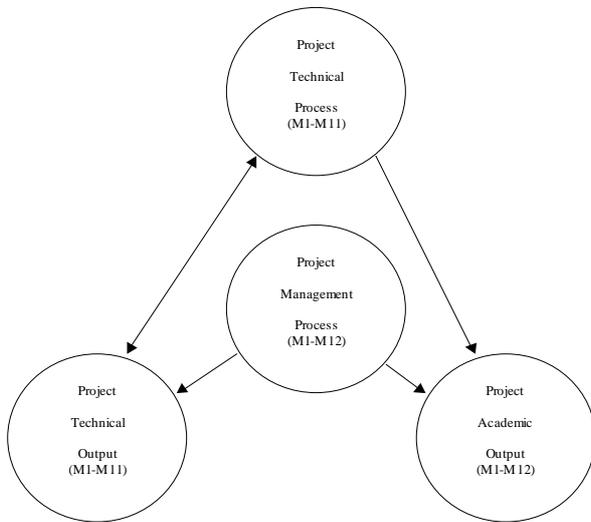


Figure 1.

overcome this problem, we require them to complete a process, which moves through the stages of:

- identifying possible project
- conduct initial study
- analyse the current system
- propose solutions possible in current system
- define purpose, content & format of project.

These steps result in the production of a Project Proposal, by which stage it is hoped that the student, customer, technical supervisor and project supervisor have a clear, and common, understanding as to what the project is, and what the student will do. No matter what sort of project is being done (programming, training, evaluation and procurement etc) all students are expected to carry out a similar process.

Students are expected to spend 40 hours on this phase, and produce 2 outputs that count towards their final assessment.

3. THE DESIGNING PHASE

The biggest variation in application comes in this and the next phase. If a standard programming project is being attempted, then separate designing and constructing headings hold, however it is not necessarily such a linear process if some other methodology such as prototyping is to be used. In this case, the boundaries between the designing and constructing phases can be blurred.

Given the above caveat, it would be fair to say that in general, a student would expect to design the solution to the project during this phase.

4. THE CONSTRUCTING PHASE

Once again, this can take many forms, from the traditional 3GL programming, 4GL prototyping, storyboarding for training packages, requests for proposals, evaluation and procurement etc,etc.

During the construction phase, students are expected to (to a greater or lesser extent)

- construct the new system
- install and test the new system
- gain customer acceptance of new system

It is suggested that traditional NDBC projects mainly consisted of phases 3 and 4, while Degree projects consist of phases 1 to 5.

Students are expected to spend 240 hours on the combined designing/constructing phases, and produce a further output that counts towards final assessment. Throughout this process, students are maintaining a work logbook, plus producing a weekly graph of time usage (their "project worm")

5. POST-IMPLEMENTATION/ WRITING-UP PHASE

The post-implementation phase requires the student to

- complete the documentation of the project
- carry out a post-implementation audit of the project
- prepare presentation of their project experiences.

A further output (Technical Report) is required for assessment

The writing-up phase concludes the project, and requires the student to produce a further four outputs for assessment. However, two of these four should have been produced during the defining phase of the project.

6. ASSISTING THE STUDENT

It appears that giving the above outline to students at the beginning of the project has increased their understanding of the processes that they will go through

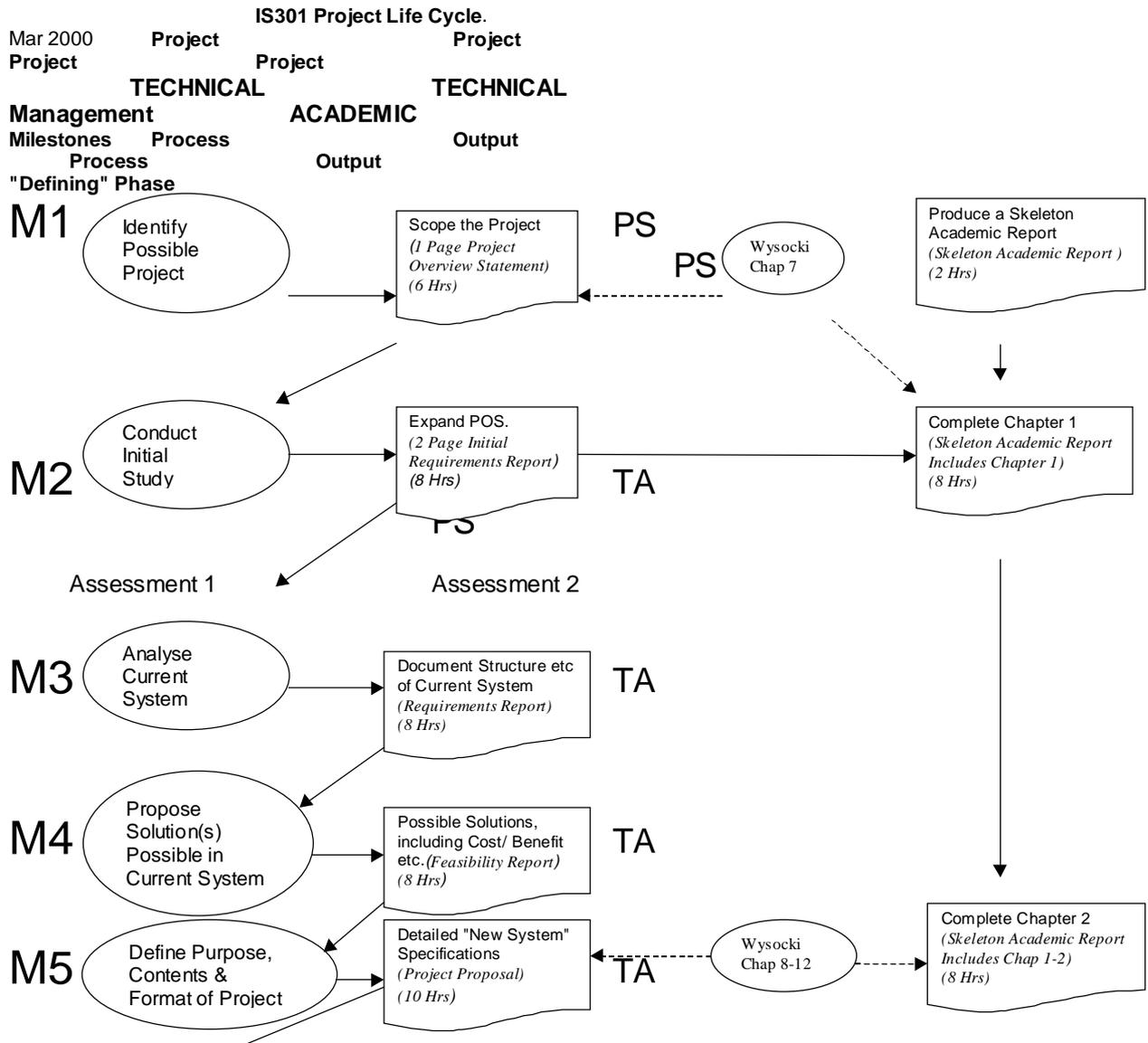


Figure 2.

while doing the project, thus assisting them to successfully complete the project. They have a clear understanding why it is absolutely imperative for them to start the writing up process very early on in the project, and to continue with it throughout the project.

Experience has indicated that management of the project process has been easier once the particular shape of Taranaki Polytechnic's student project life cycles were identified.

7. CONCLUSION

In the course of this paper we have suggested that it is possible to identify a student project life cycle for Polytechnic student's Information System or Information Technology final projects. It is further suggested that an identification and understanding of the shape of particular institutions Project Life Cycles may be of assistance for the management of such student projects to ensure there eventual success.

8. REFERENCES

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