

Moderation as a Tool for Continuous Improvement

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The role of moderation is described and the paper goes on to outline how may this be easily changed with the help of a course information folder describing the course components and using the concept of continuous improvement.

Keywords: Moderation, Course quality, Continuous improvement

ABSTRACT

Moderation is a widely accepted and practised process for quality control of assessments in degree level courses. This paper makes the case for the need to improve our programmes and courses and then goes on describe a 'course folder' and a process of using this folder to continuously improve the assessments and as well as the course itself.

The paper explains why ISO9000-type quality control processes are not the most suitable for continuous improvement of complex long-lived products and that processes based on the Capability Maturity Model for software are likely to be much more successful.

A course is a complex product with many interlocking components. The proposal is that moderators need access to information about all these components improve the quality of the assessments and the course itself.

1. INTRODUCTION

Moderation is a widely accepted and practised process for quality control of assessments in degree level courses. This paper makes the case for the need to improve our programmes and courses and then goes on describe a 'course folder' and a process of using this folder to continuously improve the assessments and as well as the course itself.

The paper compares a course with software and points to the literature on the capability maturity model and software quality processes. ISO9000-type quality control processes are not the most suitable for continuous improvement of complex long-lived products.

A course is a complex product with many interlocking components. The proposal is that moderators need access to information about all these components to be able to do the valuable job of helping improve the quality of the assessments and the course itself.

The role of moderation is described and the paper goes on to outline how may this be easily changed with the help of a course information folder describing the course components and using the concept of continuous improvement.

The paper talks mainly about individual courses rather than programmes - groups of courses leading to a qualification - because moderation as we know it is usually



done on a course basis but the proposed quality control system applies to programmes as well.

Objections may be raised against this proposed process. The paper addresses the issues of intellectual freedom and also the need for cooperation rather than competition at least within New Zealand.

It is hoped that the paper will become the basis for a much more extensive 'How to' manual and that its content can be shown to be supported by a range of other academics and quality control people.

2. THE NEED FOR QUALITY CONTROL

2.1 Assumptions

This article is based on some assumptions, the main one being that we are not doing enough to improve our programmes and courses. Other assumptions are that our future depends very much on New Zealand polytechnics and universities retaining their share of the New Zealand student population and for that, it is essential to improve the quality of our programmes and courses. A third assumption is that we can make these improvements relatively easily if we can and do follow the concept of continuous improvement.

The real competition is going to come from the large, well funded universities offering on line distance education. The consortium, Universitas 21 is a company incorporated in United Kingdom. It is owned by 18 universities in 10 countries. These universities have 500,000 students and a budget of nearly \$US9 billion. "Universitas 21 has been established for the purposes of developing international curricula" as its first priority. (Universitas 21)

One way we are going to be able to compete with these largely overseas-subsidised organisations is by cooperating amongst ourselves to produce high quality and continuously improving local programmes and courses. Some say that two can play the Universitas 21 game and that we can sell our courses overseas in competition with those mega institutions.. Only Fisher and Pykel and a small handful of other New Zealand manufacturing companies have succeeded in producing world class products being sold on the world market. Why are we so confident, especially when so much investment and expertise is needed? It will take more than a few bits of No 8 wire. Another alternative is based on "If you cannot beat 'em, join 'em" which is what Auckland University is doing. They are part of Universitas 21.

Our strength is to make and deliver NZ courses – rather than international courses.

From comments reported by ministers Maharey and Mallard, the Government is going to review the role of universities and polytechnics. It seems to good time for us to be reinventing ourselves by improving our programmes and courses.

3. PROCESS IMPROVEMENT

3.1 Need for Quality

The need to improve quality of products and processes is well accepted. There are two important approaches to achieving quality improvement. ISO 9000 is characterised by having a well defined and documented production process and then auditing to ensure practice follows the documentation. The Capability Maturity Model (CMM) puts the emphasis on *improving* the processes of production. This model is being used successfully by a number of software houses to produce high quality software in ways which are repeatable and in which both the management and technical processes are being continuously improved (SEI website).

3.2 Similarity of Courseware and Software.

A course is much more than the knowledge content and assessments. These are but two components of a course. For example, skills development and values, delivery mechanisms and institutional policies also play important parts. Furthermore a course evolves over a number of semesters. Ideally the course will adapt to changes in student and societal needs just like software evolves to meet changing business requirements and technological opportunities.

3.3 Capability Maturity Model (CMM)

This well respected model is used to develop process improvement programs for software development. It is very much based on the concept of continuous improvement – an iterative process of review and refinement of the process. The CMM model and continuous improvement form the basis for the moderation process outlined in this paper. It is assumed that because a course and software are similar, successful quality assurance processes for software are likely to be effective in course development and maintenance.

3.4 Limitations of ISO 9000

People may say that we already have ISO 9000 and that we cannot afford another set of quality control procedures. This argument is valid if ISO 9000 is actually improving the quality of our courses but I do not believe it is. Nor do I believe it is suited to doing so. ISO 9000 is based on the assumption that if the organisation has well documented procedures to do the job well, the job will be done well. It may be successful where it is easy to define the quality standards of products being made and where there is high staff compliance such as in a printing business. A course is a very complex product made more so by the interaction of the students and its life over time. My experience of polytechnics and universities is that staff compliance with rules is low. In fact, one of the strengths of these institutions is a certain degree of anarchy. ISO 9000 is an inappropriate tool for quality control in developing and delivering intellectually complex products such as courses in New Zealand Polytechnics.

4. MODERATION AS A PART OF QUALITY CONTROL

Moderation is just one of a number of procedures to help ensure that the stakeholders in state tertiary education are getting a high quality product for the money provided by students and the Government. It is one method to demonstrate accountability to stakeholders.

How does one measure quality? It is difficult. It is especially difficult to measure the quality of something as complex as a programme or a course consistently and fairly. It is also very hard to judge the quality of the student work produced in higher level courses. Moderation is about measuring the quality of the assessments and of the marking of students' work in doing the assessments

How do we judge what is a good assessment? How do we know an assessment is a good one? To do any measurement or make a judgement, we need some standards (i.e. specifications, criteria) to measure against. The student enrolls in a programme to gain a qualification. Ultimately, we need criteria to judge how each assessment contributes to that programme.

4.1 Present Practice

Minimal research and anecdotal evidence leads me to surmise that moderation processes are generally narrowly focussed on the assessments so that the moderator does not have the 'big picture' on which to base judgement. This is what the course folder is designed to provide.

4.2 Course folder

The proposal is that all of the relevant information about a course be set up in a folder so that the moderation process can be easily widened a little. The folder will contain programme and course outlines, all summative assessments and assessed work as well as something on the course delivery - so that the moderator sees the whole picture.

The contents of the course folder can be seen at a glance in table 1 below. In what follows, some of these sections are described and the reasons for including them are explained. The overall aim is to describe the course in all its aspects and to explain its role in the programs of which it is a part.

The term, course folder should not be taken to infer it is necessarily a paper folder in a ring binder. It is often likely to be - but it may be a number of documents in a folder on disk, or, better, a hierarchy of web pages. Some of the contents are general, institution wide policies. It is important to minimise redundancy to maintain the integrity of the contents of the folder. In the future it will be part of the institution's information system and will be accessed directly from there via the web. I believe it should be available to staff and enrolled students. The early pages are available to everyone. This early information may be extracted for the University or Polytechnic Calendar.

Table 1. Course Folder

COURSE FOLDER SECTION	BRIEF EXPLANATION OR EXAMPLE
COURSE INFORMATION	
(NOTE: This list is a representative set of items – not a definitive list)	
Programme(s) purpose	Courses code, title, course leader, purpose. Fairly static, standard information about the course. Includes some standard policies.
Significant themes and features of these programmes	From the accreditation document
Course role in this programme	e.g. Ethics are an underlying theme and should be addressed in each course.
Prerequisites and co-requisites	e.g. This course is designed to be the capstone course in a technical IS&T major.
Course descriptor including learning outcomes and course philosophy or themes	Courses plus brief reasons
As per accreditation document, suitably updated. Pointers to earlier versions and reasons for change.	
The philosophy may be to emphasis design and ethics.	
Course requirements	What students need to have: textbook, computer, software, etc
ASSESSMENT	
Assessment and reasons for this assessment regime	e.g. Number and type of summative and formative assessments submitted for formal assessment; Is formative assessment compulsory? Justification of the types of assessment and their weightings.
General assessment criteria	e.g. Overall criteria such as the importance of presentation, research skills.
Assessments for this semester	For each assessment there will be: Instructions for students; the assessment; assessment criteria; marking schedules and explanatory comments
Institution Marking policies	e.g. How are samples chosen for check marking and moderation;
Policy on late submission; Resit policy.	
Group work assessment criteria	e.g. How are groups created.
Are individuals in a group assessed independently as well?	
How is group work marks allocated to individuals?	
How are dysfunctional groups handled?	
MODERATION and STUDENT EVALUATION	
Moderation procedures	See below for more details
Moderation reports	Moderation reports for the last 2 semesters and notes on action taken on recommendations
Student evaluation last semester	Summary plus staff comment on changes made as a result.
Previous student evaluations	Evaluations from students over the last three semesters and comments from staff..
COURSE OCCURRENCE	
Course delivery details	Details about this course this semester.
Student support available	Lecturer and support staff, lecture and tutorial times, etc Web pages and electronic forums, Library resources, staff availability times, remedial programmes available, etc.

The course folder as the repository for course information

The course folder will be set up when a new course is proposed. Part of the application for a new course will be documented in this folder. Much of this information changes very little. Once set up, it will take little work to maintain it.

5. MODERATION PROCEDURES

The moderator's task is wider than it has traditionally been. Now the moderator is expected to review all the assessments in the context of the course and the programmes of which it is a part. That means the moderator may comment on the content of the course folder and may make recommendations on such things as:

- ◆ learning outcomes
- ◆ type and mix of assessment
- ◆ course delivery options
- ◆ the mix of analysis, synthesis, evaluation, knowledge acquisition, etc.

as well as the traditional role of judging the major assessment and, perhaps the marking of student work.

The moderator is an auditor who usually does the moderation after the students have been assessed. That means that the moderator need not look at the fine detail in either the assessments or the marking of them. The moderator is looking at the assessments and student work to judge:

- ◆ are the assessment fair?
- ◆ do the assessments measure the learning outcomes?
- ◆ do the criteria and marking schedules match the assessments and learning outcomes?
- ◆ is the marking fair and complete?

rather than should the mark have been 66 instead of 60. The emphasis is on the bigger picture.

It is estimated that the moderation process can be done well in six to eight hours per semester per course. We can limit the cost by creating a team. For example a team of four could be set up consisting of one from each from three Polytechnics and a person with mana, ability and integrity from Industry. Each team member would moderate three courses each four semesters. The cost of the industrial person would be shared between the three polytechnics.

6. ACCOUNTABILITY

There may be a perceived conflict between intellectual freedom and this widened role of the moderator. The question of the status of the moderator's recommendations need to be discussed as well. I believe that intellectual freedom is not necessarily the freedom to teach whatever we like. Staff teaching in a New Zealand Polytechnic or University are accountable to the stakeholders. They are paid, largely by the government and the students through their institution to provide high quality, relevant education (rather than training at degree level) and the stakeholders need to have some say in what this is. The stakeholders need to work with the academics cooperatively to come to a consensus on what constitutes the programme and the courses within it.

Moderation is part of building the consensus. We academics are lucky that the institutions have entrusted peer review to ensure quality and relevance but we may have missed the opportunity to use this process well and we may be losing our rights in this area. This proposed moderation process is proposed partly to win back the trust of students and management.

The two paragraphs above set the scene for discussing the status of the moderator and the moderation report. Presently, it seems that the teaching staff are free to accept or reject any or all of the moderator's recommendations. Often the moderator does not meet with teaching staff or management after the report is written. This may be partly why the moderator often just produces a glib report as quickly as possible. I recommend that the moderator be taken more seriously. The moderator should be invited to discuss the report's recommendations with teaching staff and lower level management who then must decide to implement the recommendations or justify why not. This document then becomes part of the Course Folder, which is widely available.

7. CONCLUSION

Traditionally, teaching staff have been entrusted to maintain and improve their teaching with minimal involvement from institutional management, students or anyone else. They have claimed intellectual freedom gives them this right. The result is that the quality of courses and programmes in New Zealand Polytechnics and Universities is very variable and there are not good processes in place to improve them. This paper makes the plea for teaching staff to take the initiative to 'reclaim the night' as were and implement systems to continuously improve our students' education.

A necessary bi-product of the proposed moderation process will be more cooperation between academics within the institutions and between institutions at the lowest level which may lead to more cooperation at higher levels as well.

Finally, we will be continuously improving our courses and programmes and we will be seen to be doing so. Everybody will win.

8. REFERENCES

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