

# Evaluation of subject, teaching and research



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***Abstract:** The importance of feedback has been substantiated at Monash in the Quality plans and policy of the university. This paper looks at two main areas of evaluation, namely subject and teaching evaluations. The quality plan incorporates the existing teacher evaluations and the newly designed subject evaluations in the monitoring and feedback cycle. The approach to these two evaluations is different but same in that it asks for the input of the students. The difference is that in subject evaluations the approach has been to allow faculties to approach the design of their own feedback tool with the involvement of the Centre of Higher Education Quality (CHEQ) in an advisory and design role. The results obtained from such evaluations are 'owned' by the faculty. However, in teaching evaluations, there are presently 10 sets of questionnaires in various areas of teaching activities that are used universally throughout the university. The results from the teaching evaluations are however confidential and 'owned' by the lecturer or tutor. In both cases the feedback is primarily used for improvement purposes though evidence of teaching performance is required at Monash for promotions. There is however, some consideration being given for such evidence in performance management appraisals. This paper goes on to examine how CHEQ is involved in aspects of evaluation in the area of research*

***Keywords:** Evaluation, Design, Subjects*

## Introduction

Higher education has over the years recognized that it is a service industry and has to reevaluate their approach in the industry by placing greater emphasis on meeting the expectations and needs of their stakeholders (Cheng & Tam 1997; Elliot 2002). Studies have consistently confirmed a strong correlation between classroom environments, learning and satisfaction (Fraser, 1994, 1998; Fraser & Fisher, 1994; Griffiths, 2001; Nair & Fisher, 2000; Patrick & Smart 1998; Suarez, Pias, Membiela, & Dapfa, 1998; Templeton & Jensen, 1993; Whiffen & Kalivada, 2001). Research over the last four decades has recognised that students' perceptions are important parameters of the social and psychological aspects of the learning environments of school classrooms (Fraser, 1994, 1998; Ramsden, 1991; Templeton & Jensen, 1993). Walberg's theory on educational productivity indicates nine factors which contribute to the variance in students' cognitive and affective outcomes. These nine factors being student ability, maturity, motivation, the quality of and quantity of instruction, the psychological environment at home, the classroom social group, the peer group outside the classroom and the time involved with the video/television media (Walberg, 1981, 1984). One way many universities have approached the process of meeting the needs of their students is the collection of student perceptions through evaluation of their courses, teaching

and their learning experiences. The collection of student evaluations has numerous purposes. Some of the most widely noted purposes would be,

- (a) Diagnostic feedback to faculty about their teaching that will aid in the development and improvement of teaching;
- (b) Useful research data to further design and improve courses, curriculum and teaching;
- (c) A measure of teaching effectiveness that may be used in administrative decision making, e.g., performance management appraisal;
- (d) Useful information to current and potential students in the selection of courses; and,
- (e) A useful measure of the quality of the course.

The first two purposes are recognized universally as the basis for many evaluations (Fraser 1998; Nair & Fisher 2000, 2001; Webb, 1994). Purposes (c) – (e) are relatively new to many universities especially in the Australian context. At some universities systematic student input is a prerequisite for promotions and in others the inclusion of student evaluations is optional with greater emphasis placed on research outputs and publications.

For Monash the useful measure of quality of the courses and programs are reflected in the values, aspirations and nature of the organisation. Monash's vision is reflected as thus:

“a self-reliant, broad-based, global university and learning organization, conducting innovative teaching and research of international quality and relevance, and engaged actively with the diverse regions, communities, industries and professions which it serves.”

*Leading the Way, Monash 2020, p 4.*

## **The Monash Way**

In this paper we look at Monash's approach to maintaining and improving the quality of teaching and courses. This is covered by policy in the Guidelines for Academic Review and the Working party Report on Subject Evaluation (Monash 1998; 2000). To a lesser extent, this paper will also highlight the involvement of evaluation in research. The combination of these three elements are integral to the Monash Plan.

### ***The Quality Plan***

The approach to quality at Monash covers seven core values and principles. These are creating the agenda (fitness for purpose); professional responsibility; Learning Organization; Diversity, devolution and comparable treatment; open and informed approach; Planned and systematic approach; and, Self-reflection and external reference. Details of these can be found at <http://www.adm.monash.edu/unisec/pol/acad28.html> .

These core values and principles encapsulate three important features of the approach to quality to Monash. These are

- *fundamental questioning to establish a purpose;*
  - *systematically meeting purposes or the planning and review cycle; and,*
  - *feedback*
- 
- *Fundamental questioning to establish purpose*  
The concept of quality at Monash is primarily that of fitness for purpose. Fitness for purpose implies that it is worthwhile taking some time to establish and agree purpose at

all levels. As quality is recognized as a professional responsibility, Monash encourages all staff to consider a series of questions concerning purpose and fitness for purpose. These being, what are you trying to do?; why are you trying to do it?; how are you trying to do it?; why are you doing it this way?; how do you know it is working?; how do you improve it?; and how do you improve? Each question in this framework is designed to apply to the individual, the work team, unit, faculty/division, or of the university as a whole.

- *Planning and review cycle*

The planning and review cycle consist of four elements; Plan, Act, Evaluate, and Improve. Figure one below describes the notion of the quality cycle.

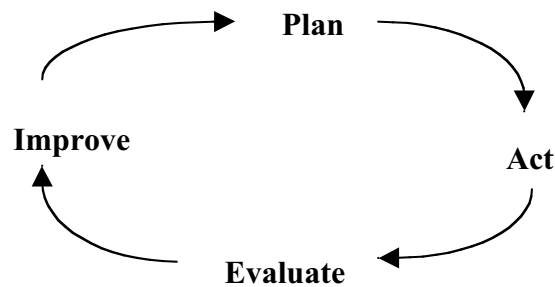


Figure 1: The Monash Quality Cycle

- ~ **Plan:** denotes formal planning at all levels including university level planning, faculty and divisional planning, school, departmental or unit planning, course or work team planning. At the individual level it reflects the planning that people do either by project, or over time, including yearly or daily planning.
- ~ **Act:** includes all the intentional activities that are undertaken to meet objectives implement plans and produce outcomes.
- ~ **Evaluate:** includes two major aspects – monitoring and review. Monitoring is a short and medium term activity mainly for developmental or formative purposes. It may use formal or informal methods and make use of existing data, or generate new data. Action and monitoring usually develop together, informing each other, hand-in-hand. Review is a longer term and more formal process that has both formative and summative purposes.
- ~ **Improve:** identifies the process by which the results of evaluation - both monitoring and review - are fed back in order to generate improvement. Often this causes modification to an existing plan or development of a new plan, and thus the cycle commences once more.

Monash University (2000). *Quality at Monash: Values and Principles*.

- *Feedback*

Feedback is primarily the seeking of evidence of stakeholder's experiences. The result of this is data for the evaluation phase of the quality cycle in terms of monitoring and review. The approach here is that the appropriate stakeholders for each of the university's operations need to be identified together with effective measures to allow the experiences to be expressed.

## **Subject Evaluation**

### **Background**

The development of a 'university policy' on the evaluation and reviewing of subjects dates from the first Quality Assurance round in 1993. One of the agenda items proposed for that first round was to determine what procedures a university had in place to evaluate its subject offerings. Monash realised that in a central, university wide sense it had none; the evaluation of subjects had until then been a faculty responsibility.

The result of this was the development of the University's Education Policy, which contained a section on *Review of Subjects*. This section specified that student questionnaire responses should be used as one of the elements of a process of continuous evaluation. The initial approach to the questionnaire had some teething difficulties. In response to these difficulties the Deans and Associate Deans (Teaching) review considered the identification of common fields of concern, which might result in core 'areas for questioning' as an alternative to the initial mandatory questions approach. The review also considered methods of subject evaluation other than student questionnaires, with a view to complementing questionnaire data and thus providing a more rounded picture of the operation of subjects. The proposal which finally resulted from this review is tabulated in the Working Party Report of Subject Evaluations (Monash, 1998) and covered that subjects should be periodically evaluated and reviewed, so as to address six broad issue areas. These areas were: content and objectives, teaching methods, assessment procedures, students' study behaviours in response to the subject, evaluation mechanisms, and expertise of the teaching staff. These key areas are elaborated below;

1. Content and objectives

This area includes a general consideration of the learning outcomes that a subject hopes to achieve in its students and the appropriateness of the curricular objectives and content in developing these outcomes.

2. Teaching methods

This key area seeks to ensure that teaching methods are selected to best support the learning processes through which students will achieve the designated learning outcomes identified in the objectives.

3. Assessment procedures

Assessment procedures seek to ensure that assessment tasks provide direct evidence of students' progress towards attainment of the learning objectives. It includes the development and systematic use of marking and grading procedures and the criteria upon which these are based (summative assessment). It also includes the provision of feedback during the learning process in order to guide and support learning (formative assessment). There is a need to clearly differentiate between the summative and formative aspects of assessment.

4. Student workload and study behaviour

This particular section concerns attempts to ensure that workload is reasonable, reflects the primary aims of the subject and takes account of student background. The provision of support to students is also identified as a concern.

5. Routine evaluation

This represents the ongoing and less formal aspect of evaluation that forms part of normal teaching activity. It may comprise one or two of the data sources discussed and may be undertaken quite frequently.

6. Expertise of the teaching staff

This section is concerned with ensuring that staff teaching the subject have appropriate subject matter and teaching expertise. It is recognized that there may be variation

among Faculties in how they satisfy themselves that staff are properly equipped to teach a subject.

### **Importance**

Subject evaluation is seen as an integral and normal process whereby practitioners seek information on whether their teaching is having the effect they desire. As with Monash and many other universities, there are presently many more students and far greater diversity in the classrooms and, such information is increasingly important to meet the needs and expectations of the students. Monash approaches this in their strategic directions outlined in the Monash Plan and the Learning and Teaching Operational Plan. For example, teaching for understanding rather than reproduction, the development of life long learning skills, engagement in community, workplace and professional contexts, innovation and internationalisation, are all considered important for Monash subjects. Apart from this, the movement toward student-centred flexible learning and the use of technology for good educational purposes are also key ingredients in the overall educational plan at Monash.

Subjects are thus, the vital 'building blocks' of the curriculum; they are the teaching unit with which educational practitioners identify and an important aspect in resource allocation. Due to the importance of subjects in the design of curriculum, a coherent framework for subject evaluation is in the pipeline that will assist practitioners to monitor and improve their courses in light of the changing teaching and learning environment.

The three main aims at Monash in subject evaluations are as follows:

- (i) quality improvement - to provide information that will enable subjects to be improved;
- (ii) external quality assurance - to provide a mechanism that indicates subjects are being monitored and reviewed;
- (iii) promotion - to provide a means for staff to document a case for promotion.

### **Major Data Sources**

Monash's evaluation plan covers four major data sources sought for subject evaluation and review:

- **Students**  
Students are best placed to comment on the classroom experience. This is consistent with numerous researches that support this (e.g., Fraser, 1994, 1998; Fraser & Fisher, 1994; Griffiths, 2001; Nair & Fisher, 2000; Patrick & Smart 1998). They are however, less well placed to comment on the level of the content material and the academic integrity of the subject.
- **Academic Peers**  
Academic peers are well placed to comment on the level and academic integrity of the subject. Academic peers from similar areas within the University, other institutions or professional bodies, would be normally asked to comment on subject documentation and materials.
- **Educational Advisers**  
Educational advisers would be well placed to comment on educational design and educational processes but are not well placed to comment on disciplinary or content knowledge. They would usually be asked to comment on subject documentation and materials but may also be asked to give formative feedback on classroom processes.
- **Self Review**  
Educational practitioners are well placed to evaluate many aspects of the teaching of a subject through systematic self-review. Systematic self-review through the keeping of

a teaching journal, notebook or other recording device can be used for most aspects of teaching.

### **Role of CHEQ in the Review of Subjects**

Collection of data from the various data sources requires considerable effort and coordination of the faculties. This features to deliver “rigorous quality standards” (*Leading the Way. Monash 2020, p.5*) and therefore places major importance on individuals and work teams taking responsibility for their own quality assurance and improvement process. Monash therefore has the following features in their subject evaluation and review process;

- The level of subject evaluation outlined should not be undertaken each year, but should normally be undertaken on a rotational basis say every five years as part of an overall review process.
- Planning of the review is placed in the hands of the respective faculties. It is recommended that subject evaluations feed into a schedule of departmental, faculty or course review. They should also run in conjunction with accreditation and other external professional reviews. For example, following a course review, a staged process of evaluations for each subject in the course could be planned for the 5 years leading up to the next course review. Such a rolling process of review would minimize repetition and the over-burdening of students in a particular course in a particular year.
- Each faculty submits a schedule of subjects evaluated each year. This is placed on the CHEQ website for reference.
- Each faculty designs a required questionnaire covering the six core areas. The design will encompass items that the faculty as a whole can use to gauge the effectiveness of their subjects and curriculum as well as specificity with respect to subjects within departments.
- Data obtained via evaluations is ‘owned’ by the faculty.
- The primary purpose for subject evaluation is for quality improvement. The focus of the information gained in subject evaluations is to improve the subjects. Subject evaluation can easily become a compliance issue, rather than a mechanism for improvement. Part of the approach at Monash is a recommendation that demonstration of improvement as a consequence of subject evaluation be written into the terms of reference for course (or similar) reviews.
- Faculty monitor and document improvements recommended and made. One example of this is following up on the evaluation of subjects evaluated the previous year.
- CHEQ analyses the data and provides reports to the faculty and instructional staff.

### **Teaching Evaluation**

#### **Background**

Though the primary purpose of the subject evaluations is improvement, faculty could use apart from this data in a portfolio of evidence presented for promotion, other mechanisms that are available which allow for interpretation of results against University and Faculty normative data. One such tool specially produced for this purpose is the Monquest Questionnaire Series on Teaching (MonQueST) (Ely & Thomson, 1993). The MonQueST is presently a set of ten independent questionnaires, each focused on a different teaching activity. Each questionnaire is designed to enable student feedback to be obtained on specific

aspects of an individual's teaching. Copies of the questionnaires can be previewed on the CHEQ website ([http://www.adm.monash.edu.au/cheq/evaluations/MonQueST/monquest\\_previews.html](http://www.adm.monash.edu.au/cheq/evaluations/MonQueST/monquest_previews.html)).

### **Importance**

The MonQueST questionnaires provide a source of useful feedback for academic staff and is used by faculty as part of their teaching dossier, and by academic staff to support applications for tenure and promotion or other staff development and appraisal activities. Due to its focus on different teaching activities the Centre for Higher Education is presently designing another four questionnaires for the series namely for flexible learning, field trips, case based teaching and project supervision.

The feature difference between the teaching and subject evaluations is that in teaching evaluation the data is 'owned' by the individual instructional staff and the quality improvement is considered as a professional responsibility.

### **Role of CHEQ in Teaching Evaluations**

- CHEQ plays a crucial role in teaching evaluations at Monash. They are
  - ~ CHEQ coordinates the administration of the questionnaires and the analysis of the data.
  - ~ Individual reports are produced for lecturers and tutors in the 10 questionnaires in the series. The reports give a break down for the individual lecturer in each of the items constituting the respective questionnaires both graphically and in numerical form.
  - ~ CHEQ produces a yearly profile for the whole university on each item in the series. Academic staff are able to compare their teaching performance on each item in comparison to the whole university and their faculty. In this way, a practitioner would have an indication on his/her performance in comparison to their colleagues in the institution.
  - ~ CHEQ releases individualized reports.

The questionnaire series not only provides the individual practitioner quantitative but as well qualitative data. The aim in providing for such data is to help lecturers to improve the teaching of their courses. At Monash there are presently courses run by the Center for Higher Education Development (CHED) to facilitate such improvements. CHEQ also provides assistance to faculty members in analyzing their individual data.

### **Research Evaluation**

Research plays an integral role in Monash's plan in the future. The evaluation of research is rather new. The Centre for Higher Education Quality (CHEQ) works in collaboration with Monash Research Graduate School (MRGS) and its plan, Research and Research Management Plan (Monash University, 2000). CHEQ's present evaluation involvement is in the feedback of student perceptions of their research experience through a number of surveys. One such feedback tool that is presently being updated with CHEQ's involvement is the Doctoral Research Students Exit Survey. This survey is presently being extended to all research based postgraduate degrees. This instrument is designed to specifically examine research student's perceptions as they exit the university on completion of their program. There are presently plans to have a similar approach to other postgraduate courses, mainly masters by course work, graduate diplomas and graduate certificates just to name a few.

## Future Directions

There are a number of feedback tools presently in the design stage at CHEQ. Many of these will be implemented in 2002. Some of these are

- The Monash Experience Questionnaire (MEQ)
- Postgraduate by Coursework Exit Survey
- Employers Satisfaction Survey
- A Redesigned Research Students Exit Survey
- Monash's Course Experience Questionnaire (CEQ)

## Conclusions

The approach to quality at Monash is not a series of fine-level procedures to be followed. It is designed so that all members of the Monash community are involved, gauging their own quality assurance and improvement issues and how they approach the matters to give rise to the desired goal, in this case serving the needs and expectations of their students. It places responsibility on the professionals, both the individual and the team as whole.

The approach thus can be encapsulated in the following way:

- Encourages the development of a learning organization;
- Valuing diversity;
- An opened and informed approach to quality;
- A planned and systematic approach; and,
- Valuing self reflection and external reference

The approach encapsulating these values are reflected in the diverse way the organization has allowed that feedback be obtained in each of the faculties. Faculties in general work in groups to achieve the desired outcomes to their areas.

The data thus obtained via feedback is now in the hands of individual professionals, educational committees and the respective faculties to ascertain if the structure of the subjects, teaching and curriculum meets the needs of their stakeholders. Feedback is thus used as a tool to improve and not merely as a research or data gathering exercise.

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