

Using Evaluations to Improve and Prove the Quality of Teaching

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Abstract This paper begins with an overview of some recent initiatives to improve the quality of teaching in Australian higher education. Different strategies for supporting quality enhancement at university level are discussed, together with different approaches to evaluating the quality of teaching. The arguments advanced in the paper are:

1. Improving teaching quality depends on appropriate support at the system wide and institutional levels.
2. An evaluation of teaching quality needs to be based on a prior conception of what constitutes good teaching.
3. Teaching evaluations need to be based on multiple sources of data.
4. It is important to make a distinction between improving and proving the quality of teaching.

QUALITY INITIATIVES IN AUSTRALIAN HIGHER EDUCATION

In recent years in Australia there has been an increased focus on the quality of teaching in higher education. One reason for this is that education is being seen more explicitly as an instrument of government economic and social policy. This realisation has been followed by a number of Commonwealth Government interventions in the higher education sector, which include: breaking the universities' monopoly on accreditation and encouraging private providers of education and training, amalgamating the universities and the old colleges of advanced education to achieve economies of scale, introducing performance indicators for research and teaching, quality reviews, management reviews, national evaluations of students' course experiences, annual negotiations on student profiles, funding on a competitive basis to encourage teaching innovations, establishing a range of specifically targeted research funds that meet national priorities, pressuring universities to contribute more to their budgets through entrepreneurial activity and full fee paying courses, encouraging credit transfer arrangements with the vocational education sector, and promoting the recognition of prior learning in industry or commercial settings.

In addition to the above, there is increasing competition

from institutions outside the university system. No longer do universities have a monopoly on accreditation, or privileged access to the production and distribution of information and knowledge. Increasingly, commerce, industry and government agencies are becoming more sophisticated in providing learning opportunities in the workplace as they move towards the notion of the 'learning organisation'. The competition will continue to increase amongst universities themselves, especially with the introduction of open learning and distance learning technologies and practices, increased access of foreign universities to the Australian student population, a move towards user pays in the Australian system, the expansion of mature age entry, and the burgeoning international student market.

All this has resulted in a growing interest in efficiency, effectiveness, accountability for quality, and a subsequent concern with management structures and practices. It is in this context that teaching quality initiatives have been introduced at the system, institutional, departmental and individual level. Some of the system level initiatives are outlined below.

COMMITTEE FOR QUALITY ASSURANCE IN HIGHER EDUCATION (CQAHE:1993-1995)

The Committee for Quality Assurance in Higher Education

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first met in 1993. It conducted three quality reviews of all 36 public universities in Australia. It allocated additional funds to universities if they demonstrated effective quality assurance practices and quality outcomes. Each university prepared a portfolio and submitted it to the Committee following the set guidelines. The Committee then arranged for a team of people to visit each university. In the first quality audit the Committee focussed broadly on the three areas of teaching, research and community service. In the second review the focus was on teaching alone. The areas reviewed for teaching are outlined below to illustrate the range of evidence gathered:

- overall planning and management of the undergraduate and postgraduate teaching and learning program
- curriculum design
- delivery and assessment
- evaluation, monitoring and review
- learning outcomes
- use of innovative teaching and learning methods
- student support services and other teaching support services such as library and computer services
- staff recruitment, promotion and development
- postgraduate supervision

It is clear that this process has stimulated a range of new quality assurance practices in universities, including strategic planning, staff development, guidelines for course development, programs for new staff, the collection of statistics in a range of areas, internal and external self evaluations and so on. It is generally agreed that the reviews raised awareness and debate around the issue of “quality in higher education”, and that they encouraged universities to articulate what hitherto were implicit processes for assuring quality and to identify both good practice and aspects of their performance which require enhancement.

The extent of change reported by the Committee indicated that the process of review had encouraged significant management focus on quality at all levels in institutions (NBEET, 1995: 10).

The approach has not been without its critics. For example, the National Tertiary Education Union (NTEU), which represents Australia’s academics, has called into question the reliability and validity of the process:

The quality process.... remains founded on too great a commitment to quantitative performance indicators, some of which need to be used with more caution than the committee has suggested... In its decision-making process, the committee’s strategies for moderation are still too vague and arbitrary... The time has come to ask whether spending over \$70 million whether... the cause

of quality (can be) better served by a different process (Carolyn Allport, NTEU President, Campus Review, Vol 5, No10, March 16-22, 1995: pg 6).

Dr Don Anderson, chair of the Committee for the Advancement of University Teaching (CAUT) observed in the same issue of Campus Review:

It is very hard to accurately measure the intellectual quality of the people who are graduating, but it will have to be tackled soon if we remain concerned with quality. It is central to the whole issue of quality (Campus Review, Vol 5, No10, March 16-22, 1995: pg 29).

Additional criticisms of the CQAHE review process have included assertions that:

- a focus on the university as a whole produces an assessment which is too general to be of any practical use;
- rewarding those universities which are already performing well at the expense of those who are not simply makes the divide between elite universities and their poorer, new counterparts even wider;
- while universities were asked to frame their portfolios and quality goals in the context of their particular mission, little recognition has been given to the different approaches and priorities of some of the newer universities (NBEET, 1995: 10).

This shift in emphasis parallels that recommended by the Higher Education Council (HEC) in its November 1995 advice to the Minister on the future use of the discretionary funds in the Australian higher education sector.

We’ve got away from an emphasis on ‘quality control’ and more towards an emphasis on quality improvement (Professor Gordon Stanley, Chair HEC, Campus Review, Jan 18, 1996: 3).

QUALITY ASSURANCE & IMPROVEMENT ARRANGEMENTS 1997-2000

The quality review process described above has now been incorporated into regular profile visits between the universities and the Higher Education Council.

There are now no rewards and no ranking of institutions. However, a poor report from an institutional visit could adversely influence a university’s reputation, and vice versa. Consistent with recent OECD accountability trends, the process appears to be primarily outcomes based. It involves each university in:

- a. Developing key strategic quality outcome statements

which are discussed and agreed during annual profile visits. They are confidential between each university and the HEC.

- b. Setting targets for improvement based on institutional performance indicators already used/emphasised.
- c. A 3 day review visit to each university every 3-4 years to audit outcomes/achievements in quality improvement and 'offer guidance and assistance on quality improvement.
- d. Public accountability through a published review visit report.
- e. A feedback visit after an agreed period.

The focus when looking at each institution's outcomes is on the:

- rationale for setting priority quality outcomes and associated performance indicators.
- reliability of mechanisms used to monitor these.
- accuracy of explanations given for outcomes of this monitoring process (this would include exploration of outcome claims to ensure that they stand up to closer scrutiny).
- subsequent performance improvements in areas identified as requiring attention.

COMMITTEE FOR THE ADVANCEMENT OF UNIVERSITY TEACHING (NOW CUTSD)

This Committee was established in June 1992, its mission is to identify and promote good teaching, learning and assessment practice in higher education and to foster and facilitate innovation in higher education teaching. The Committee operates five programs: National Teaching Development Grants, Commissioned Studies, Workshops, National Teaching Fellowships, and Clearinghouses. Most of the funds support the National Teaching Development Grants scheme, which finances projects leading to practical improvements in teaching, learning and assessment within the university system. One of the Committee's goals is to raise the status of teaching in universities so it is comparable to the status of research in the academic life. Many of the grants are for very specific initiatives in discipline areas - titles include:

- enhancing practical legal skills through use of interviews in criminal law
- interactive computer package for teaching digital image processing to medical imaging students
- simulations of medical care for childhood medical emergencies
- an audio-visual interactive package for self-paced learning in introductory programming
- multimedia learning in process engineering laborato-

ries

- laboratory based engineering education
- innovative assessment techniques in selected undergraduate mathematics subjects
- collaborative learning through computer conferencing
- self directed learning modules for large science courses
- the problem solving approach to teaching economics
- an interactive multimedia CD Rom for Australian History
- peer collaborative study programs in anatomy

As can be gleaned from the above list, there has been a great deal of interest in utilising new communication technologies for the delivery of materials. Other areas of interest have been self-paced learning, collaborative or group learning, learning from the workplace, and the use of simulations or real life problems.

There is still a need to undertake evaluation research to determine precisely whether or not such innovations do add value to learning and, if so, in what contexts. There is also need to establish whether or not such innovations have had a broader impact and have been sustained.

COURSE EXPERIENCE QUESTIONNAIRE (CEQ) COMPONENT OF THE GRADUATE DESTINATION SURVEY (GDS)

The GDS is a mail survey of recent graduates of nearly all Australian universities. The universities invite graduates to participate in the survey a few months after the completion of their course. The questionnaire takes approximately 20 minutes to complete and focuses on the current activities of graduates: whether they are employed, studying, or unemployed. It seeks information about occupation industry, income and further study. The CEQ was first introduced into the GDS in 1993, following a number of trials and a recommendation from a group set up by the government to identify appropriate performance indicators in higher education. The items in the questionnaire are shown in Table 1, which shows the grouping of items in the CEQ, and the name of the scale to which each item contributes. The structure and existence of the scales has been confirmed by factor and item analysis.

The item scores were recoded from 1,2,3,4 and 5, (from strongly disagree to strongly agree as per the questionnaire) to -100, -50, 0, +50, +100 respectively. The means and standard deviations are based on this recoding.

PROPOSED NATIONAL SURVEY OF TEACHING QUALITY IN HIGHER EDUCATION

In July 1997 Australia's Education Minister Vanstone announced the establishment of a task force to develop and

Table 1. Constituents of the Course Experience Scales

	Mean	Std deviation
The Good Teaching Scale	6	40
The teaching staff of this course motivated me to do my best work		
The staff put a lot of time into commenting on my work		
The staff made a real effort to understand difficulties I might be having with my work		
The teaching staff normally gave me helpful feedback on how I was going		
My lecturers were extremely good at explaining things		
The teaching staff worked hard to make their subjects interesting		
The Clear Goals and Standards Scale	13	39
It was always easy to know the standard of work expected		
I usually had a clear idea of where I was going and what was expected of me in this course		
It was often hard to discover what was expected of me in this course		
The staff made it clear right from the start what they expected from the students		
The Appropriate Assessment Scale	36	43
To do well in this course all you really needed was a good memory		
The staff seemed more interested in testing what I had memorised than what I had understood		
Too many staff asked me questions just about facts		
The Appropriate Workload Scale	2	39
The workload was too heavy		
I was generally given enough time to understand the things I had to learn		
There was a lot of pressure on me to do well in this course		
The sheer volume of work to be got through in this course meant that it couldn't all be thoroughly comprehended		
The Generic Skills Scale	28	34
The course developed my problem solving skills		
The course sharpened my analytic skills		
The course helped me develop my ability to work as a team member		
As a result of the course, I feel confident about tackling unfamiliar problems		
The course improved my skills in written communication		
My course helped me to develop the ability to plan my own work		
The Overall Satisfaction Item		
Overall I was satisfied with the quality of this course	31	49

(Long and Johnson, 1997, p7)

implement a national student satisfaction survey of all 500,000 students currently enrolled in Australian Higher Education. She also announced the establishment of a phone 'hot line' for students to comment on the quality of their experience at university and suggest ways to improve standards and services.

In late August the peak representative groups of academics and students The Australian Vice-Chancellors' Committee, the National Tertiary Education Union, the National Union of Students and the Council of Australian Post-Graduate Organisations) declared that they would collectively boycott the plans. In a joint announcement they questioned the reliability of information that would be generated through a telephone hot-line and noted that the national survey would duplicate work already carried out by most universities.

Minister Vanstone also announced the establishment of

national awards for excellence in teaching, a move that has been supported by Vice-Chancellors, academics and student leaders.

SUPPORTING QUALITY ENHANCEMENT AT THE UNIVERSITY LEVEL

In addition to the above system-wide quality initiatives (and partly because of them), individual institutions have adopted a range of strategies for enhancing quality. Ramsden et al. (1995), in a major project commissioned by the Committee for the Advancement of University Teaching, report on a survey of institutional policies for recognising and rewarding good teaching. All 36 universities in the unified national system were sent questionnaires. Responses were received from 33 universities, and supplementary documentation from 29 of these (eg. teaching and learning manage-

ment plans, strategic plans). Promotion documentation was received from 27 universities and appointment documentation from 11 universities.

“we specifically asked whether universities had developed criteria for identifying good teaching; whether they had in operation, or in the process of development, any policies or procedures concerning appointments, promotion and tenure.; and in what other ways they encouraged good teaching.” (Ramsden et al, 1995, p 37).

The results of the survey are reported in **Table 2**. The results indicate the range of ways in which universities recognise and reward good teaching, such as through appointment and promotion policies, teaching development grants, academic development unit orientation programs, the provision of support for formal qualifications in higher education, workshops and seminars, excellence in teaching awards, regular and systematic reports on evaluation exercises, input into design and review of courses from stakeholders, and the existence of both committee and individual responsibility for overseeing quality teaching.

Although there was a great deal of activity directed towards teaching quality, Ramsden et al report that there was a much variability between institutions. Also there were a number of areas which clearly needed attention as the following observations demonstrate:

- few universities had clearly articulated views of the nature of scholarly activity in relation to teaching
- only 50% of universities had developed criteria for identifying levels of teaching competence
- the sources of evidence used to assess teaching were quite limited (over half used student feedback only)
- mentoring of inexperienced teachers and academic programs focused on supporting good teaching were relatively uncommon

On the positive side, teaching figured more prominently in promotion decisions, will over half of the universities allowing promotion primarily on teaching. Also, half the universities reported that they now offered a formal qualification in university teaching.

In a subsequent set of case studies, Ramsden et al confirm academics' views that institutional support is crucial for the enhancement of teaching quality, which means the provision of opportunities for professional development, support for teaching innovation, and career advancement based on teaching. One issue that stood out was the need to develop more explicit criteria and standards of good teaching as a foundation for assessing, recognising, rewarding and improving university teaching.

EVALUATING GOOD TEACHING

Teaching is complex and multifaceted and good teaching is hard to define, but any approach to evaluation needs to be based upon a conception of what constitutes good teaching. After a review of the literature, Ramsden et al (1995) offer the following list of qualities that researchers generally agree are essential to good teaching at all levels of education:

- good teachers are also good learners; for example, they learn from their own reading, by participating in a variety of professional development activities, by listening to their students, by sharing ideas with their colleagues, and by reflecting on classroom interactions and students' achievements. good teaching is therefore dynamic, reflective and constantly evolving
 - good teachers display an enthusiasm for their subject and a desire to share it with their students
 - good teachers recognise the importance of context and adapt their teaching accordingly; they know how to modify their teaching strategies according to the particular students, subject matter, and learning environment
 - good teachers encourage deep learning approaches, rather than surface approaches and are concerned with developing their students critical thinking skills, problem-solving skills and problem approach behaviours
 - good teachers demonstrate an ability to transform and extend knowledge, rather than merely transmitting it; they draw on their knowledge of their subject, their knowledge of their learners, and their general pedagogical knowledge to transform the concepts of the discipline into terms that are understandable to their students. In other words they display what Shulman has termed 'pedagogical content knowledge'.
 - good teachers set clear goals, use valid and appropriate assessment methods, and provide high quality feedback to their students.
 - good teachers show respect for their students; they are interested in both their professional and personal growth, encourage their independence, and sustain high expectations of them
- (Ramsden et al,1995,p 24)

It is clear, however, that different student evaluation questionnaires contain within them different implicit views about what constitutes good teaching. It is certainly worthwhile making such views explicit and to base them on available theory and research, but is it possible and desirable to identify a set of generic qualities which constitute good teaching? At its heart evaluation is about values, and therefore

Table 2. Number of universities reporting policies and procedures for recognising and rewarding good teaching (Ramsden et al, 1995, p 39)

	No with policies	No with procedures
Identifying good teaching		
1. University has developed criteria for identifying a basic level of competence in teaching	17	15
2. University has developed criteria for identifying a high level of competence in teaching	20	17
3. University has developed criteria for identifying the contribution of research and scholarship to teaching	9	8
Sources of evidence about the quality of teaching		
1. Student feedback	24	24
2. Internal peer review	12	14
3. External peer review	14	13
4. Head of department review	15	15
5. Teaching portfolio	10	8
6. Reflective self report	14	13
7. Quality of student learning	13	12
Appointment and promotion		
1. Appointment processes give equal value to teaching and research	17	13
2. Appointment can be based primarily on excellence in teaching	7	8
3. Appointment processes take teaching into account	18	16
4. Appointment processes take teaching qualifications into account	11	12
5. Promotion processes give equal value to teaching and research	26	25
6. Promotion can be based primarily on excellence in teaching	17	16
7. Promotion processes take teaching experience into account	26	24
8. Promotion processes take teaching qualifications into account	12	12
Encouraging good teaching		
1. Teaching development grants to individual academic staff	17	21
2. Special arrangements for teaching development projects	14	20
3. Funding to replace staff on teaching development projects	11	15
4. Academic development unit to support high quality teaching and learning	25	26
5. Special appointments for teaching in departments	81	9
6. Orientation programs for less experienced teachers	17	24
7. Continuing program for less experienced teachers	16	21
8. Mentoring program for less experienced teachers	3	4
9. Innovative teaching or excellence in teaching event	14	21
10. Workshops and seminars on teaching and learning	18	28
11. Formal qualifications in higher education offered	14	16
12. Academic leadership development program for encouraging good teaching	8	9
13. Excellence in teaching awards	20	23
14. Senior committee which oversees educational policies and practices	24	20
Strategies for assuring quality		
1. Systematic review of the effectiveness of processes for recognising and rewarding good teaching	11	14
2. Reports from departments on the effectiveness of measures to improve teaching	14	13
3. Regular input from students into design and review of courses	20	20
4. Regular input from employers into design and review of courses	17	16

Table 3. Proving and improving the quality of teaching - different characteristics

Proving teaching quality	Improving teaching quality
Descriptive	Diagnostic
Judgement oriented	Action oriented
Time specific snapshot	Ongoing
Quantitative/reliable	Qualitative/valid
Potentially punitive/summative	Potentially supportive/formative
Competitive	Collaborative
Past oriented	Future oriented
Top Down	Bottom up
Context free	Context dependent
Outside perspective	Inside perspective

different people have different preferred indicators of what constitutes good teaching (including cultural variations) Also one's role (President, Dean, Head of Department, Lecturer, student, employer) will clearly influence which indicators are given prominence. This limits the idea of generic qualities of the 'good teacher'. But the impetus to identify generic qualities is persistent, coming partly from the increased need to **prove** the value of teaching at an individual level, departmental level, institutional level, and system level - it is part of the increasing demand for accountability in higher education, and the need to demonstrate competence and excellence in teaching performance. Only by using standardised instruments, which are supported by theory, previous research, and empirical procedures such as factor analysis, can systematic comparisons be made between departments in different universities, or between individuals within and among universities. This is also necessary for documenting system level changes over time and for making comparisons between different disciplinary and professional groupings. The emphasis on **proving** the value of teaching also leads to an over reliance on quantitative measures of teaching performance as evidence (in particular, student questionnaires). But thorough evaluations will always make use of multiple sources of evidence, such as internal and external peer reviews, self appraisal, Head of Department Reviews, teaching portfolios, quality of student learning - sources of evidence which involve qualitative judgements about the context in which the teaching occurs. One way of looking at the distinction between **proving** as opposed to **improving** the quality of teaching is set out in **Table 3**.

In many respects a focus on proving the quality of teaching is easier to do and can give a good broad snapshot at specific points in time. It may be cheaper and more reliable to use but validity could be a problem, especially because of the lack of attention given to context. Improving the qual-

ity of teaching is harder to do, may be less reliable and therefore requires multiple formal and informal measures. It may also, however, be more valid and constructive. 'Proving' gives little attention to helping people do something constructive about the results and may actually be perceived as punitive. This in turn can lead to people manipulating data. 'Improving' requires a sophisticated, 'just in time' infrastructure and support mechanism to assist individuals and groups to address gaps identified. It is therefore more complex, uncertain, challenging and costly. It can, however, actually help students.

The best solution is not to opt for 'proving' or 'improving' but to utilise both as appropriate to your purpose. At present, at least in Australia, there is certainly too much emphasis on 'proving' and too little on 'improving'. If the concern is with improving teaching, then the results of student questionnaires become one source of many sources of data which is fed into an ongoing reflective evaluation of teaching in context. It is the quality of this ongoing reflective evaluation and local supports for improvements to teaching which are at least as important as the results of generic questionnaires.

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