

ADDING VALUE TO STUDENT LEARNING :
QUALITY AND OUTCOMES IN TAFE

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Concern about the `quality' of services provided to students and other
clients,
particularly industry, and a focus on `outcomes' rather than processes are
emerging as
twin imperatives for the Australian TAFE systems in the nineties. This is

increasingly evident as each State system is being drawn into a national vocational education and training system as part of an explicit reform agenda. This paper will examine the implications for the TAFE systems of aspects of the national vocational education and training reform agenda: specifically, the impact of introducing competency-based training and establishing quality assurance systems within devolved operational structures. It will be argued that the test of such reforms must be the extent to which value is added to student learning.

I will deal with the impact of what I call the 'outcome' and 'quality' imperatives in turn. In the first instance, however, the national reform agenda will be sketched in broad outline. The major elements are neatly summarised in the recently agreed national goals for vocational education and training. Overall the national system of vocational education and training is intended to:

- be effective, efficient and collaborative,
- improve the quality of outcomes,
- improve opportunities and outcomes for individuals,
- be more responsive to industry,
- improve access and outcomes for disadvantaged groups,

increase contribution from industry and individuals as training is to be seen as an investment.(1)

Fundamentally then the national reform agenda is about expanding education and training on the one hand, and reducing rigidities within current awards and education and training practices on the other.

These goals, which are merely signposts to foreshadow the direction of reform were endorsed by VEETAC, the Vocational Education and Training Advisory Committee at its meeting in June 1992. VEETAC comprises senior State officers of the TAFE and Training Systems and representatives of the industry partners, that is ACTU and CAI, and is chaired by the Commonwealth. VEETAC then, given its membership, can be seen as the policy arm of the reform agenda in operation.

In brief, the reform agenda in policy and practical terms is far reaching not merely because it is national in scope but because it has tripartite and cross-sectoral support, which transcends party politics. Its origins lie in economic and social considerations which find expression first, in the industrial relations arena and, in turn, as we will see are being reflected in a new pedagogical base for vocational education and training.

The mission statement of the 'Business/Higher Education Round Table' captures the duality of the rationale well:
a prerequisite for a more prosperous and equitable society in Australia is a more highly-educated community. In material terms it fosters economic growth and improved living standards through improved productivity and competitiveness with other countries. In terms of equity, individual Australians should have the opportunity to realise their full social, cultural, political and economic potential.(2)

In other words the rationale for change stems from Australia's weak position in comparison to other OECD countries which is indicated in general terms by: our lack of productivity and severe balance of trade deficit, the apparent low skill levels of much of our current workforce and the segmented nature of it which is particularly the case with respect to gender. So, reform of education and training is seen as an urgent priority if Australia is to improve its economic position by the twenty first century. Again, the economic rationale has a social dimension. Currently much of the existing workforce, outside the professions, trades and technical areas has received little or no formal training beyond their years at school. Even where extensive on-the-job training has occurred this is generally not recognised for purposes of career advancement or pay rates.

Hence, on social equity as well as economic grounds a new system of wage fixing has emerged, the so-called 'structural efficiency principle', which is a necessary pre-condition for the implementation of award restructuring. Since the National Wage Case decision of 12 August 1988 increases in wages and salaries have had to be

justified in terms of a co-operative review of the relevant awards with a view to improving the efficiency of industry and providing workers with access to more varied, fulfilling and better paid jobs. Measures to achieve this include: establishing skill-related career paths which provide an incentive for workers to continue to participate in skill formation, eliminating impediments to multi-skilling and broadening the range of tasks which workers may be required to perform, creating appropriate relativities between different categories of workers within the award and at enterprise level, ensuring that working patterns and arrangements enhance flexibility and the efficiency of the industry. (3)

It is this industrial relations context to the reform agenda which is of particular interest to TAFE systems. This is so because of the way in which the core business of TAFE, vocational education and training, has been fundamentally shifted since the starting point for all major curriculum development is now not educational issues per se but industry competency standards. In theory, unless an industry sector has developed competency standards which have been endorsed by the National Training Board there is no agreed outcome basis by which the corresponding national curriculum development work can proceed. Herein lies the rub. To date only a few industry sectors have developed their standards and still less have had their standards endorsed.(4)

In practice, however, significant national curriculum development has occurred over the last two to three years in competency format in the absence of endorsed standards because of pressure from particular industry sectors, which as part of restructuring have been keen for workers to benefit from more flexible forms of training in line with new awards. The most notable example is that of the Metals and Engineering Industry. Significant funds, in excess of two million dollars, (5) have been expended through ACTRAC, the Australian Committee on Training Curriculum, in developing the so-called national 'metals modules' which form the new trade-based course that replaces some fourteen separate trade certificates. In addition, a new operative level form of

training that provides an alternative to the trade route, particularly for existing, unqualified but experienced employees, the Engineering Production Certificate, has also been developed. It is currently being offered together with the modular trade courses through most TAFE systems. Despite massive curriculum development all of which has been modular and in a competency-based format there is still no agreement by the industry partners to the competency standards per se. This is now expected to be achieved by early 1993.

To pursue the case study the question has to be asked: "Has this competency-based approach been of benefit to students training to enter the metals industry?" The cursory answer is that it is too early to tell in terms of long term outcomes. A fuller analysis reveals, however, that there are a number of apparent benefits: Students who complete the modular-based metals trade course will be more skilled than formerly because they will have acquired competencies across the fabrication, electrical and mechanical streams, The outcomes approach means that students have more opportunity to control and pace their own learning, The EPC offers an alternative form of training not previously available to those at operative level without formal qualifications.

There is, however, further evidence of the lack of fit between theory and practice in terms of the impact of the reform agenda on TAFE systems. There is as yet no formally agreed framework for competency-based training despite the agreement of

Ministers of Vocational Education, Employment and Training (MOVEET) that there would be "substantial progress towards implementing competency-based training by 1993".(6) Since competency-based training is essentially a pedagogical response to award restructuring such a framework is clearly needed so that all stakeholders involved in adopting such responses have a more coherent and consistent understanding of its potential and limitations.

It is fair to acknowledge that the decision to re-focus curriculum development, delivery and assessment of training in this direction did not necessarily arise from an evaluation of available options by educators but rather from the industrial relations context which demanded a pedagogy which could provide a more equitable means of accessing and recognising training. The curriculum expression of award restructuring is an outcome-based model of education and training which is designed so as to provide for multiple entry and exit points, recognition of prior learning, including that derived informally from life experiences, and credit transfer. In this sense competency-based training contributes an important equity orientation towards vocational education and training.

In developing the model, competency-based training has become both a system of linked processes and an approach to teaching and learning. (7) As a system of linked processes competency-based training involves: development of industry standards, development of the corresponding curriculum for courses and training programs, establishing mechanisms for accreditation and national recognition, provision for flexible methods of delivery and outcomes based assessment, certification of student achievement.

As an approach to learning competency-based training: places primary emphasis on what the learner can actually do, is focused on outcomes rather than learning processes or time spent engaged in these processes, is concerned with the attainment and demonstration of knowledge and skills and their application, is concerned with achieving flexibility in the use and adoption of national industry standards while still enabling the consistency essential for national recognition.

There has been criticism of competency-based training from some quarters partly because as we have seen it has arisen to meet the demands of award restructuring and as such has not been subject to scrutiny or debate by educators. This is not to say,

however, that competency-based training does not have educational potential. Concepts such as flexible learning, multiple entry points, pathways and recognition of prior learning are essentially emancipatory in character and when fully implemented will provide a better deal for young people and the existing workforce. Notwithstanding this, competency-based training has been characterised by some in such a way that at first glance it appears to be anti-educationist. As Hager and Gonzi (8) have argued, however, many of the myths associated with competency-based can be debunked. In brief, competency-based training is not necessarily behaviourist, complex, only about training which is centrally controlled or developed, nor is it focussed only on the lowest common denominator in terms of performances or impractical to assess.

Clearly competency-based training like all other pedagogies is neither wholly deleterious nor a panacea to all our educational problems. It is simply a tool. And yes, it is a tool which we as educators have used and mis-used before. But like any tool in the kit of educators or trainers it has the potential to make a difference. If competency-based training provides a means of promoting alternative pathways to higher education, training or employment, is used as the basis for granting credit when none has been granted before, and contributes to the breaking down of existing rigidities in the way we often draw and reinforce boundaries around the various sectors of education and training then it is an approach that I endorse as a valuable step forward. It is a step forward because of the potential to add value to student learning.

The work of the Mayer Committee in developing a set of key, generic, employment-related competencies is further evidence of a step forward. This cross-sectoral educational work has demonstrated that competency can be viewed holistically and developed to integrate knowledge and skills, and their application(9). Competencies of this kind apply to work generally rather than being specific to work in

particular

occupations or industries. In this sense it is possible to describe knowledge and skills

richly enough to be able to identify discriminating variables which may be used to

distinguish between performance standards at arbitrary points or levels.

Preliminary

field testing undertaken with employers and trainees in industry during the consultation

phase in the development of key competencies indicate that the notion of distinguishing

levels for the key competencies makes sense in real work situations(10).

More research,

however, needs to be done to validate and benchmark the current level descriptions.

In practical terms, the implementation of competency-based training certainly does

create difficulties for TAFE systems. A few, as yet unresolved, questions illustrate the

point:

What is the role of workplace assessors and who determines their suitability for assessing on-the job competencies viz-a-viz the off-the job assessment which will be conducted typically by qualified TAFE teachers or their equivalent in private training organisations?

To what extent can vocational skills be satisfactorily demonstrated and performed to the requisite industry standard outside an actual work situation?

How are competencies to be recorded now that the critical issue is no longer "who is the best apprentice?" but "which competencies has this apprentice required?"

By the end of 1992 the following mechanisms are likely to be in place which will

assist TAFE systems and other providers to implement competency-based training.

The National Framework for Recognition of Training (NFROT) came into existence

in August, 1992(11). It has been endorsed by MOVEET as a means of ensuring that

accredited training is recognised nationally and that there is consistency in the

application of the principles which characterise a competency-based system of

vocational education and training, namely:

assessment will be measured against clearly defined competency standards set by industry and endorsed by the National Training Board,

prior learning will be recognised and credit transfer arrangements will be promoted, consistency will derive from a focus on outcomes, common criteria will apply for registration of providers and accreditation of courses. A common format for the development of modular, competency-based curriculum has been recently developed by ACTRAC and endorsed by other key stakeholders (12). This means that there will be greater consistency in curriculum design and that more attention will be paid to the difficult task of deriving units of competency and learning outcomes from industry standards. Currently a staff development train-the-trainer package and strategy is being developed which will provide opportunities for key personnel such as TAFE teachers, curriculum writers and industry trainers, to become familiar with the pedagogical issues involved in undertaking such tasks.

Turning now to the impact of the 'quality' imperative, an important question is: "How have TAFE systems in responding to the national reform agenda assured students of the quality and vocational relevance of their courses?" Traditionally TAFE systems have dealt with quality assurance through their accreditation systems. In some cases in the past courses have been largely internally developed and did not involve or allow for very much industry input or scrutiny. In other cases, as in NSW, there has been a long tradition of industry involvement and external review panels have always been a feature of the accreditation system. Irrespective of these differences in the past, in line with a key tenet of the national reform agenda, 'the level playing field', (13) all TAFE systems have lost their monopoly in respect of course accreditation and correspondingly, registration of providers. In all States and Territories there is now an independent accrediting authority, often created by a specific piece of legislation. This is the case in NSW where the Vocational Education and Training Accreditation Board has been established since mid 1991. In line with the provisions of the legislation, the NSW TAFE Commission has negotiated self-accrediting status and has now established

a TAFE Accreditation Council to manage its accreditation processes.

At the same time as TAFE systems have been responding to the national training reform agenda they have also been restructuring in their own right. In NSW the former Department of Technical and Further Education was subject, along with the Department of Education (schools sector), to a major management view, the so-called Scott Review (14), which resulted in significant organisational changes. In summary, TAFE NSW became a Commission with an independent Board, the teaching schools became training divisions with an explicit industry or educational focus, colleges were clustered into Networks and later into larger groupings as Institutes(15), head office functions such as teacher recruitment, budgetting, planning, quality control and other related operations were devolved or out-sourced with a corresponding down-sizing in staff numbers.

In 1992 there are a small number of central support divisions and eleven Institutes: three are Institutes of Technology and eight are Institutes of TAFE. Each of the metropolitan Institutes have significant State-wide functions in addition to their delivery responsibilities through the college/campus structure. All thirteen training divisions,

which are jointly responsible for the development and maintenance of TAFE curriculum, examinations, and the setting of quality assurance standards for recruitment of staff, provision of facilities and equipment, selection of students and course delivery, have been devolved to relevant Institutes. Responsibility for the development of corporate policies and frameworks in critical customer service areas such as marketing and quality assurance including accreditation, remain a central function. Thus there is a quality assurance and customer service group which includes divisions in marketing (corporate and international), educational quality assurance and student services (examinations and enrolments).

The challenge then is to improve quality while devolving the majority of the operational functions, which determine whether a particular service, such as the enrolment process actually meet student needs. The pressure on TAFE NSW as with other TAFE systems to more visibly and credibly implement quality assurance measures are increasing. They come from internal and external sources: internally, students and teacher need an assurance of the quality and consistency of the educational services provided irrespective of the location or circumstance, whereby these are offered, externally, industry expects a timely response in the development of new courses, and relevancy in terms of the vocational content and technological context.

To respond to these internal and external pressures the approach adopted by NSW

TAFE has been drawn from the Australian Standard for Quality Management Systems.

Many in industry will already be familiar with the application of Australian Standards to various products. A standard also exists for Quality Management Systems (AS

3901). Its purpose is to define a system for "all those planned and systematic actions

necessary to provide adequate confidence that a product or service will satisfy given

requirements for quality".(16) The standard consists of limited separate elements which

describe the kind of procedures and records that must be established and maintained

to ensure confidence in the quality of a system.

At this stage NSW TAFE has undertaken preliminary work to group and translate these

elements into an educational service delivery context. It is no easy task. What follows

is an outline of what this translation might look like in terms of a major education and

training system such as NSW TAFE.

(1)Management responsibility for maintaining quality

TAFE management has the responsibility to develop, implement and maintain policies and procedures to achieve a quality educational service to its customers which includes students, staff, as well as external clients.

Management must support personnel with responsibility for quality assurance by providing adequate resources.

Management must review its quality system at appropriate intervals.

(2) Meeting the needs of industry, the community and individual students
Procedures must be established and maintained to ensure that the requirements of customers are known and can be met, and that individual students have been enrolled in the correct and agreed course/subject/module.

The design both of course content (curriculum) and of the program of courses offered in a particular Institute/College must reflect student needs, industry requirements and be soundly based in educational terms.

Current courses and other curriculum documents must be readily identified and obsolete ones destroyed as part of a review and maintenance cycle.

(3) Delivery of quality courses, with appropriate staff, and provision of student services

The college/campus must maintain procedures for delivering and reviewing courses to the standards set down in course documentation for content, teacher qualifications, assessment and physical resources.

All resources which TAFE purchases to provide educational services - including staff recruitment - must be chosen by selection procedures that ensure that they meet specified requirements.

Students must have access to services such as counselling, course information advice, or tutorial support to support them in their studies, and appropriate student and course records must be maintained.

(4) Maintenance of appropriate assessment and testing, and conferring of awards

Procedures must be established and followed to ensure that initial, on-going and final assessment occurs as necessary, and that assessment is valid, and consistently applied.

Records of students' enrolment, attendance, assessment and examination results and final award must be maintained.

Student outcomes must be reviewed on a regular basis, problems identified and improvements made, with the aim of increasing student success.

(5) Support of teaching and learning through maintenance of the physical environment and human resource development

The college/campus must provide a physical environment appropriate for learning and Occupational Health and Safety requirements must be met.

Human resource development needs of staff who are responsible for developing or delivering courses to students, must be identified so that priorities can be set and training planned and delivered.

(6) Maintain checks on the system through Educational Quality Audits

All aspects of the Quality System must be audited to ensure that activities comply with set procedures.

Auditors undertaking such review and monitoring must be trained appropriately.

What would the operation of a quality management system mean in practice?

Put

simply it would mean that meeting student needs would be seen as an important value and would therefore become the prime focus of all activities in practice.

Also all

functions within the TAFE system would be carried out by staff in a manner consistent

with the value of 'continuous improvement'. TAFE NSW believes that changing the

internal culture of the TAFE system to embrace these values is necessary particularly

in the context of a devolved structure. It is easy for consistency to be lost under the

guise of autonomy unless there are clearly articulated and understood standards. If

value is to be added to student learning then it is clearly essential, for example, that

all students enrolled in a particular course have the same chance subject to their ability

of satisfactorily completing the course irrespective of the place or time or mode of

delivery, or the specific teacher involved.

Gaining executive and staff commitment to reorient existing operations so that students

come first is not a single event process. Nor can it be done in an isolated or piecemeal

fashion. It requires an integrated and system-wide strategy which has been developed

through collaborative processes so there is ownership and recognition of the need for

change. TAFE NSW has set itself such an agenda but over a 2-3 year timeframe. As

a billion dollar enterprise with more than 400,000 students and 20,000 staff there is a

significant amount of work to do in reshaping existing policies and procedures to

achieve a more explicit customer focus consistent with our vocational education and

training charter.

Currently the Queensland TAFE system has made a similar commitment to establish

quality management systems. It is likely that all other TAFE systems will in some way begin to define quality in customer service terms. It is interesting to note that the university sector has been responding to the quality imperative in some respects, at least, in a similar way.

Arising from the Minister's 'quality' reference to NBEET (17) each Australian university in the next three years will need to construct a system of quality management appropriate to its context and mission. As we have seen there are three preliminary questions to consider:

who are the customers?

what are the products and/or services?

how is it intended to achieve congruence between these, that is, fitness for purpose?

As recent commentators (18) have noted there are in fact a number of measures already in place in universities which are used to assure the quality of academic experience.

These can be summed up as:

designing for quality through procedures, attaining quality through attainment of conformance to design, that is, continuous improvement.

It can be further argued that many of the concepts associated with quality theory - continuous improvement through feedback, use of collaborative processes including team work, and teacher rather than management input into the curriculum and course design - are essentially educational in character and so are compatible with the core function of universities. The same situation also applies in the case of TAFE sector.

So, the quality imperative can be interpreted as affirming rather than weakening the education charter of our tertiary education and training institutions. In this way student learning is certainly not at risk in an education and training institution such as TAFE NSW which is explicitly setting out to put in place a quality management system. The reform agenda then means that TAFE systems are focusing more on outcomes on

the one hand and recognising the importance of a customer focus on the other through the implementation of quality management systems. While there are difficulties and much work still to be done there is the potential, at least, to add value to student learning.

Notes

(1)MOVEET, "Common and Agreed Goals for Vocational Education and Training in Australia", mimeograph, 5 June 1992.

(2)Business Higher Education Round Table, "Educating for Excellence" Commissioned Report, No.2, Camberwell, Vic., September, 1992.

(3)TUTA, "The National Wage Case", mimeograph, August 1988.

(4)National Training Board, "NTB Network", No.6, Canberra, September, 1992.

(5)Australian Committee for Training Curriculum, 1991 Annual Report, Melbourne, August, 1992.

(6)MOVEET, "Minutes of Special Meeting", mimeograph, November, 1990.

(7)Competency-Based Training Working Party, "A Framework for Competency-Based Training", mimeograph, September, 1992.

(8)Gonczi,A., and Hager,P., "Seven Myths Cloud Debate on Competency-Based Education", Campus Review Weekly, July 2-8, 1992.

(9)The Key Competencies agreed to by AEC and MOVEET Ministers at their meeting in Auckland in October 1992 are: collecting, analysing and organising information, communicating ideas and information, planning and organising activities, working with others and in teams, using mathematical ideas and techniques, solving problems and using technology.

(10)The Mayer Committee, Employment-Related Key Competencies: A Proposal for Consultation, Melbourne, May 1992.

(11)This agreement derives from an earlier framework set out in Vocational Education Employment and Training Advisory Committee, National Framework for the Recognition of Training, November, 1991.

(12)Commonwealth of Australia, User's Guide to Course Design for Competency-Based Curriculum, Issue I, 1992.

(13)For a critical analysis of the 'costs of award restructuring' see, Junor,A., "Training Costs of Award Restructuring", Australian Universities Review 1, 35, 1992.

(14)Scott,B., "TAFE Restructuring", Management Review : NSW Education Portfolio, Sydney, September, 1989.

(15)NSW TAFE Commission, "Future Directions", mimeograph, Sydney, August, 1991.

(16)See Australian Standard AS 3901, (1987 version), which is equivalent to the international standard.

(17)Baldwin,P., Higher Education : Quality and Diversity in the 1990s, Canberra, AGPS, 1991.

(18)Dixon,T., and Gardner,R., "Quality Management in Higher Education", Australian Journal of Communication, Vol.19,1,1992.