

WHAT IMPACT IS IMPLEMENTING A QUALITY SYSTEM HAVING ON THE VET CLASSROOM?

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ABSTRACT

This paper will report on research into whether implementing quality systems is having an impact on the teaching/learning process in TAFE Institutes. The research used a case study approach as well as a review of literature and current findings from workshops conducted by educators who use quality tools and principles in the classroom. Preliminary findings indicate that there was a mixed response from teachers regarding the value and impact on the classroom of implementing quality. This is due to various interpretations of the term 'quality' as well as the fact that the VET sector has experienced a number of fundamental changes and new initiatives, which have all, had some impact on teaching and learning. The conclusions reached in this paper are that if quality is to have an impact on the teaching/learning process, we need to

- mould the definition and principles of quality so that they are closer in meaning to the main activity of the sector – learning;
- learn from the quality framework for VET and apply it in the classroom : the class is the organisation, the leader is the teacher, the people in the organisation are the students and the teacher/s and the customers are those who benefit from the student's work;
- bear in mind that improving learning is the bottom line for training organisations and whatever we do with quality should lead to improved learning.

Tooley and Darby (1998) examine educational research to assess whether it:

- makes a serious contribution to fundamental theory or knowledge
- is relevant to practice
- is cumulative - that is whether it is coordinated with any preceding or follow-up research.

Given the theme of this second AVETRA conference is quality of VET research, I would like to suggest that the three criteria Tooley and Darby use be the starting point for assessing the research that is described in this paper .

Rationale for the project

Hagar (NCVER, 1997) noted in his review of research into quality assurance in VET that most of the research relating to quality in the VET sector was concerned with the business of setting up quality assurance measures and was therefore developmental, rather than evaluative.

The purpose of this paper is to report on a piece of research which was designed to contribute to the evaluative research into quality. The project conducted by NCVER aimed to examine the impact that implementing quality initiatives was having on the teaching/learning process in the VET sector.

Guest (Q Magazine, OTFE, 1997) noted that :

It was generally recognised in the US that the use of quality principles should not be confined to the administration/management area, but should be integrated in to the core business of teaching and learning.

Kable (the Quality Magazine, October 1997) echoed this view stating that:

. . . to gain maximum value from an imposed quality system, it must be structured around the processes that drive the business'.

Many VET practitioners believe it is premature at this stage to be examining and seeking to measure the effects the development and implementation of quality systems are having on the quality of the

teaching/learning experience. They hold this view because the primary effort at the start of a quality journey is generally directed at applying the quality principles to the management of the organisation and this has been the primary focus of the quality framework for VET developed in each State and Territory. Furthermore, quality as a term is problematic because it means different things to different people.

Methodology

The project drew on non-empirical research in the form of literature published in the field of quality in education as well as current work by practitioners who have established reputations in the USA for their work in putting quality principles into practice in the classroom. The project also involved qualitative research in the form of questionnaires and interviews with quality managers, head teachers and teachers in 8 Institutes of TAFE in New South Wales, Victoria, Queensland, South Australia and Western Australia. The 8 institutes which took part in the study all had been recognised publicly for their commitment to quality and for progress they had made on the quality journey. These organisations were those which had been recognised through the Australian Training Awards (administered by Australian National Training Authority) and the Australian Quality Awards (administered by the Australian Quality Council).

The reason for selecting these organisations was that since these organisations had gained an award for their commitment to quality, they would have been on their quality journey for some time and it could be expected that the impact of quality was filtering through to the learning environment.

The preliminary research for this national project was conducted in early 1998. Given the fact that this research topic was considered by some to be premature in that the VET sector had been in a change of flux and change since the early 1990s and given that implementing quality was a relatively new concept within the sector, there was hesitation about using the available quantitative measures when assessing the impact that implementing quality may be having on the quality of the teaching and learning experience. Quantitative measures such as participation rates, module completions, employment of graduates, satisfaction of graduates, number of graduates who returned to do further study provide an indication of the performance of the VET sector, but they are not the type of data from which to draw conclusions about the quality of the teaching/learning process at the institute level. Furthermore, there are protocols and sensitivities about using institute level data in national studies.

Another option was to compare data over time within the one institute. The problem with this approach was that there have been so many changes in the VET system – such as restructures and mergers of colleges into larger training organisations and the shift to a competency-based approach. Thus comparing participation and outcome data such as module completions and graduate destinations over time could be meaningless. Moreover, many institutes have not been collecting this type of data for very long in a systematic way.

The approach that was adopted was to go direct to teachers in the first instance to find out from them what impact they felt implementing quality was having in the classroom. This was achieved by selecting a range of training organisations to visit, sending out a preliminary questionnaire and then arranging to meet with groups of 8-10 teachers to discuss whether they felt implementing a quality system was having an impact on the teaching and learning experience they offered. A total of 117 staff from TAFE Institutes took part in the study.

These teachers taught a range of courses covering Diploma level, Associate diploma level, and Certificate I – IV as well as general access and equity courses. The teachers represented the full range of fields of study and included trade and non-trade: general trade areas, community health, business, manufacturing, information technology, foundation education, communication skills, animal care, electrical engineering, horticulture, aged care, workplace training and assessment, arts, health and safety, childcare.

100 of the teachers taught classes of 11-20 people or more – only 7 taught smaller classes. 104 of the teachers consulted used mainly classroom-based, teacher directed with some self-paced delivery. 15 teachers indicated that they also used workplace-based delivery strategies. The predominance of classroom-based delivery is reflected in national VET statistical collection: 1997 data reveals that 86% of modules were delivered using classroom based teacher directed and self-paced delivery strategies. (unpublished statistics, NCVET)

Another angle that was pursued was the non-empirical angle - reading the literature to find what other researchers are saying about quality and its impact in the classroom. This phase also involved

attending conferences and workshops presented by educators such as Myron Tribus and David Langford, both from the USA who are contemporary thinkers and practitioners who have made their current careers from putting quality principles into practice in the classroom and who take time to share their ideas with other teachers.

Defining quality

Crucial to the consultations with teachers was to find out what they understood by the term 'quality'. Quality has become a short hand term that is used to describe a set of features or attributes, a philosophy/a way of thinking and an approach to management.

Heywood (1998) suggests that:

. . . what in fact is offered by a 'quality' approach is a coherent framework for thinking about the management and improvement of organisations – a systems view of the organisation. (p. 10)

Connor (1998) states that he read a paper with over 200 definitions of the term. For this project two definitions were given to teachers to find out what their understanding of quality was:

- By quality I basically understand it to be a set of processes and procedures

'Quality is excellence in the management of our services, our processes and our products. Quality management focuses an organisation on the needs of its customers, with a view to ensuring ongoing competitiveness and effective use of resources.'

- By 'quality' I basically understand it to be a philosophy and commitment to continuous improvement that is built into the culture of the training organisation

'A quality system is a comprehensive, organisation-wide approach to continuous improvement and ensuring consistent quality standards. It involves looking at all aspects of your service and asking 'how can we do things better?' But, you don't just ask the question once. In a quality system, everyone in the organisation continually looks for ways to improve products, services, and timelines, processes - and ultimately, outcomes and client satisfaction.'

In each group discussion teachers selected the second definition as the one they personally ascribed to and worked to and which reflected the professional culture they shared: a commitment to continuous improvement and to educational standards. In contrast, the first definition reflected the bureaucratic quality culture characterised by quality assurance, processes and procedures and this was what teachers perceived management to be implementing. Some teachers in the group felt that the first definition was a subset of the second while others felt there really were two ways of thinking in their organisations and they were compatible.

Findings

In order to discuss the findings the approach adopted in this paper is to:

- look back and report what has been achieved so far in terms of quality implementation and the changes that have taken place in the VET sector
- look inwards and present what impact quality has had so far and what issues cloud the picture
- look forward to discuss what the implications are for the VET sector of recent literature and recent practice in USA into quality and its impact in the classroom.

LOOKING BACK

The factors to note in looking back are:

- There have been enormous changes taking place in the VET sector which all potentially have an impact on the quality of the teaching and learning experience. These changes include restructures and amalgamations/mergers of TAFE institutes, the changing nature of the work of TAFE teachers, the mix of full-time to part-time staff, the range of clients the teacher has to

satisfy as well as fundamental changes to education and training (the move to a competency-based system, the move to an evidence based approach to assessment, the move to flexible delivery which incorporates self-paced learning, training packages, training in industry, user choice and new apprenticeships).

- At the national level the VET sector has a set of eight quality principles (ANTA 1997) on which to base its approach to quality. These principles are broad and simply state the importance of leadership, customers, staff, training products and services, data for decision making, continuous improvement.
- The VET sector has developed the Australian Recognition Framework which sets out the guidelines for registration and quality endorsement of training organisations. It has developed training packages which set out the competency standards for the industry, assessment guidelines and a qualifications framework. There are key performance measures for the VET sector and a number of major data collections: the national VET statistics collection, the national graduate satisfaction/outcomes survey and employer surveys.
- At the State level each State and Territory has developed its own quality framework for VET for all institutes to use for self-assessment. These quality frameworks are based on the Australian Business Excellence Framework which focuses the organisation's leaders, people, customers, processes, strategic planning, information and analysis, and organisational performance. At the State level there has also been activity related to benchmarking projects, best practice projects, surveys of graduates and employers and development of performance indicators..
- At the level of the training organisation, the quality journey may take many forms. The most common include achieving ISO 9000 certification, either for the whole organisation or teaching units/sections within the organisation; self-assessing against the state's quality framework with a view to gaining quality endorsed training organisation status; seeking quality endorsed training organisation status; conducting surveys of graduates, students, employers and staff; developing documentation to support processes which contribute to the good running of the organisation.

For the teacher in the classroom recent national projects that have focused on the teaching and learning process per se have included the manual *Good, Better, Best* (ANTA 1997) which is a tool for the teacher to use to allow them to reflect on their current practice and OTFE (1996) *Success in Practice: a guide for vocational teachers and trainers*.

As yet there has not been a focus on quality in the classroom. In Victoria the *Quality in Schools* project which involves piloting quality implementation in 28 schools, set itself the goal of improving school leadership and management processes in its first year and in its second year it has set the goal of improving teaching and learning processes. This has not been a goal of the VET sector to date and it is time that it was acted upon. Improving the learning that takes place must be the goal of implementing quality. It can not be limited purely to the management and administrative processes.

The bottom line in education is not money saved or spent, but learning and its impact on society. (Langford, 1999, p 23)

LOOKING INWARD

In the questionnaire teachers were asked to identify quality initiatives so that we would understand what their experience of quality was. This question was open-ended and thus a range of answers was elicited. The type of quality initiatives that teachers identified are listed in the table below. Since teachers were asked an open-ended question the table lists the number of examples of each type of quality initiative as well as the number of institutes in which teachers identified this type of initiative. The most commonly named quality initiatives were ones relating to quality management (ISO 9000, quality manuals, quality audits) as well as initiatives related to customer focus (surveys, better enrolment and induction procedures), staff (surveys, in-service training, staff inductions, performance indicators) and management of information (better enrolments records, record-keeping, roll books, documented policies and procedures). Interestingly, many teachers identified national initiatives such as flexible delivery, CBT, audits, the Australian Recognition Framework, workplace delivery, user choice, upgrading learning resources as quality initiatives.

Quality initiatives	No. of examples	No. of Institutes
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Initiatives relating to quality management in the institute	18	7
Customer focus	12	8
National VET initiatives	12	5
Initiatives relating to staff	10	8
Administration/management of information	10	7
Physical environment	5	3
Initiatives related to delivery	5	4
Initiatives related to assessment	3	3

Having identified the range of quality initiatives, teachers were then asked whether quality initiatives were having an impact on the work they do. Of the 116 teachers who answered this question in the preliminary questionnaire, 79 (68.1%) answered yes and identified positive changes, 27 (23.3%) answered no and identified negative changes and 10 (8.6%) were not sure.

In the questionnaire, teachers were asked to identify changes to the work they did as a result of implementing quality. Again this was an open-ended question and a wide variety of answers were given. The table below summarises these answers.

Positive changes that have resulted from implementing quality	Number of different examples	Number of Institutes
improvements to administration	11	7
more focus on the learner	5	6
better assessment practices	5	6
approach to work is different	14	5
more focus on the customer	2	5
delivery is better	3	4
better learning resources	6	3
better facilities and equipment	3	2
more staff development	4	1
more focus on outcomes	1	1

The negative changes were generally the fact that there was now more paperwork to deal with, more administration and thus a greater non-productive workload and less time for preparing lessons, preparing resources, marking and keeping up to date with new initiatives in VET.

The positive changes reflect the type of quality initiatives that teachers identified - the national initiatives, the focus on customers, the focus on administration. The most interesting positive change was the approach to their work. Here teachers stated that a growing knowledge of quality systems:

- is empowering and encourages teachers to look at different ways of improving delivery
- encourages teachers to self assess and reflect on teaching practices
- creates greater enthusiasm for teaching/learning
- greater cohesion and cooperation between teachers
- encourage teachers to be more innovative and more flexible
- gives more authority and more responsibility - and therefore more satisfaction
- leads to continual upgrade of skills
- is welding of team ethos within the department

During discussion a number of teachers observed that none of the institute quality initiatives were directed at the process of teaching and learning:

the administrative systems have been given more attention than the adult learning process.'

'the message is not reaching the classroom'

'I am completely unaffected by the formal quality process at the institute level. I have always endeavoured to provide quality education to my students.'

'I don't believe the quality system has really been aimed at the teaching programs to any great extent. It has certainly documented the administrative side but it has not changed the face-to-face teaching strategies of staff.'

Where teachers gave examples of classroom practice changing in terms of delivery and assessment practices, this is most likely to be a result of national initiatives such as flexible delivery and workplace

assessment, rather than the quality initiatives themselves - although the quality movement within the Institute may well have added impetus to the national initiatives. However, overall, the impact so far has been superficial and within the boundaries of the current approaches to teaching and learning which are dominated by this notion of 'delivery' - which has associations with providers and recipients of training.

During the discussions with teachers it became clear that there were three schools of thought regarding the impact of quality in the classroom:

- the positive view - quality is having an impact: it is changing our way of thinking; we listen more to students; we work as a team; we are energised and motivated; we go out to industry more.
- the negative view - quality is a disruption in that it increases workload and takes away precious time from core business - which is preparing classes, teaching, designing resources, exploring new delivery options and keeping up with changes in the VET sector. In fact teachers with this view will state that the implementation of quality has decreased the quality of teaching in the classroom and has not brought any advantages to students.
- no change view - we have always listened to students, we have always aspired to improve and deliver a quality education.

Thus the early advice that this project was premature would appear to have been correct in that:

- Quality means different things to different people
- Quality in VET has not focused on the learning process yet, except in superficial ways
- Quality has been implemented as a way to improve business and the way an Institute is run, not as a means to improve learning.
- There are many other initiatives which are impacting on the work teachers do and they are still in the midst of understanding them and coming to terms with them.

LOOKING FORWARD

A review of literature and current work in USA revealed that before we can start to evaluate the impact quality is having on the classroom, we have to come to a common understanding throughout the VET sector of what quality can mean to the learning process. This project started off with a couple of definitions of quality - one had a quality assurance focus and the other more of a total quality management focus. Having now talked to more people, read more, listened more and thought more, I believe the definition we should be adopting in VET is one which David Langford (1995) puts forward:

Quality is a new way of seeing and thinking about the very relationship between the teacher and the learner. (p. xi)

Langford goes to say that

The impact of quality does not lie in any cookbook approach to change. Instead, it is embodied in the remarks of teachers who say they feel 'released, and free to think'... The impact of quality is found in teachers who turn to their students for learning, in students who become facilitators of their own and others' learning, in administrators who say, 'this concept has changed my life' and in leaders who say 'I've gained so much by letting go. (p. xii)

Myron Tribus succinctly defines quality as 'joy in learning'. Tribus also observes that for too long teachers have been concerned with what and how to teach - hence the emphasis on curriculum and packages and not with how learning actually occurs. He describes a leader as a person who:

... persuades people to do what they would not otherwise do. The leader takes them to places they would not go by themselves. A leader creates new systems within which people can achieve goals to which they and the leader aspire. (p. 26)

This description is in essence the description of teacher in a class in which the main process is learning, not teaching.

Improving the bottom line in a training organisation is improving learning. Let's not lose sight of this! Improving learning means more than increasing the module load completion rate or percentage of graduates in employment. It means getting students involved in learning, arousing their desire to learn and creating an environment in which learners feel intrinsically motivated to learn. Langford talks about the need to make a paradigm shift away from teaching and towards learning: we can

consciously and with consistent effort and commitment create an environment in which the student's desire to learn is aroused and this will by necessity mean an environment in which the student is given responsibility for learning and is equally accountable with the teacher for learning taking place. We are not talking here about lip service to student centred learning we are talking about a philosophy which permeates all class activity .

Langford (1999) defines learning as the process by which a person gains

- Information (facts and figures)
- Knowledge (understanding those facts and figures)
- Know-how (apply the knowledge)
- Wisdom (using judgement, discernment and experience to decide how, when, whether to apply the knowledge you have to a variety of situations)

The writings and workshops of educators such as Tribus and Langford give an insight into the body of knowledge and theory that underpins the quality philosophy – they draw, particularly on the wisdom of Deming(1994). The wisdom, which is not yet part of the VET quality 'psyche', is:

- The key to implementing quality is leadership – leadership in the VET system, leadership in the training organisation, leadership in the teams/sections/teaching units and leadership in the classroom itself. Langford (undated, p. 6) observes that the ingredient which is most in short supply once basic funding needs are met is not money but leadership.
- Having a quality approach means taking a system's view of issues – in the class that means looking at the performance of the group and seeking to improve the performance of the whole class rather than focusing on individual students and seeking to improve individuals who are performing below the 'average' level.
- Data are necessary to improve the system, that is the class. Teachers and students can gather data on the system and analyse the data using tools such as correlation charts, frequency charts, Pareto charts and using simple statistical techniques such as calculations of standard deviation.
- All systems have variation and thus variation is normal: thus for the teacher it is important to chart progress each week of the whole group and to note the variation that is within the normal range. It is the teacher's job to improve the system – the whole class – so that performance for all students falls within boundaries of what the teachers and students regard as acceptable. Any performance outside of this can then be studied to identify if it is a special cause, and if so, what action needs to be taken. Deming warned practitioners of the dangers of treating common causes of variation as if they were special and treating special causes as if they were common. The only way to avoid this danger is to gather and chart data on the whole group and analyse it regularly.
- Quality tools and processes are one way of ensuring the learner owns the process of learning, allows them to be responsible, allows learning to be 'just in time', ensures the learning is relevant to the learner, allows the learner to be active and to 'do' rather than to 'receive'.

Conclusions

Insights which I have gained from this project so far and which I feel do contribute to fundamental theory and knowledge, which are relevant to practice and which build on the work of others are:

- The way quality is defined and commonly understood throughout the VET sector and the way it is described in the VET quality principles is too far removed at present from core business – that is, learning. They do not mention learning, nor do they mention a systems approach, the need to improve the process of learning in order to improve the output, the importance of planning, or the need to note that variation is inherent in all systems.
- Too often quality is interpreted and acted upon as if it is customer focus or strategic planning or data collection. These are the parts of what constitutes a quality approach, not the whole
- The quality framework for VET is a powerful tool and has already had an impact on the management and administration of training organisations. This tool is potentially a powerful tool for the classroom if we start thinking of the class itself as the organisation, the teacher as the leader, the students as the people in the system and the product as learning.

- The bottom line for VET organisation is improving learning: this is the 'profit' of a quality training organisation that is managed and run effectively and efficiently.

The structure for this shift from teaching to learning is with us: we can take the quality framework and use it in the classroom if we change our thinking about what a class is and what the roles of students and teachers are. The quality framework is built around seven criteria. At the institute level where the institute is the organisation, the leaders are institute management, the people are the staff of the institute and the customers are students and employers.

At the classroom level where the classroom is the organisation, the roles change: the teacher is the leader, the students are the people in the organisation and the customers are the beneficiaries of the student's work – this can include employers, other teams of learners and the community if work has been undertaken for the community, either in real life or in a hypothetical setting.

Some teachers may choose to achieve the paradigm shift by putting into practice adult learning principles or other approaches. The quality framework and tools are one way, perhaps a more disciplined way, of ensuring that improved learning is the bottom line. The table below is a brief description of how the quality framework for VET can be applied in the classroom.

Quality Framework for VET	Application to the classroom/learning environment
Leadership	The teacher is the leader. The role of the leader is to improve the system (the class) with the help of the students. The leader creates an environment in which students motivation to learn is aroused. The leader communicates with and gets involvement from employers and members of the wider community.
Strategy, policy and planning	Designing the learning experiences, deciding on a class code of conduct is done by the teacher and students working together within the boundaries of the competency standards or training package. Lesson plans should not be designed solely by the teacher, but with the students.
Information and analysis	Data relating to performance, gaps in knowledge, barriers to learning, for example, is collected by the students themselves as well as the teacher throughout the learning process and is analysed using basic statistical techniques so as to inform and guide the learning.
People	The people in the system are the teacher and the students. Students own the learning. The teacher's role is to guide, oversee, coach, coax the students and lead them to becoming independent learners. The students work with teachers in planning the learning, doing it and monitoring it through, for example, self-assessment against a competency matrix and portfolios of work.
Clients focus	Learning happens when there is a clear beneficiary of the activity that students undertake. Thus the beneficiaries of learning experiences could be employers, a community group, the students themselves or their families - just depending on how practical and real the learning experiences are. There is more motivation to undertake a project or piece of work once a beneficiary has been identified.
Process and service	Learning is the process – quality tools can be used throughout learning to involve students in designing their learning experiences as well as monitoring and assessing the activities they carry out which are part of learning.
Organisational performance	The success of the whole class is monitored and it is the teacher's job to work on the system so that improvements benefit everyone. Measures of success can include scores on individual assignments. These can be reported anonymously for the whole class and the performance of the whole class can be monitored and everyone can play a role in working out what aspects of the system need to be improved. Areas of poor performance are identified and the teachers and students work on the system to improve this, rather than focusing on individuals who did not perform.

At present we could measure the impact quality is having on management of institutions because this is where most the quality activity has been directed. Heywood (1998) summarised this when he said:

what in fact is offered by a quality approach is a coherent framework for thinking about the management and improvement of organisations – a systems view of the organisation.

What we need now is to adopt a systems view of the class and then we will start seeing quality *learning*. At this stage we will be ready to assess the impact in the classroom of the body of knowledge and wisdom which is called 'quality.'

The challenge for those in education is to reclaim and reshape the (quality) agenda to adapt it to the goals we can believe in and support as educators. (Jackson, 1995 p. 56)

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