

FUTURE PATHS AND CHALLENGES FOR QUALITY AND DIVERSITY IN VOCATIONAL EDUCATION AND TRAINING

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INTRODUCTION

This paper explores implications for vocational education and training raised by a recent study: the NCVER/ANTARAC project 'Documenting Capable Organisations: Implications for Vocational Education and Training' carried out in 1997, by a partnership of researchers from Southern Cross University, Monash University and Northern Melbourne Institute of TAFE. The study concludes with a series of recommendations pertinent to Vocational Education and Training.

A sample of ten Australian organisations were studied to investigate capability in organisations, with questions focussing on organisational learning, development and change.

The organisations were a large city council, an international engineering consulting company, a cement manufacturer, a large construction and mining company, a section of a government office, a special Koorie school, a cable making company, and a chemical manufacturing company, a sub section of a Technical and Further Education College, and a state road authority.

The organisations were identified by a series of steps. The 1996 Australian Capability Network Conference with the theme of 'Applying Capability to the Workforce,' explored the question 'What is a capable organisation?' Organisations identifying with the concept were invited to make presentations which contributed to arriving at some basic concepts about what a capable organisation might look like.

With the guidance of the Project Reference Group, (itself a cross section of industry, education and training) a number of organisations were identified for study, including some who had presented at the 1996 conference. The organisations studied present a cross section of size, type, number of employees, core business, geographical location (state capital, urban, rural) and indigenous.

Methodology employed

A grounded theory methodology was employed. (Glaser and Strauss, 1967, Strauss and Corbin, 1990). An extensive literature review was developed in the initial stage. After developing a broad set of initial exploratory ideas, in consultation with the Reference Group, a series of interviews was carried out. These were analysed utilising the computer program 'Scenario' (Brooks and Daley, 1997). The study set out to gain from the interviews and the case studies an overview of the elements manifested by the organisations in their structure and operations. Finally, a search conference was conducted to discuss the emerging implications of the case study data, particularly for the vocational education and training sector. The research was guided by the project Reference Group.

The interview questions were developed by the researchers in conjunction with the Reference Group and as part of the process (Strauss and Corbin, 1990). Interviews were conducted by the three principal researchers. In each organisation, the CEO or representative and a cross section of personnel identified by the CEO were interviewed. Subsequent interviews were conducted with personnel identified through the initial interviews.

Introductory questions to the case study organisations focussed on organisational innovation, change and development, fostering of organisational capability and the role of training.

Findings

A set of indicators for capability and success were identified from the interview data. The case studies revealed a number of factors which appear to be significant as essential features of organisational capability.

Major factors appearing as significant and essential features of organisational capability were: recognition of complexity, visionary leadership, excellence of management behaviour, the presence of

a learning culture, organisational adaptation and appropriate reward systems. Quality of working life was an important factor. Alignment of employees' values with those of the organisation, (both going in the same direction) was another identified general theme.

Capability and Capable Organisations

The Capable Organisation is one which 'draws on and adds to the individual capability of its members, their competence (current skills, knowledge and attitudes), their capacity (potential ability) and their values' (Hase, Malloch and Cairns, 1998:15).

The concept forming the focus for the study, 'Capability,' is defined as: 'the confident and mindful application of both current and potential ability (competence and capacity) and values within varied and changing situations to formulate problems and actively work towards solutions as a self managed learning process' (Cairns, 1997).

Major features of Capable Learners and Capable Organisations are:

- flexibility and adaptability
- self managed learning
- mindful awareness of capability and learning
- values bounded behaviour
- readiness and confidence to engage the unknown (risk taking).

A Capable Organisation:

- can identify Capable individuals within its structure
- consciously fosters the idea that capability and capable individuals count
- is aware of its emerging corporate capability as more than the sum of individuals' capability
- looks to being competent now but also learning for the future and using potential
- operates within a set of clearly understood appropriate values
- has management which values learning and self management of that learning
- encourages self managed teams
- understands the significance of individual and collective efficacy in developing and maintaining commitment from all involved
- has leadership which understands and drives three significant elements: values, vision and customer focus.

The Capability Learning Model argues that there are three key elements of self efficacy: specialist knowledge and skills (competence) and values which intertwine in learning. The model postulates that Capable Learning takes place across a range of 'learning planes' which encompass varying degrees of novelty on the two dimensions of tasks/problems and contexts/situations. Self efficacy is proposed as the major motivational driver in the model. (Malloch, Cairns and Hase, 1998:5)

The case study organisations were implementing, advocating and moving towards the development of the capable organisation.

The 'organisations studied manage the complexities of operating in a turbulent environment by means of continuous change and development. They appear to do things that maximise the effectiveness of their employees by empowering them; raising their self esteem; helping them learn; increasing their ownership of what they do; and increasing the quality of working life; in short they help staff become more capable.' (Hase, Malloch and Cairns 1998:25).

Achievement of change seen in the case studies necessitates significant paradigm shifts in terms of current understanding of the functions of CEOs,' and significantly, also 'middle managers, and other employees...' (Hase, Malloch and Cairns, 1998:35). importance of learning and how people learn, the culture of an organisation and organisational structure.'

Implications for Vocational Education and Training from the Report

Factors found to be important in encouraging organisational capability were the development of learning culture, of work being intrinsically rewarding, of there being a positive quality of working life and a strong identification by the workers with the organisation's vision and values.

1. *Learning how to learn was found to be a major aspect of individual and organisational capability - an examination of how people can be assisted to 'learn how to learn' should be a focus for organisations, and vocational education and training providers.*

There was a strong focus on learning, linking this with improved performance. Creativity and lateral thinking were appreciated. Thinking outside the box' was valued.

'All they had to think of in the past is doing a job within a defined box, so by all this other development being available to them they're there working outside of the box. Yes, they do have their roles to perform but it's a much wider role now that includes a lot of other aspects that before was done by ... other people in again defined boxes so there was a very rigid sort of structure' (Malloch, Cairns and Hase, 1998: 17).

One senior manager, said, as did many others interviewed, 'We need them to bring their brains with them because the person who's doing the job has got a far greater capability in coming up with cost - cutting solutions than the person who doesn't do the job' (ibid: 29).

2. *Shifting the emphasis from training to learning means there is a need to reconsider the traditional role of the trainer and 'train the trainer' programs. New skills such as mentoring, learning facilitation, and educational leadership will need to be built on an understanding of this paradigm.*

Curtain (1996:7, citing Gonczi 1995:16, referencing not provided) reported that in a survey of supervisors, only 58 per cent had received any training for their role of trainer, and that mostly short term training.

The professional development section of the non endorsed components of the Training Packages provides an opportunity to address the training and development of workplace trainers and assessors, for example, the manufacturing industry training board has developed materials to train 'capable facilitators' of training.

Delivery of vocational education and training has been based on a 'teaching' model, a transmission model; there is a need for learner managed learning.

3. *The relationship between competence and capability can be seen as progressive. Competence is sufficient in familiar circumstances but the unfamiliar requires more holistic characteristics associated with the concept of capability.*

Also emerging from the case study data was the finding that members of the organisations expressed the need for competence, elements of self efficacy, openness to change, the capacity to learn and demonstration of the values associated with cooperation and self reliance. Whilst competencies have a vital role in developing people, 'there is clearly a need to go beyond competency into the realm of changing values and beliefs.' (Hase, Malloch and Cairns, 1998:35)

Under competency based training, the emphasis has been on the skills and knowledge outcomes to be learnt rather than the traditional time for training. Recognition of prior learning is utilised for the formal recognition of experiences and qualifications to provide exemptions, and/or partial credits in training.

It can be argued that the forms of competency based training utilised are able to train and produce the type of people required for changing and developing organisations. The interviewees in the case study organisations mentioned that their organisations found competency based training positive in the development of skills for jobs.

Competency based training was found to be important in skills formation and this formed a foundation for further development. 'One of the six key basically business objectives for the year really revolved around continuing to develop the learning capabilities of our people and growing ...all this, their skills and breadth of knowledge.'(Malloch, Cairns and Hase, 1998: 18) What they went on to develop through a range of methods were leadership, management and people skills in organisations they consciously worked to change.

Evans, (1996:10) in her assessment of competency based education and training in the United Kingdom, advocated for education and training which utilises 'a more holistic approach,' integrating knowledge, understanding and skill, analysis and synthesis and judgements of performance. She proposed a future oriented approach which developed capabilities to operate in changing contexts, and attention to be given in training to processes as well as outcomes.

Williams, Cunningham and Stephenson (1998) have explored the relationship between the implementation of the National Vocational Qualifications and 'corporate capability.' They found that the opening up of communication, showing of greater self confidence upon improvement and recognition of competence and the development of the beginning of a culture of learning were contributing to corporate capability. A second study investigating the social milieu of learning around NVQ implementation is currently underway.

A key implication of the study is that 'Vocational education and training needs to focus on developing people for the modern workplace which is demanding holistic attributes that go beyond competence.' (Hase, Malloch and Cairns, 1998:39). Competency based training programs provided a basis for the acquisition of required knowledge and skills in the case study organisations.

4. *Initiatives in the area of work based learning and learner managed learning in Australia and overseas could be further investigated by vocational education and training providers. The role of these models in assisting organisational development should also be examined.* (Hase, Malloch and Cairns, 1998: 41).

An important aspect of flexible delivery of competency based training has been the modularisation of training and an emphasis on the learner setting the pace for learning, and a cutting back in the length of time required for training programs.

There are several centres providing work based learning worthy of further study. Examples include the Workbased Learning Centre at Middlesex University , RMIT University and Southern Cross University.

5. *Vocational education training providers, including universities could examine the use of flexible curricula which would accommodate accreditation of work based learning and learner managed learning in the workplace.*

The current vocational education and training policy emphasis is on delivery of training in the workplace. With an ageing workforce, the multiskilling of adults, and multiple career changes, flexible training and a move from classroom training has been advocated. The government aims to expand traineeships into new industries, have greater community and regional involvement and look to business to take a leading role in training. Vocational training is being extended to delivery in schools. (Greer, 1996).

Flatter organisational structures and greater participation of the workforce in the organisation are leading to greater utilisation of individual strengths. 'We need them to bring their brains with them because the person who's doing the job has got a far greater capability in coming up with cost cutting solutions than the person who doesn't do the job.' (Hase, Malloch, and Cairns, 1998: 29)

Flexible delivery enables the combination of work, family and study, and for rural distance study. (Burns, Williams and Barnett, 1997:26) Video conferencing for remote areas has shown successful in assisting module completion rates. (OTFE, 1997: 8)

6. *The development of leadership skills as well as the technical skills of management at all levels of an organisation needs to be emphasised.* (Hase, Malloch and Cairns, 1998: 41).

In relation to visionary leadership, the CEO was regarded as important in providing dynamic leadership in driving and supporting changes. 'A champion who is a visionary and has been able to steer the direction of training towards a learning organisation' (Malloch, Cairns and Hase, 1998:28)

A manager from the public sector emphasised the shift in focus to develop of people... 'Our key objective would be to skill the organisation's people - our colleagues, our clients in the organisation - about how to be high performance leaders if you like, high performance people managers' (ibid: 28) .

Management and management training in Australia was identified by the Karpin Report as requiring change and improvement (Karpin, 1995).

7. *Team building and teamwork require improvement* (Hase, Malloch and Cairns, 1998: 42).

The organisations interviewed had all developed teams and team work as a key mode of worker /workforce operations.

'The job itself now isn't just confined to the nuts and bolts, it's confined to what is it going to take for the team to manage itself satisfactorily and that includes a whole host of other things that in the past were foreign to the ... award people. There were tasks that were performed by managers, supervisors, superintendents, foremen, you name it - now all those titles and all those positions are

obsolete, the team is responsible to ensure the delivery of a cost effective safe service' (Malloch, Cairns and Hase, 1998:17).

'We have used a process for change that involved: communication, the training of facilitators/change agents, support by a central change team, self - directed work teams and work - based training.'(ibid: 27)

8. *The formation of partnerships and use of partnering may assist vocational education and training providers in the development of organisational learning cultures and capability.* (Hase, Malloch and Cairns, 1998: 42).

The Ramler Report (1998:5) recommended that TAFE Institutes (including non - metropolitan Institutes) be encouraged to form strategic alliances with partners of their choice (either other TAFEs or private third parties) to further rationalise the provision of corporate services.

Such alliances are utilised currently and this forms a basis for further research and development.

9. *Include broader aspects of human growth and adaptation in learning in human resource development.* (Hase, Malloch and Cairns, 1998: 42).

Communication and participation in decision making were important to the case study organisations. People and their development and hence their contributions were seen as a key strategic resource. (Karpin, 1995: Vol. 1: 574)

'Well, decisions were made behind closed doors and then they tried to sell it. It never worked because the first thing people looked for was the hidden agenda, they never listened to what was being proposed to them, whereas now they're part of that dissemination of information so they understand it.' (Malloch, Cairns and Hase, 1998:18).

Learning from mistakes and problem solving with other workers were also important factors.

'Where in the past the person who gave the technical support was in charge, he was the foreman, if it went wrong he wore it. Now, the individual, the operator would say to the technical process guy, 'Look, I've got a problem. I can't nut it out. What do you think I should do?' The responsibility still lies with the operator so they're having to think more, they're being challenged more and they're coming up with the goods more' (Malloch, Cairns and Hase, 1998:18).

10. *Further collaborative arrangements between TAFE, universities and private providers should be developed to enable smooth transition through the Australian Qualifications Framework.* (Hase, Malloch and Cairns, 1998: 41).

To fully utilise lifelong learning, to become a learning society, there needs to be a 'shift' in emphasis of 'post - compulsory education ' to 'a seamless system with multiple entry and exit points ' (ibid :35).

The Ramler Report (1998:5) advocated the development of cross sectoral pathways between education and training sectors to assist in the development of a skilled and flexible workforce. To date, the 'seamlessness' between sectors, and the credit transfer and articulation arrangements require attention and cooperation between all education sectors.

It would be a positive development to see an increase in joint University and TAFE research projects and for research to have a higher profile in the VET sector.

Research directions

These findings are important in providing a picture as to how a cross section of organisations are developing and encouraging the capability of both individual employees and of the organisation.

They both reinforce current research themes and also provide for some 'diversity' in trying to broaden the research agenda.

The vocational education and training sector has an operating expenditure of \$3.96b with 1.46 million clients (an increase of 53 per cent between 1988 and 1997). Such a large sector requires ongoing research and development.

The State Training Board (199 *) in the document: 'A Vision for Training and Further Education,' has as objectives and strategic directions, the building of new relationships, learning through life, learning

through new technologies and flexible resourcing, goals which are congruent with the findings from the study.

The OTFE Research Strategy aims to raise the quality of VET research; to have high quality well targeted research essential to inform VET policy development and planning (1995:17).

To raise research quality, a series of action proposals are suggested which involve forums, research special interest groups, conferences, register of researchers with relevant skills, links with universities, working with national bodies to develop tendering and project management processes, informing local work with input from interstate and overseas, and increasing research impact and strengthening research infrastructure. The focus over last three years has been on moving from TAFE to VET, from supply to demand, from activity to outcome, from quantity to quality and from central control to devolved system. (ibid: 17)

The NCVET writes of research for the national strategy: 'Research involves investigations which contribute to knowledge, in this case our knowledge about vocational education and training. The national strategy will focus on research which is applied in nature, which looks beyond specific contexts to produce outcomes and which has applications to both policy and practice.' (NCVER, 1997:3)

The research priorities listed are:

- economic and social implications of vocational education and training
- employment and the workforce
- pathways from school to work
- outcomes of the vocational education and training sector
- the quality of provision of vocational education and training
- future issues affecting the VET sector (NCVER, 1997:5).

Themes present in recent vocational education and training research include: investigations into VET in schools, assessor training, quality assurance, flexible delivery of training, entry level training, learning in the workplace, VET in small business, evaluation of VET in Australia, public and private provision of training, and reform in the VET sector.

Recommendations from the study

Directions for further research, reinforced by the study, include:

- development of multiskilling from competency based training
- self managed learning
- contributions to organisational capability made by team based structures enabling worker participation in decision making, access to information and responsibility for work
- the trainer as facilitator of workplace/work based training and learning becomes
- development of leadership skills in management
- development of seamless post compulsory education
- articulation/credit transfer between sectors (The AVCC/ANTA have recently initiated research into this area)
- documentation of partnership arrangements between learners, providers and workplaces

A key focus for research in vocational education and training is on a more holistic development of people for the modern workplace (including those already in the workplace, school leavers and the unemployed) (Malloch, Cairns and Hase, 1998: 21 -22) .

The case studies reinforced the usefulness of competency based training, but also pointed to further areas for development; that training employees is important.

The findings from the study also provide indications that capability in organisations could be researched further.

Dr. Gregor Ramsey, in an address at the National Vocational Education and Training Conference of 1995, with the theme Towards A Skilled Australia made the following comment:

'What I am more interested in is creating a learning society or a learning organisation for our TAFE systems where people are able to develop a learning relationship with their place of work, the education sector and the general community. It requires an integration of theory and practice,

formal and non approaches, and the use of technology that the concept of lifelong education demands. There are tremendous curriculum implications of such a direction, much more wide ranging than the simplistic competency based approaches which are driving us at the moment. As you can see, I think there is an exciting time ahead.' (ANTA, 1995:178)

In this comment are directions for research, development and practice. In the time elapsing from Ramsey's comment, further developments to competency based training have occurred, with the advent of National Training Packages, based on National Competency Standards, to be used to train across all industry sectors; management and workplace assessor competencies have been refined; lifelong learning is a goal of UNESCO and the OECD adopted increasingly internationally, and flexible delivery and workbased education are advocated for the delivery of training. Within this context, research into self directed learning and situated learning is important.

However, to have capable societies, and capable organisations, we need to continue to reflect, analyse and evaluate our work and developments and to be prepared to step beyond the bounds of convention, conformity and fashion.

There is a need for quality research into vocational education and training which will assist in creating more organisations and workplaces where recognition of complexity, visionary leadership, excellent management behaviour, the presence of a learning culture, the nature of the organisation, and appropriate reward systems operate as a daily occurrence.

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Recommendations from 'Capable Organisations: The Implications for Vocational Education and Training'

1. Learning how to learn is a major aspect of individual and organisational Capability, as well as a core component of the learning organisation, work-based learning, flexible learning and independent learning. However, most people have not learnt this valuable skill and it is most likely that their education and training experiences have been as dependent learners. Examination of how people can be assisted to 'learn how to learn' should be a focus for organisations, and vocational, education and training providers.
2. Shifting the emphasis from training to learning means there is a need to reconsider the traditional role of the trainer and 'train the trainer' programs. Flexible learning methods, flexible curricula, learner managed learning, Capability and learning organisations need to be fully understood. new skills such as mentoring, learning facilitation, and educational leadership will need to be built on a sound understanding of this new paradigm.
3. The relationship between competence and capability can be seen as progressive. Competence is sufficient in familiar circumstances but the unfamiliar circumstance requires more holistic characteristics associated with the concept of Capability.
4. There are some current initiatives in the area of work - based learning and learner managed learning in Australia and overseas that can be further investigated by vocational education and training providers. In particular the role of these models in assisting organisational development should be closely examined.
5. Vocational education training providers, including universities, could examine the use of flexible curricula that would accommodate the accreditation needs of work - based learning and learner managed learning in the workplace.
6. There needs to be a greater emphasis on developing leadership skills as well as the technical skills of management at all levels of the organisation. As organisations become flatter, more flexible and responsive, team based, outsource, and become more like networked organisations they will be looking for people with strong leadership abilities as well as the capacity to learn.
7. Examine how team building and teamwork can be better learnt given that current techniques, particularly the use of experiential exercises, are limited in their success and direct application to the work environment.
8. Partnering and the development of partnerships are key strategic approaches for the modern organisation. Vocational education and training providers might learn a great deal about how to create learning cultures and Capability by forming learning partnerships with public and private sector organisations.
9. Consider how learning in human development can include some of the broader aspects of human growth and adaptation.
10. Further develop collaborative arrangements between TAFE, universities and private providers that enable a smooth transition through the Australian Qualifications Framework.