An overview of Australian vocational education and training research

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In this paper an overview of vocational education and training (VET) research in a number of selected areas is provided. The research examined is the wide range of VET research reports and papers that have been published in Australia, mainly in the 1990s, on the topics of -

- learning in the workplace
- returns to enterprises from investment in VET
- VET and small business
- training markets
- entry-level training
- vocational education in schools
- public and private training provision
- flexible delivery of training
- assessor training programs
- quality assurance in VET
- evaluation of VET.

The main studies referred to in this paper were prepared as part of a series of 'research stocktakes' that were undertaken in 1997 to inform the development of priorities for Australia's new national VET research and evaluation strategy. The National Research and Evaluation Strategy for Vocational Education and Training in Australia, 1997-2000 was published by the National Centre for Vocational Education Research (NCVER) in 1997 (see NCVER 1997). The new national VET research and evaluation strategy was prepared by the NCVER under the guidance of the National Research and Evaluation Committee (NREC). The key elements of this strategy are outlined in Robinson (1997).

Learning in the workplace

Australian vocational education and training policies in recent years have been about shifting the emphasis from what courses TAFE and other training providers are able to offer (ie. the supply side of the equation) to a focus on what industry and enterprises really required in terms of skill formation (the demand side). There has been a corresponding shift in training out of the classroom and into the workplace. But how much do we really know about the effectiveness of workplace learning?

Hager (1997a) reviewed the recent Australian research literature on the issue of 'learning in the workplace' which includes both formal on-the-job training and informal workplace learning. Both are important, with some research stressing the importance of productive interactions between the two. Hager noted that recent policy decisions have led to increasing emphasis being placed on the informal activities and that this presents problems because informal workplace learning is different from formal on-the-job learning.

Hager noted that informal workplace learning is characterised by such things as its close relationship to the environment of the individual learner's workplace, its unstructured nature and the absence of any formal training program. Characteristics such as these have allowed some people to undervalue informal learning because it is 'enterprise specific' and not related to the national or industry standards.
However, the close relationship between informal learning and an individual learner's workplace can be seen as a good thing. Many businesses work hard at promoting a 'company philosophy' or 'corporate culture' which underpins the way they work and their relationships with the wider community. Therefore, there are expectations about the performance of employees that stem from these company workplace requirements. The learning of a workplace culture is more frequently done informally than formally; it tends to be 'absorbed' by the employees over time as a result of constant exposure.

Recent research on learning in the workplace has demonstrated that:

- simple notions of transfer of skills learnt in the workplace are dubious
- the best kinds of learning in the workplace involve appropriate links between formal training and informal workplace learning
- proper account needs to be taken of the diversity of variables in the workplace environment/culture, language, numeracy and literacy are capable of being addressed in a holistic way along with other changes as workplace reform is implemented
- there is much confusion about the 'recognition of prior learning' (RPL) even though it enjoys wide support

Nevertheless, there is still much more we need to know and, in particular, the area of informal learning deserves greater attention. We need to better understand how to apply RPL procedures to informal learning and just how informal learning links with formal learning activities. As well as RPL procedures, the conventional methods of workplace assessment are not well developed. These and the associated record-keeping activities require further investigation and development. There is also an issue about costs. If we move more of our training out of the classroom and into the workplace, we need to know that this produces better outcomes and that these outcomes are worth the extra expenditure that may be involved.

**Returns to enterprises from investment in vocational education and training**

Knowing more about the benefits and costs to enterprises of training is critical in the context of increasing the skill formation efforts of Australian enterprises and the overall levels of skills in the Australian economy. Many Australian businesses remain sceptical about the value of investing in training and learning, seeing training as a cost rather than an investment. Some enterprises adopt policies of recruiting skilled employees already trained by other enterprises rather than investing in skill formation themselves.

Billett and Cooper (1997) analysed recent Australian research which addresses this topic. They found that Australian research over the 1990s into this question suggests that patterns of enterprise investment in training have varied considerably, particularly in relation to factors such as enterprise size, the degree of specialisation in the training required, geographic location and perceptions of the value of training.

They found that the research suggests that most larger enterprises invest in training whereas many small to medium-sized business do not. Enterprises make different levels of contribution to training, depending on the degree of specialisation of the training required and the extent to which publicly funded VET is able to provide the training they require. Convenience, in terms of ease of physical access to publicly funded VET in the locality of the enterprise, is a factor determining its own investment in training. Many enterprises, particularly small ones, do not believe the returns to investment in training match the costs and have displayed little interest to date in securing more detailed information about the returns on training expenditure.

Billett and Cooper concluded that future policies will involve investigating strategies to increase business investment in training. In particular, they concluded that the questions emerging from the analysis of the literature on returns to enterprises from their investment in training include:

- How best can we overcome barriers which inhibit investment in training by small business?
If low levels of investment in training by small business continue, what approaches need to be implemented to maintain and increase the nation’s quantum of training activity?

Vocational education and training in small business

The empirical evidence about small business involvement in training is clear cut. Fewer than 20 per cent of small businesses report training expenditure, whereas most large enterprises (those with more than 100 employees) are spending considerable amounts on training. The evidence is also that small business training activity in Australia is on the decline, and it has been gradually declining over a long period of time. It is a vital issue because over half of employed Australians work in small businesses. Knowing more about the factors explaining these training patterns will be critical in devising future strategies to address the paucity of training amongst Australia’s small businesses (those employing fewer than 20 people).

It should be noted in any discussion of reported training expenditure in small business that this refers to formal training which is structured and therefore does not include the informal training that occurs in small business. Researchers such as Field (1997) have noted that while the amount of structured formal training taking place in small business is low, there is little published data on the amount of learning that takes place in small business.

Gibb (1997) looked at Field (1997) and the very considerable body of other recent Australian research on VET in small businesses in her review of Australian research literature in the 1990s, in an attempt to throw light on what the key factors behind this situation are.

Firstly, she examined a number of major reports commissioned in the early part of the 1990s mainly in the area of management education and training. These focussed on the role for government in addressing training in small business.

The strong message that came through these reports is that the training system was failing to meet the needs of small business and the system needed to pay more attention to marketing its products. In addition, Gibb found that there were numerous disincentives or barriers to training faced by small business: cost, location, scheduling, quality and relevance of training and the fact that small business tended to employ people with the skills they needed. By the mid 1990s, there was increasing recognition of the fact that training for small business was generally informal, conducted on site by experienced workers and included advice provided by accountants and bank managers.

Gibb went on to examine research on the issue of creating partnership arrangements between small business clients and training providers and the fact that training providers must make their product relevant to small business and its goals. The main focus of research in this area has been identifying barriers to business being involved in training, identifying the training needs of managers and employees and reporting on case study research of small businesses and the approach to training being taken. The main approach to training in small business would appear to be informal, which is not a component of training reform.

In examining research on the question of training delivery to small business, Gibb found that much of the research restates the need for training providers to change how they operate. While many writers have described the needs of small business, there is little research reporting on innovative methods that have delivered what small business wants. A recent development has been research on workplace-based training. However, Gibb argued that this research appears inconclusive because it seems that formal workplace training does not sit comfortably with small business. The success of workplace-based delivery can depend on the commitment of players, the ongoing support and the characteristics of the learning environment at work, about which little is known.

In looking at training formation and networks for small business, Gibb found that the research in this area makes reference to the role that business advisors such as accountants and bank officers play in providing information and advice to small business. Research has also led to pilot projects which establish mentors or networks for certain target groups and report on the success of these approaches. Although much of the research into small business refers to the need to
promote a training culture, it is unclear which bodies are responsible for this and what are effective means of providing information about the training system. Little research has been undertaken on the extent to which small business uses networks, which networks are used and what value they provide.

Gibb also examined Australian research into the quality of training provision to small business and into equity issues affecting access to small business training. In both areas she found very little available research.

Finally, Gibb examined Australian research in the quality of training provision to small business and into equity issues affecting access to small business training. While there has been some research commissioned into small business and the VET needs of women, people of non-English-speaking background and the rural community, there appears to be no available research into small business and VET needs of indigenous peoples and people with a disability.

Training markets

Anderson (1997) reviewed the very considerable volume of recent literature on the issue of training markets in Australia. As Anderson argued, training markets are now a critically important issue in the Australian VET scene because, since the mid-1980s, Commonwealth, State and Territory governments have been engaged in a process of reform with the aim of increasing the efficiency, flexibility, quality and responsiveness of the VET sector in Australia. Among the most important of recent policy developments is the introduction of competition and market reforms. The concept of a training market is now a central feature of government reports and policy literature on VET. The training market has become the dominant model for re-framing the relationship between skills supply and demand, and for re-engineering the structure, culture and operations of the VET sector. Within the market framework, competition has been adopted as the key principle for reorganising the financing and delivery of VET programs and services.

Anderson argued that recent attempts to promote the development of a competitive training market are unprecedented in the history of the Australian VET sector. They represent a radical shift from traditional approaches to the provision of VET programs and services which, up to the late 1980s, occurred largely under non-market conditions. The policies and practices associated with the development of a competitive training market have far-reaching implications for participants in the VET sector. They challenge long-standing assumptions about the nature and purposes of VET, and necessitate a thoroughgoing review of the roles, responsibilities and relationships of all stakeholders. As a consequence, the development of a competitive training market has sparked considerable debate in the VET sector.

In his examination of current knowledge about the nature, development and consequences of competition and market reform in the Australian VET sector, Anderson examined key aspects of the theory and practice of a competitive training market and research on the dimensions of the training market. He also considered the available literature on central policy issues such as models of competition and market reform; the role of government; and approaches to the funding and regulation of VET. Research on the impact and consequences of competition and market reform are also reviewed.

Anderson found that although there is a growing body of research on competition and market reform in the VET sector, the knowledge and information bases remain limited in key respects. Conceptual frameworks and data for analysing the size, structure and composition of the training market require further development. He argued that additional research is required on the extent to which current market conditions satisfy the pre-conditions for an effective training market, specifically in relation to:

- the structure and composition of the supply and demand sides of the market
- the nature of VET products
- the information requirements of clients and providers.

Most importantly, he also points to the need for more research on the efficiency and cost-effectiveness of the various models for competition and market reform, and their relative

Impact of research
appropriateness for different market sectors. Anderson also stressed that there is a need to develop a better understanding of the costs and benefits of competition and market reforms.

The real message from this review of research literature, in my view, is that there has been a lot of commentary on the issue of training markets, very often motivated by the particular philosophical stance of the authors (or, more correctly, the commentators). What is missing is a body of dispassionate and analytical research into the actual effects of training markets in Australia.

**Entry-level training**

Issues associated with apprenticeships and traineeships have been given a heightened emphasis recently, with the Federal Government's policy focus on young people and New Apprenticeships.

Moreover, any policy debate on entry-level training in Australia in recent years has really been overshadowed by media focus on the decline in apprenticeship numbers in Australia since the historically high apprenticeship numbers right at the beginning of the 1990s. What is not widely understood is that the decline in apprenticeship numbers, which has largely been halted in the past couple of years, really reflects a shift in employment from traditional manufacturing industries (where apprenticeship training has predominated) towards emerging industries (such as tourism and other service industries) or industries where employment is consolidating (such as retailing). It is these industries where traineeships predominate over apprenticeships (see Ball & Robinson 1997). In the last few years, overall entry-level training numbers have been growing very strongly because of the large increases in the number of traineeships.

Examining the research literature into entry-level training is the subject of the research review undertaken by Lundberg (1997). He found that 'specifying major policy-relevant research findings on entry-level training is rather like identifying beauty'. He pointed out that there are many worthwhile research projects, but the essential reality is that the major policy directions have been determined by assumed policy premises with strong roots in prevailing political or other ideologies, but with little basis in research. According to Lundberg, researchers have tested the arrangements, warned of difficulties and suggested improvements and even queried fundamental premises, but changes of direction have been largely politically determined.

Lundberg concluded that the contribution research has made to informing policy on entry-level vocational education and training could (and probably should) have been greater. He argued, however, that research has informed several areas, including knowledge in relation to:

- competence requiring knowledge and understanding as well as performance
- competency-based assessment, including graded assessment
- problems of policy implementation
- unforeseen consequences or limitations of official policies

Lundberg identified a number of areas for future research into entry-level training that, along with improvements to statistical data, he believes are necessary to improve the quantum of strategic and policy relevant research in this area. These include:

- reasons for the decline in apparent retention to Year 12 since 1993
- reasons for the decline in provision of apprenticeship opportunities, and in the educational profile of students taking those that are available, in comparison with the growth in traineeships
- the relationship between employer and trainee participation in work-based training arrangements and incentives, including training wages and subsidies
- the learning processes associated with achieving competence
- graded standards-based assessment
- factors affecting transfer of knowledge and skill
Vocational education in schools

Perhaps the most ‘fashionable’ contemporary issue in VET in Australia today is the issue of VET in schools. The massive increase in secondary school retention to Year 12 in Australia over the past couple of decades (although retention rates have declined marginally in very recent years), together with the realisation that the majority of Year 12 students will not enter higher education, has meant a resurgence of interest amongst Australian educators in vocational education in the senior secondary years. It is almost as if the ‘purging’ of vocational education from secondary school curricula that occurred in many parts of Australia throughout the 1970s and 1980s did not happen.

Ryan (1997) argued, in his examination of Australian research literature on this subject, that, during the 1980s and 1990s, sustained increases in youth unemployment and a general perception that the transition from education to employment and adult roles has become more hazardous for young people, have caused a range of the Organisation for Economic Co-operation and Development (OECD) countries to redefine education policy with a sharper vocational focus.

Ryan noted the challenge that the introduction of vocational education presents to a school system which has hitherto largely confined itself to delivering general academic subjects to students seeking the traditional higher school or tertiary entrance certificates at the end of their twelfth year. He found that, so far, the integration of vocational education with general education was poor, as was integration with institutions-based and workplace training initiatives. This was despite the success of the short-term work placement and work experience programs for school students being promoted by organisations like the Australian Student Traineeship Foundation (ASTF). Not only were these programs highly valued by the students taking part, but also participation in the programs generally enhanced the skills sought in general education. Ryan also drew attention to the evidence of successful local institutions’ initiatives with VET in School programs and argues that ways must be found to legitimise and resource these at the national level.

Other challenges are even more complex because they require changes to the school culture and its underpinning values. Traditional school teaching cultures do not sit comfortably with vocational education and a substantial (and potentially costly) program of professional development for school teachers will be needed as the amount of VET in schools increases. Furthermore, ways must be found for dealing with the perceptions that some students and many parents have of vocational education as being ‘second best’ and inferior.

Enough is known about the difficulty of changing values and attitudes to realise that advancing the cause vocational education in schools is going to require substantial commitment from all these involved over the next few years.

Public and private training provision

There is a degree of overlap between the issues identified by Barnett (1997) in her review of research literature about public and private training provision and those covered in the review of research on training markets by Anderson (1997). Barnett (1997) showed that the recent national policy initiatives related to ‘the market’ have promoted competitive delivery of VET by seeking to remove the impediments faced by non-TAFE providers and encouraging public providers to operate in a more entrepreneurial fashion. By endorsing an open training market a more significant role for private providers is automatically encouraged.

However, this change in policy direction was initiated with a dearth of research and statistical evidence about the nature and operation of private provision and about the implications of altering the public-private balance by market-driven provision. It is only in the past five years or so—throughout the period of the implementation of these initiatives—that this knowledge gap has begun to be addressed. However, even so, it is apparent from Barnett’s review that more research will be needed in order to obtain a comprehensive and coherent view of the factors which influence the training market and, within this, of the most appropriate strategies to foster a dynamic balance between public and private provision of VET.
Although VET providers are often described in terms of their sectoral base—private or public—this segmentation is not a clear one. It disguises the fact that providers in either sector do not necessarily operate exclusively within one sector. Furthermore, it suggests a degree of homogeneity which does not in fact exist, particularly among the ‘private’ providers. Public and private provision of training cannot be readily identified in terms of separate sectors, or even in terms of individual providers.

A critical problem for researchers has been the absence of comprehensive data collection about the size and operation of the private and public training sectors. This has made it difficult to determine the composition and relative size of the private sector and, in particular, of the unregistered private sector. Neither the Australian Bureau of Statistics (ABS) nor individual government agencies had, until recently, kept data on private training provision on a regular or comprehensive basis.

In terms of market share, TAFE is the dominant provider of training, even though private providers have increased their share through competitive tendering (when this option is available to them). Providers in the private VET sector have been found to operate within ‘niche’ markets, thus enabling them to compete with TAFE in a less direct way. Niche markets usually arise from gaps in public sector provision as a result of under-supply or non-provision.

Barnett also reviewed the extent to which the key components of training reform such as:

- competency-based training
- accreditation of courses and registration of providers
- quality assurance
- recognition of prior learning
- access and equity
- have impacted on the training providers.

Recent research has identified a range of market distortions or barriers to entry which have not facilitated competitive neutrality or a ‘level-playing field’ in VET provision. These include:

- lack of access in some States to curriculum developed with public funds or, conversely, to curriculum developed privately
- slow and bureaucratic accreditation and registration procedures
- a tendency for accreditation authorities to use TAFE curriculum as a benchmark thus limiting product diversity
- poor articulation to higher education courses
- many courses offered by competitive tender have short-term (one year) funding which disadvantages private providers who are usually reliant on continuity of income to a greater extent than are TAFE providers
- an open training market does not favour all private providers because geographical, political and organisational factors influence their ability to deliver services competitively

Collection of crucial information relating to competitive neutrality has recently commenced, but this critical and, so far, little documented area requires ongoing monitoring as well as the development of a comprehensive and coherent research strategy in order to adequately inform future VET policy.

Flexible delivery of training

Some quite different VET issues get pulled together under the ‘flexible delivery of training’ (or more importantly, of learning) banner. Some, quite inappropriately, relate to finding yet another application for the latest developments in information technology. Others represent genuine attempts to improve learning outcomes in different situations by using diverse and flexible approaches to the delivery of training (which may happen to encompass the effective educational use of new technologies).
Kearns (1997) reviewed recent Australian research on *flexible delivery* in training. He drew attention to the different interpretations being placed on the term flexible delivery and noted that the changing nature of the concept has been driven by the recent policy shifts in VET promoting economic/efficiency objectives. He pointed out that research has been impeded by a lack of clarity in the concepts used throughout this period with terms such as flexible delivery, open learning, and flexible learning used interchangeably. He went on to say that research has revealed confusions among teachers and trainers who are unsure whether flexible delivery methods are being adopted for their educational or their economic value. Kearns' review suggests that flexible delivery methods encounter more problems in a training college environment than in industry. Apart from the question about what is driving the change at the college level, staff can be frustrated by such things as inappropriate resources and industrial relations issues relating to teaching awards and work practices.

Not surprisingly, the greatest value of flexible delivery strategies are found in their use with disadvantaged groups. Kearns noted successful examples of the strategies with non-English-speaking background students and Aboriginal people. Other work with students who have intellectual or neurological disabilities is also promising. Teachers are, in general, poorly prepared to deal with students with physical disabilities in their classes—flexible delivery methods can be of considerable value to these students. However, the review also emphasises that many teachers and trainers are poorly prepared to implement flexible delivery strategies. For many, flexible delivery represents a different teaching and learning culture both in training colleges and industry. Effective staff development programs are needed to prepare teachers and trainers for the task of implementing the new strategies.

Some specific gaps in the relevant research literature identified by Kearns include the following:

- There has been a relative neglect of learning aspects of flexible delivery including the application of adult learning principles, and of the analysis of the learning benefits and outcomes of alternative delivery strategies.
- There is a major deficiency in the research base related to the economic and social imperatives for lifelong learning.
- There have been few longitudinal studies to monitor outcomes of the strategies which address the barriers to flexible delivery identified in the research.

There is insufficient ongoing statistical monitoring of different delivery modes and their implications for training outcomes. One ominous finding in the paper was the suggestion that *learning outcomes* were not the chief determinants for deciding whether or not to use a flexible delivery technology. The future is bleak for any new technology adopted for reasons other than it is an effective method by which students can learn.

**Assessor training programs**

Competency-based assessment has been a prescribed feature of VET in Australia for around ten years. Given this fact, it is therefore worrying to learn how little information we have about the training received by people responsible for conducting competency-based assessments.

Docking (1997), in his review of research into assessor training programs, noted that although assessor training courses have proliferated in recent times, there has been little effort to monitor their scope and quality. He pointed out there is little hard evidence to show that assessor training has made any improvement to assessment procedures and calls for research which compares the efficacy of the judgements made by people who have successfully completed different assessor training courses. Docking also drew attention to the impact that the process of being assessed has on the individual learner. Research is lacking in this area as the relationships between competency-based assessment and an individual's learning style, self-concept, and motivation are poorly understood. Employers would no doubt embrace competency-based assessments more enthusiastically and be more prepared for their supervisors to be trained as assessors if there was evidence that the end result was a more motivated and highly skilled workforce. The costs of training supervisors to become assessors and conducting competency-based
assessments in their workplaces are a new and often unwelcome burden for many employers. This situation will not change for these employers until it is possible to demonstrate that the expenditure is matched by increased productivity.

On a more positive note, the review shows that there has been a substantial amount of work specifying what is appropriate content for the assessor training programs. This has, in part, been driven by a decision of the ANT Ministerial Council which specified that all assessors should be competent against endorsed competency standards. The assessor competency standards have been developed by the Competency Standards Body—Assessors and Workplace Trainers. The standards date back to the early 1990s and underwent a major revision in 1995. These standards are the basis for the many assessor training courses currently available. The assessors and workplace trainers body has recently produced a set of guidelines to assist the providers of these courses. This has presumably been done to address some of the uncertainties and information gaps detailed in Docking’s review. However, the fundamental question as to whether assessor training programs are producing competent assessors still remains unanswered.

Docking’s review of assessor training program research has a number of implications for policy-makers and practitioners. These include:

- sponsoring further research to extend our understanding of competency-based assessment, how this approach can be taught to assessors and how the impact of assessment can be evaluated.
- incorporating interpersonal skills (communication skills, cultural awareness and gender awareness) in assessor standards
- tightening up on accreditation procedures to ensure that all the assessor competencies are covered, that assessor trainers are qualified and experienced, and that the assessment process is rigorous and includes on-the-job components
- providing for ongoing auditing of assessor training courses to ensure that they conform to their accreditation conditions
- ensuring that all assessors (including TAFE lecturers) are qualified assessors

establishing a national register of assessors (or comprehensive industry-based registers)

Quality assurance in VET

Every so often a particular technique or procedure is promoted as the panacea for some perceived ill of vocational education and training in Australia. In recent times, quality assurance has been one such panacea. Hager (1997b), in his review of research about quality assurance in VET, traces the interest in quality assurance in the VET sector to:

- close connections with industry sectors that have gained from the introduction of quality assurance measures
- the more competitive training market that has been increasingly encouraged by governments in Australia
- increasing demand for quality by those paying for courses which are becoming increasingly more expensive

This interest has been further reinforced by the Australian National Training Authority’s emphasis on developing system-wide performance measures for the VET sector. Hager reviewed a range of quality programs and identifies those most relevant to vocational education and training, namely: quality assurance (the ISO 9001 standards), best practice and benchmarking, and self-managed teams. Perhaps, more importantly, he identified programs that are of doubtful relevance to the sector and also a need for more sector-specific information on quality approaches to help guide future initiatives.

Research into quality programs in the VET sector consists, for the most part, of case studies directed at the development of quality assurance procedures rather than an evaluation of how well these procedures are working. Evaluative studies of quality initiatives that have become well established are therefore seen to be an important research priority in the short term.
Furthermore, nearly all the research reviewed has been done in the publicly funded sector of VET, hence there is also a priority for more work to be done in the private sector.

At this point in time, the difficulty in drawing definite conclusions from the VET sector research into quality is due to a combination of three factors:

- the diversity of approaches to quality in the sector
- the diversity of targets to which the quality measures have been applied
- the very preliminary stage of most of the projects

However, if we are prepared to see quality as a journey rather than a final destination, the diverse nature of the work and the fact that much is at a preliminary stage should not be a problem. Processes and procedures related to the work of organisations are never static and we must recognise that the quality journey is evolutionary in nature.

It is clear that the development of quality approaches will continue unabated in the foreseeable future using criteria such as those based on the Standards Australia ISO series and the Australian Quality Awards. However, as the review indicates, there is a need to evaluate the range of approaches being adopted within the sector before any one approach can be recommended.

Nevertheless, whatever quality program is implemented, one thing we can be sure of is that its success will depend upon the attitude and commitment that everybody involved in the program has towards quality improvement.

The evaluation of vocational education and training

The adoption of program budgeting across most areas of government expenditure in Australia and other developed economies over the past couple of decades has included public spending on education and training. Formal evaluation strategies have been incorporated as part of these program budgeting processes.

McDonald and Hayton (1997) examined the extent to which evaluations of VET have been undertaken in Australia over the past five years. They also examined what evidence exists in the Australian VET context for gauging the extent to which evaluations have led to the improvement of VET.

Rather disturbingly, they conclude that evaluation has so far been little used for the improvement of VET in Australia. Their review of the literature found that over the past five years, there were only 98 published evaluations on vocational education, and four on workplace training. Moreover, in a recent survey of industry, only 48 per cent of worksites had formally evaluated any training delivered in the past year.

- McDonald and Hayton went on to say that evaluation, like research, has not been used to provide the support that it could to those framing VET policy because:
  - VET policy has, in the past, tended to be formed at a rate that made evaluative input impossible.
  - Only rarely do evaluations include analysis of cost-benefit issues.

Results of the evaluations are rarely made available in a form which will facilitate their use by those framing policy. Policy issues which are more difficult to resolve are often avoided in evaluation projects.

McDonald and Hayton concluded that evaluation has the potential to play an important role in vocational education and training. By its focus on formulation of the significant questions, data gathering, analysis, and subsequent action it can make decisions at all levels better considered, and can help to improve policy and practice. They argued that much more emphasis should be given in the future to building on the results of evaluations to improve VET in Australia.
Conclusion

The reviews of research referred to in this paper are by no means exhaustive. They are merely a cross-section, albeit a wide one, of the enormous range of topics covered by Australian VET researchers in recent years.

In recognition of this the NCVER will continue to commission further reviews of Australian VET research literature to inform decision making in the sector and provide researchers with useful reference tools. For example, some studies looking at research done into different aspects of equity in VET are currently underway.

The striking thing about the research reviews examined in this paper is, however, the sheer volume of VET research that has been carried out in Australia over the 1990s, particularly in the last two or three years. While not every study reviewed was an Australian one, most were, and while some of the studies were examined in more than one of the reviews of research, in total the eleven research reviews referred to in this paper looked at around 700 research papers and reports in their reviews of VET research literature in the 1990s.

Quantity of VET research is now not a major issue in Australia. The next challenge is the quality of research undertaken.


References


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