

QUALITY AND DIVERSITY IN VET RESEARCH: THE CAPABILITY PERSPECTIVE

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ABSTRACT

This paper presents an argument that the issues surrounding Quality and Diversity in VET Research can benefit from a consideration of what has emerged in the recent three years as the "Capability perspective".

There has been much research and consideration of approaches to Vocational Education and Training here in Australia and in other countries over the past decade based on what has been termed the Competency-based perspective. Research has examined the theory, models, applications and the development and evaluation of a wide range of training packages, modules and materials based in this paradigm. There has been criticism and some reassessment of the approach and the alleged "practical" and "industry led" necessity for this model to dominate.

More recently, an approach which claims to move "beyond competency" has emerged and been propagated and fostered by a national body (The Australian Capability Network). Quite recently some research and further elaboration of the theory, models and positions associated with this perspective has begun to emerge both here in Australia and in the United Kingdom.

This paper traces the development of the Capability perspective, argues that the theory and models underpinning the most recent research are well grounded and asserts some ideas for the continued development of this paradigm as a means of further emphasis on quality and diversity in VET research in Australia.

Introduction

This paper offers a case for the serious consideration of what has recently emerged as a new perspective on Research, Theory and Practice in the Business, Education and Training areas. The **Capability** perspective is backgrounded against some of the most important research and development influences of the past decade and is "situated" within the VET area as a useful additional perspective through which research can be viewed. More importantly, the Capability perspective, it is argued, offers a grounded, evolving model which rests on a simple triadic representation of an interdependent relationship between Research, Theory and Practice in a holistic and bidirectional manner. The model is not linear, is not a consideration of research on theory-into-practice and it resonates with a number of recent models and paradigms proposed. The paper also offers some examples of applications of the concept in research/theory/practice.

Background: TAFE, VET and Research and Development Influences in the 1990s

The Vocational Education and Training area of the Australian society is a broad, multi-faceted and extensively influential sector. What, in previous generations had been an almost exclusively government dominated sector with Technical College and apprenticeship approaches, has become, in the 1990s, a mix of TAFE, private providers and other sector elements which develop, offer and compete for VET opportunities.

The "Training sector" which also now includes many "in-house" company training branches is, in annual monetary terms "a \$5 billion industry". When this is considered alongside the overall expenditure on the Education and Training sector (including schools and higher education) which has been estimated to reach around \$26.1 billion per year by 2004-5 due to demographic effects alone and possibly \$27.3 billion if additional strategies recommended in the 1995 report "Australia's Workforce 2005" were implemented (DEETYA, 1995), it is apparent that this is *big* business!

Whilst it is not the place in this paper to attempt a detailed overview of the changes and developments in the VET area over the past decade, it **is** important to background some of the influences as they have affected research and development.

A useful brief tour through the change and development in the VET sector in Australia is offered by Smith and Keating (1997). The dominant aspect of the past decade has been the emergence and popularisation of what has become known as the "Training Reform Agenda", a term frequently applied to the range of policy developments including the establishment of entities such as the National Training Board (NTB) (1990), and its successor, the Australian National Training Authority (ANTA) and the changes they have wrought. At the same time, largely driven by the then Federal Government, there were a series of Reports (Deveson, 1991; Finn, 1991; Mayer, 1993), all of which urged particular change scenarios and followed similar rationales leading to the introduction of Competency-Based Training as a key element. These approaches were part of the reforms within a National Recognition Framework (1992) which sought to establish a set of clear sequential qualifications across the nation. This latter aspect is also well charted and explained in detail in Harris, Guthrie, Hobart and Lundberg (1995).

Interestingly, most of the discussion and almost all of the initial rationale for these changes (or "reforms" as they were touted in more emotive language) was based on assertions that it would make Australia "more competitive" and effective in the workplace. In addition, a good deal of this justification arose from a series of international site visits by "leaders" of industry to where such aspects were being rapidly introduced and adopted (Germany, the United Kingdom and to a lesser extent the USA). Curiously for this time and context, much of the rhetoric surrounding this push for change (or "reform") showed a loose alliance between many officials in the Trade Union sector and others from the Business leader groups.

Discussion, in similar terms, about reform movements, competitive edge rationales and the need for competency-based training was echoing around New Zealand and Canada about the same time (see chapter 2, Harris, Guthrie, Hobart and Lundberg). There was little reported research evidence that Competency-Based Training (hereafter CBT) was able to deliver the efficacy and results touted in these many papers, reports and calls for this needed reform. The idea was seen as timely, the approach was grasped with almost missionary zeal by some and the outcome focus was seen as common sense. The lack of research evidence clearly justifying the approach or demonstrating clear links to the alleged competitive improvements for individual and even national business efforts was not an issue.

Much research, for example, had been completed on Competency-Based Education in the Teacher Education sector in the USA and Australia in the 1970s, but this appears to have been ignored. There was even some assertion at the time that this new version of competence/competency-based work was "different" and broader and therefore not related to the earlier Teacher Education research and development (this was particularly so in the case of the Mayer Committee). The fact that the term, the focus on observable behaviours and the outcome approach was rooted in behaviourist theory and research was, for some, a non-issue and for others was merely sidestepped by stating that the new "broader" competencies "cannot be explained or inculcated through the use of behaviourist learning theories" (p.3, Mayer, 1992). This is the same group which defined competence as "(i)t is about what people can do" (p. 9, Mayer, 1991).

Even in the early days of the so-called "Competency debate", there were a number of protests and reviews which critiqued the concept, its basis and argued for caution (Cairns, 1992; Collins, 1993), but the waves lapped on.

The CBT perspective has tended to dominate the VET sector discussion in the past decade and there have been attempts to extend the concepts' alleged applicability to "the professions" (NOOSR, 1995). Whilst this actually happened in some areas such as Nursing, it was not a raging success across the board and the Universities were particularly sceptical of its applicability (Praetz, 1996; Adey, 1998)

There were some, as mentioned above, who sought to describe the competencies in ways that emphasised the possibility of broader meaning by adding qualifies such as "generic", "key" or "strategic" to the name and asserting that what resulted were in some way a form of basic, broad or even "higher order" competencies. That the theoretical roots were clearly behaviouristic and that the focus therefore **had** to be on explicit performance to keep faith with the originating theory appears to have alluded some proponents of the wider view. One could argue that this was akin to arguing that a carnation was a rose without thorns!

An argument has also been developed more recently that the broader views of the CBT idea can be seen as a more "holistic and integrated" concept which has arisen "through a research methodology that used a variety of methods: expert workshops, observation of performance and interviews" (p. 183, Chappell, Gonczi and Hager, 1995). Whilst this case has some appeal as a middle ground and as a movement towards a somewhat different conceptualisation which **is** based on different methodology and has some research authenticity behind it, there is still a difficulty, I would argue, with the central terminology, the "linguaging", and thus, the applicability of the terms.

As will be seen below, this type of mixed methodology has appeal and is a useful paradigm. It has been one of the main aspects utilised in exploring and developing the Capability concept and its applications over the past four years.

Much of the later discussion on CBT, which centred on the perceived need by both critics and advocates of CBT alike, to "add" such things as Values, a future orientation and to somehow cope with the idea of potential ability, led people to re-explore the Capability idea which whilst an old term had little usage in this area prior to 1994 in Australia. This aspect will be returned to later in this paper.

A more recent development in the VET sector has been the emerging interest in this part of the educational enterprise by Universities. The University sector has seen the VET sector as a potential income source and has also encouraged academics to explore aspects via research and course development. The ANTA established a research advisory committee (abolished and reformulated as part of the National Centre for Vocational Education Research (NCVER) in 1997) which set about identifying useful priorities and dispensing research funds to examine those areas across the nation. While the pool of such funds was not large, it facilitated some developments. The funding of various centres and groups at Universities and the development of some TAFE research and development sections has demonstrated that there is an emerging understanding that research is necessary and can be helpful. The emergence in the last few years of the AVETRA is also a further recognition that the VET sector has come to see research more evidently as a significant integral element. There are however, still many aspects and areas where the idea that research is useful and helpful appears to raise doubts.

The recent House of Representatives Report on the role of TAFE and Higher Education in Training and Education (1998), while examining aspects of what is described as "the sometimes uneasy relationship" (p. vi) between Universities and TAFE, says very little about Research in the VET sector. It is significant that what was included pointed out that there was a need for "collaborative research" involving TAFE and the Universities **but**, there was a caveat that "(i)t is important, however, that if TAFE develops a greater research capacity, it does not lose its practical focus" (p.51). This type of limited focus on what research is, what it offers and its relationship to practice and the "concrete" (an unfortunate term quoted in the Report and attributed to Stevenson), reveals a somewhat stereotypical view of research and its benefits. There seems to be an underlying assumption that research and researchers are somehow removed or distant from reality, practicality and "the concrete" as a matter of belief. This smacks of some "big R" research versus "small R" research, with the former being abstract, esoteric and therefore unhelpful and the latter being applied, real and therefore more acceptable. There is almost a fear expressed that more research may take TAFE (and by extension VET) away from its practical and real roots and contribution. Such a case, if that is what is apparently implied in these types of meanderings (however brief and throw away), is specious.

The point behind some of this rhetoric and the attached "warnings" or caveats is however, much more significant. It is not just a case of cynicism nor sinisterism, but rather, such comments expose a narrow view of research, its purposes and possibilities and contributions and an apparent reluctance to engage in careful scrutiny and critique which can be provided by research. Such a view should trouble us all.

Another aspect of the concern for the future of VET research rest on the need for a more diverse set of "informing notions" than is current in the field.

As already briefly mentioned, Vocational Education and Training in Australia in the past decade has moved to a broad adoption of what has become known as the Competency-based perspective. This perspective had generated a lot of debate, some research and much justificatory rhetoric in its support. This perspective has not however, been the only feature of influence or "informing notion" for research in the VET sector.

McIntyre, in a brief, but succinct discussion of research in adult education and training (1995), points out that the range of different perspectives, research paradigms and competing traditions all impact

upon the research in the adult education and training area. McIntyre's conclusion is worth quoting in full as it raises significant points of relevance to the core of this paper:

Another theme of this chapter has therefore been that research needs to do justice to context. Diversity of context makes adult education distinctive, therefore research must develop better ways to understand how learner and setting interact to produce "adult learning". Neither an institutional perspective (the focus of participation studies) nor a learner perspective (the focus of adult learning theory) can give an adequate frame of reference for understanding this interaction. New models for research will need to be found for this task, and they will give more emphasis to analysing the complexities of adult education and learning context (p.133).

Research paradigms and the traditions they have generated and supported have been the stuff of much debate and even dispute (Nate Gage, of Stanford University, wrote a seminal article in the American Education Research Association journal *Educational Researcher*, entitled "Paradigm Wars" which broached the issues of differences between those engaged in empirical research versus ethnographic research).

There are those who adhere to and advocate more empirically-based approaches where "hard data" and statistics are asserted as the bases for "rigour". Others take a more qualitative approach and utilise case studies, interviews and a range of different methods to gather and analyse information. Still others see themselves as central participants in the research, whilst others see narratives as the key. The range and diversity of methods and arguments is wide. Many researchers today feel that the divisions and debates are less than productive and opt for a range of methods, instruments and techniques which are more eclectic or "mixed methodology" approaches. We will also return to this later.

Recently, in the VET sector we have seen not only the CBT conceptualisation as one of the major influences on practice and some related research interests, but also a range of other "informing emphases" which have led to influences on the nature and purpose of much of the research in the field. It is not argued that these are separate paradigms per se, but rather dispositions and models.

These have included:

- Action Research/Action Learning
- Situated Learning
- Work-based Learning
- The Learning Organisation
- Lifelong Learning

Each of these notions has led to a whole realm of debate, theory development and research and practical attempts to implement and demonstrate the efficacy of the ideas inherent in the notion. It is significant that all of these emphases or "informing notions" have a central and strong "learning" thread running through the rationale and practice ideas and ideals. That this recent era has been the "learning era" is undeniable and that learning based approaches are central to the further development of societies for the twenty-first century is so evident as to smack of asserting a truism. It may be that this set of informing emphases could be said to all have some home in a "learning paradigm" of research and development.

What is emerging is an emphasis on both methodological diversity and also the beginnings of a wider set of "informing notions" which offer particular theoretical perspectives for research and practice. As will be seen below, this interaction of Research, Theory and Practice as an overt bi-directional set of elements in a more holistic overview is important to reassert at this stage of the field's development to enhance progress.

This paper sets out to argue that the Quality and Diversity of research in VET can benefit from a consideration of what has emerged in recent years as the "Capability perspective". The paper suggests that such a theory-based concept and the range of research approaches it is beginning to generate adds to the possible diversity of approaches, schemas and informing rubrics within the VET field and thus increases the diversity of research traditions. In addition, because of its grounded basis, the ability of research based on this perspective to contribute to quality processes and outcomes in practice is an additional strength. It would be too pretentious to argue that such a perspective even approaches a paradigm at this stage, but it does cut across the learning paradigm and is well situated within the qualitative and holistic paradigms of research and theory.

Paradigmatic Approaches and Needs

Paradigms of research and discussion about methodologies have figured extensively in many recent conferences and journals. One recent review article, enticingly titled "*Caught in the Paradigm Gap: Qualitative Researchers' Lived Experience and the Politics of Epistemology*" (Miller, Nelson and Moore, 1998), discussed the range of conflicts and interpretations placed on educational research by practitioners and their contexts. They concluded that:

...our field needs to become more reflective about practice and to develop a more deeply democratic discourse for research, one grounded in principles of academic freedom and supported by the conviction that diversity engenders strength (p377).

Miller, Nelson and Moore (1998) go on to discuss the way the language used to describe and attempt to differentiate among the various ideas, methodologies and practices of researchers can add to the confusion and difficulties. They state "differences in theory and practice distinguish these emerging research perspectives, but terminologies are not always consistently used in paradigms that are still in formative stages (p.378). The significance of language as a means of developing and applying terms which aim for more precision and refinement is an important point.

The case being developed in this paper is that there is a paradigmatic necessity for what have frequently been perceived as somewhat independent elements of Theory, Research and Practice to be seen clearly and overtly, to be necessarily **interdependent** elements in any analysis and discussion of the VET research area. By emphasising the interdependence the essence of a more holistic and interactive view of these elements as explicit concerns which all need to be considered, emerges as a necessary perspective.

Whilst this is a simple point, it appears to often slip off the agenda in discussions about research methods and paradigms. To return to simple, almost self-evident truths is often a very useful thing to do. Obfuscation, convoluted grandiloquence and sheer linguistic gymnastics does nothing for progress. Much discussion centred early in the so called debate on the dichotomy between *quantitative* and *qualitative* research. This was largely a matter of methodology, but more recently the latter term has been used to cover a very broad range of methods and techniques. Also recently, the terms *constructivist* and *interpretivist* have come into some use and as Miller, Nelson and Moore remind us, today there is the term *postpositivist*, which covers the stance of those researchers who mix qualitative and quantitative methods and strategies. Such dichotomous arguments and searches for difference and contrasts have bedevilled much of the discussion in this domain. The descriptors and the potential paradigms are almost "morphing" while we watch, like some high priced multimedia advertisement. Even the language of the debate can descend into a meaningless quagmire (Cairns, 1997 d) which does not assist clarity.

The tendency to fall into discussions based on simple dichotomies for example has been a cultural one that is traceable to *Cartesian* dualism and this has influenced many models and traditions in Western society, and particularly in the Business and Management field (Nonaka and Takeuchi, 1995). That the East has a different tradition, philosophy and consequential way of constructing "knowledge" where Cartesian dualism is not the dominant model is well expounded by Nonaka and Takeuchi (1995). A good deal of their argument exposes that many previous attempts to transfer the observed post war successes of the regeneration of Japanese business to the West and models based on apparent analyses of that success (including Drucker, Senge and the Resource-based views associated with Prahalad and Hamel) erred in **not** understanding the epistemological differences between Western and Japanese thinking models.

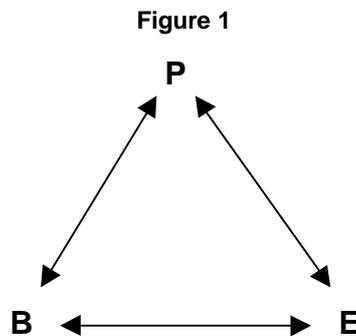
The importance of returning to the key significance of all three interdependent elements, as a necessary informing part of the VET paradigm underpins the argument for both Quality and Diversity needs in the VET sector. While there may be quality programs in practice, quality research in aspects of VET and while some of the theoretical positions informing these practices and research traditions may derive from methodological or implementation paradigms which are quite diverse in nature, it is the necessity for a model which emphasises the interdependence of all three elements which underpins the reality of Quality and Diversity.

In very simple terms, this means that Research without a theoretical perspective and which contributes little to practice, is, in this field, less efficacious. Practice, without a theoretical and research informed basis, is also a "walk in the dark". And, Theory, which ignores practice and leads to no research to test and evaluate its applicability, is vacuous. It is this need for all three elements to be involved, to interact and to be part of the paradigmatic perspective which makes the field of VET somewhat special. It is also probably why the aforementioned House of Representatives Report

(1998) argued for the need for any research to not detract from the practical base of TAFE, even if the way this sentiment was expressed was naive and less than carefully thought through.

Figure 1 represents the view of the "interdependent causal structure which involves triadic reciprocal causation" as proposed by Bandura (1997) in his attempt to explain human agency whereby people are both producers and products of social systems. Bandura drew on his Social Cognitive theory to argue that:

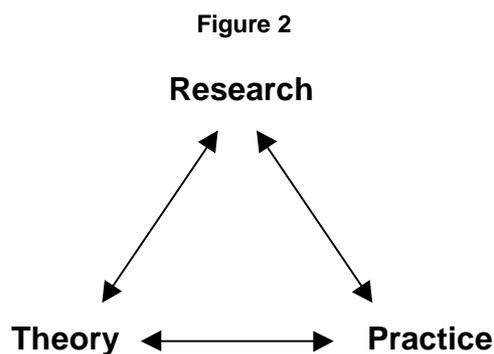
In this transactional view of self and society, internal personal factors in the form of cognitive, affective, and biological events; behavior; and environmental events all operate as interacting determinants that influence one another bidirectionally (p.6).



In this representation, B represents behaviour; P, the internal factors in the form of cognitive, affective and biological events; and E, the external environment.

In proposing this triadic model (like the three notes of a chord) rather than a dichotomy or even a trichotomy (two or three distinct aspects) Bandura argues that his "social cognitive theory thus avoids a dualism between individuals and society and between social structure and personal agency" (p.6, 1997).

Figure 2 shows the three elements of Research, Theory and Practice ought also to be modelled in such an interdependent triadic relationship. As with Bandura's model, the three elements in Figure 2 are not necessarily equal. Situations, emphases and other factors in the reality of operation mean that at different times, for different purposes and in different situations, one element may have more emphasis or more weight than the others **but**, all three are significant and involved in an effective quality and diverse system and the interaction is bi-directional. It is a triadic, explicit and overtly interdependent linkage.



Because of the nature of the VET sector, where elements of Work, the sites of practice and therefore research are so varied and yet "situated" in knowledge and practice terms, there is a strong need for careful consideration of perspectives and constructs which can deal with all three elements (Research, Theory and Practice) **and** as well can accommodate three key aspects; the personal, the organisational and the social.

This later aspect relates back to the points made by McIntyre in the quotation above. There is a need for models (in adult learning and in VET research and development) that can describe and account for aspects of individual, organisational and societal interaction and learning. One can infer that more holistic models which offer a synthesis of the various elements and aspects in interdependent interaction is the direction currently being pursued.

The emergence of what has become known as "situated cognition" theory, based in its infancy, on analyses of learning "on the job", is a complimentary and at times elegant exposition of this type of thinking (Lave, 1988). In this model a core concept is that:

Cognition observed in everyday practice is distributed - stretched over, not divided among - mind, body, activity, and culturally organised settings (p.1).

While a range of studies have begun to explore the implications and applications of this area of theory and there is critique and analysis (Kirshner and Whitson, 1997), there is no doubt that the ideas and implied models for learning involved in this theory are profound and will be very influential. One of the difficulties in this area however, has been coming to grips with the "situated" and "distributed" nature of cognition involved and where the individual's development fits in the relationship (Salomon, 1993).

The models and contention of the advocates of the Capability perspective is that this concept and its application begin to address a number of the ideas expressed so far as needed in models and developments for research in the VET area and perhaps there is promise in taking such a concept further to test this applicability. The remainder of this paper will expand on the concept of Capability and attempt to demonstrate how it has been applied to use the three elements and also to relate to the three aspects mentioned above.

The Capability Perspective: The Model and Research Development

The notion of applying the term , *Capability*, and its implicit definitional elements and aspects to develop and argue for a particularly different perspective on VET research initially begs a few questions.

If the Capability approach is described as a perspective and not as a paradigm, does this signal that the idea and its applications are vague, nebulous and ill defined, or that it is merely another term in the long line of language generation of titles and descriptors?

This initial question was clearly answered and has been the focus of two "search conferences" conducted by the Southern Cross University (one a Byron Bay in 1994 and one in Ballina in 1995). The fledgling Australian Capability Network (founded late 1995) held conferences in 1995 and 1996 where the concept and details of how and where Capability went "beyond competence" was addressed. Further, as part of the "Capable Organisations" ANTARAC project there was considerable development on the topic of defining Capability (Cairns, 1997a). In addition, the International Journal, *Capability*, produced by the Higher Education for Capability centre has frequently added to and developed the concept (Stephenson, 1994; Weaver, 1994; Cairns, 1996) Quite recently, Stephenson and Yorke (1998) have also added further to the definitional clarification and offered examples of Capability in practice.

A further question raised is: "Why bother attempting to embrace another term when Competence, Competency, Competencies, all can be defined in ways to include much of what appears to be the Capability argument?"

The concept of Capability is broad, holistic, but robust and has been well grounded in practice and draws upon Social Cognitive theory. In addition, the concept of Competence is seen as one sub-element of ability in the Capability concept. Competence refers to the ability to perform in the "here and now", that is current observable ability, but Capability also refers to that capacity or potential to do more, in unfamiliar or novel circumstances. The two terms are not opposed. The more holistic nature of the Capability concept and the clear use of the term to signal this difference is seen as a prime reason for furtherance of its application.

Capability has been defined as :

Capability is 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 in a self-managed learning process (p.9, Cairns, 1997a).

The essence of this concept is summed up by the description of three key elements, **Ability** (Current Competence and Capacity or Potential), **Self-Efficacy**, and **Shared "appropriate" Values**. In addition, the concept is located within three contextual aspects which are also significant in its operationalisation. These are; Mindful Openness to Change, Learner-Managed Learning and a Problem-Solving Approach.

Based on these elements and the social cognitive traditions of the concept a tentative Capability Learning Model was developed during 1997 by Cairns and Stephenson and has been the basis of discussion and examination over the past two years (Cairns, 1997c; Malloch, Hase and Cairns, 1998). This Model has been aimed at bringing together in a recursive manner, the elements and aspects of the concept and its "knowledge-into action, action-into-knowledge" processes so that the interaction of the theory, practice and research continually informs, modifies and assists the further evolution of the concept. It is envisaged that the Capability Learning Model will evolve and be modified over the next few years as Research, Theory and Practice explicate, critique and verify or refute its applicability, descriptive and predictive power.

One response, worthy of consideration in answer to the question of the "need" for a different term is that the language that we use to describe or label is more powerful as a variable in the process than many practitioners appear to see or believe. Indeed, within the theory area known as *Autopoiesis* (Maturana and Varela, 1980, 1987), the concept of *linguaging* (the way language use maintains some, adds new and refines other descriptors) is a key aspect. This idea and the application of autopoiesis theory to strategy and management by way of how it relates to the epistemological aspects of the "knowledge" within an organisation has been a recent significant development (von Krogh, Roos and Slocum, 1996; von Krogh, 1998). Companies as Knowledge creators (Nonaka and Takeuchi, 1995) beyond simply knowledge stores, has emerged from this debate as a different and significant element. Whilst the "knowledge" company notions and the Learning Organisation ideology have received a good deal of publicity and discussion and varied "adoption" (often merely the term is invoked), there has been little exploration of the theory-research-practice links in these areas. That the idea of a Learning Organisation has been much touted but undertheorised is something a few recent scholars have strongly argued (Nonaka and Takeuchi, 1995; Argyris and Schon, 1996; Garavan, 1997; Dovey, 1997).

The term *Capability* offers an alternative, with more holistic scope than competence (however "stretched" in definitional terms), which allows for different language, different emphases and incorporates a capacity to relate to a wider range of theoretical positions and models. It is thus, a **term**, an enabling language unit which offers what Richard Bawden (1997), described as follows:

Capability, like quality, remains an *emergent phenomenon* - forever emerging, forever evolving, but always within an identifiable ethos which characterises its *potential*, while reflecting its *history and traditions*, its *logical structure*, and its *theories of value*, all allowing it a *future* (p.2).

Research and Development completed within the Capability Perspective over the past three years has added to the force of the case that the concept and its derived models offer a further perspective in VET research. A few examples should convey the nature of the process.

In Australia, the Australian Capability Network (ACN) completed a study of a range of organisations (ten) from a wide range of industries across the country to attempt to identify whether there were elements of the theoretical concept present and what these were and to further elaborate on the notion of a "Capable Organisation" (Hase, Cairns and Malloch, 1998). The organisations involved included a number who had explicitly embraced the idea and used the term *Capability* as their basis for organisational change and learning as well as those who had participated in conferences as case study presenters looking "towards" a Capable Organisation and finally, a small group of others who were identified by repute as demonstrating characteristics similar to *Capability* in practice which had emerged from the previous conferences as possible characteristics. The findings of this research have been fed back into the models of *Capability* and the Capable Organisation and have informed changed practice through recommendations for VET and through the development of Professional Development materials for the Process Manufacturing industry through packages for the non-endorsed components for the Rubber, Plastic and Cablemaking and the Chemical, Hydrocarbons and Oil refining Industry Training Advisory Board (ITAB) (Manufacturing Learning Australia, 1998).

In the United Kingdom, two recent projects funded by the RSA Examinations Board have been examining the relationship between the implementation of the National Vocational Qualifications (NVQs), a system of work-place assessed competency-based training approaches, and "corporate capability" (Williams, Cunningham and Stephenson, 1998). In the first study, the "spin-offs", that is the incidental impact of undertaking competency-based training and qualification recognition were part of the main contributions to corporate capability. It was not that undertaking NVQs led to improvements in such Capable attributes as Customer Focus or Quality or Shared Vision, but rather through the opening up of communication, showing more self-confidence because one's competence has been recognised ("officially") and the development of a beginning of a culture of learning that there was progress. This prompted a second study, which is currently under way, where a more detailed examination of a set of cases is attempting to probe what the social milieu of learning involved around

NVQ implementation and to propose how such training regimens could be utilised more explicitly to develop and enhance Corporate Capability.

In a different, but nevertheless related application of the Capability perspective, Cairns (1998 a, b; 1999) has taken up the concept and argued for a notion of the "Capable Teacher", that person who is:

...able to move beyond basic competence (knowledge and skills) towards a flexibility (coping with present twists and turns) and an adaptability (coping with uncertain futures) in a manner that demonstrates potential and professionalism. The capable teacher - with that blend of high skills and knowledge, wedded to strong self-efficacy beliefs and intertwined with central values of and for learning and the development of learners who manage their own learning in life- is the essence of future teaching and development for the next century. (p. 49, Cairns, 1998a)

This idea is currently being explored and critiqued as part of an Intern/Professional development school model of final year Pre-service Teacher Education at Monash University's Gippsland Campus where 18 Interns and 18 Mentor teachers are engaged in the program across five state primary schools (Cairns, 1999). The intent of this project is to explore, clarify, critique and investigate the efficacy of the Capable Teacher idea and to further develop materials and programs to work towards its use in Pre-service and In-service Teacher Education. Comparisons and contrasts with the notions of "beginning competence" and the "expert pedagogue" form part of the debate.

In the United Kingdom, Stephenson and Yorke (1998) have presented an argument for the application of the Capability concept to Higher Education within the post Dearing Quality debate and offer a series of examples where Capability has been invoked as a credible inspiration. One of the most interesting applications of the concept in this context is what Stephenson and Yorke describe as the "Capability Envelope", a curriculum framework which they argue will assist in "creating the conditions for the development of Capability" in a Higher Education Institution context. This idea draws heavily on a three stage process approach ("exploration", "progress review" and "demonstration") all of which are controlled by the student (in both strategy and program). The areas of specialist content and activities (whether in modules, subjects or projects) forms a "core" of sorts but the essential process, its timing and direction are largely in the hands of the learner (p199-200). This example lends itself to a range of research opportunities and explicitly demonstrates the inter-relatedness of theory, research and practice within the Capability perspective.

Conclusion

This paper has argued that the term **Capability** offers a possible perspective through which Theory, Practice and, significantly for AVETRA, Research, can be viewed and that this holistic triadic conceptualisation should contribute to the Quality and Diversity of Research in the VET field.

The concept of Capability is presented as a sensibly simple rubric which enables, as a language (or labelling) feature, the identification, definition and application of a range of ideas in a manner that differentiates it from other conceptualisations in the field. The concept, it has been argued here, is robust, well grounded and because of the recursive nature of the triadic basis of its development and application involving Theory, Research and Practice, it offers much promise to the field.

Emerging applications and further developments involving the Capability perspective are strengthening and verifying the concept's wide applicability and the usefulness of the perspective as an extension of the diversity currently available and utilised in VET research paradigms.

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