

# In Search of Evaluation Truths —Representation and Abstraction: Pursuing the Illusions of Objectivity or Mirroring the Processes of Learning?

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## ABSTRACT

This paper is about the process of developing a framework for a specific VET evaluation, the evaluation of the Frontline Management Initiative (FMI). The purpose of the paper is to examine the process of designing VET evaluation frameworks, and how we construct knowledge about how others are constructing knowledge. The paper illustrates the process by reflecting on parallel learning experiences during the Perth International Arts Festival.

The paper continues the theme developed for last years conference which proposed that when we evaluate learning processes, "the illusion of the absolute, may obscure meaning." This previous paper examined the discourses of research which influence vocational education and training (VET) researchers to frame research in advance, and often within traditional patterns of *objectivity*. The paper explored why such practices may act to limit the evaluation framework, and the eventual evaluation outcomes.

This paper continues the theme by examining the specific and current process of developing a research evaluation framework for the FMI (EFMI). The FMI is of specific VET interest because it represents the emerging form of CBT, an open market training package, based upon facilitation in the organisational context, and underpinning moves towards continued situated learning and knowledge development for adaptive organisational cultures. It also offers an empirically based reflective platform for this reflection and examination of research practice.

This paper will suggest that evaluation frameworks should be constructed to mirror the emerging meanings of the learning practices that they are examining, rather than be based on a predetermined and politically constructed framework. The paper will then attempt to explore the issues of *mirroring, representation and abstraction* that confront the construction of an evaluation process. The parallel process of artistic construction is used as a metaphor to help explore the meaning of mirroring, representation and abstraction in relation to the evaluation of learning texts and learning practices.

The paper then examines three specific developments that have occurred in the EFMI project methodology. As the evaluation framework has been informed by a greater understanding of FMI practice, it has adapted to more effectively mirror those practices. At the same time, the paper *illustrates* each of these three evaluation framework developments with parallel learning experiences which have occurred simultaneously in the "other world" of artistic experience and learning. These illustrations mirror how changes in knowing in one lifeworld may develop new understanding and meaning in another.

The paper concludes by examining the relationships that construct evaluation frameworks, and attempts to model the relationships that are constructed between learning practice, learning texts and evaluation frameworks. The paper invites ongoing feedback on the EFMI.

## INTRODUCTION

As there are numerous opportunities to report research findings, I have always viewed this particular conference as offering the opportunity explore the intractable dilemmas of our research practice, and as a platform to provoke reflexive discourse. This paper is therefore framed to explore and reflect on how *our* practice is formed by examining the generation of a framework for a current project, the evaluation of the Frontline Management Initiative (FMI). The purpose of the paper is to examine the process of constructing knowledge about how *others* are constructing knowledge, the evaluation process.

The paper continues the theme developed for the last conference that proposed that when we attempt to evaluate the learning process, "the illusion of the absolute, obscures meaning." This previous paper

examined the discourses of research which influence VET researchers to frame research in advance of field interaction, often within traditional patterns of *objectivity*. The previous paper also explored why such practices may act to limit the evaluation framework and the eventual evaluation outcomes.

This paper suggests that VET evaluation frameworks should be constructed to *mirror* the emerging meanings of the learning practices that they are examining rather than be based on a predetermined framework. The argument presented in this paper is that the process of representing the learning practices that exist, is enhanced when the evaluation framework is informed by and adapts to, the emerging contours of the learning practice. The development of the EFMI process and this paper has occurred simultaneously with the current Perth International Arts Festival. It has been interesting how learning about the FMI and developing a more appropriate evaluation framework, has been mirrored by learning experiences from the art world during the festival period. This paper uses these experiences both to illustrate the key points being made, and to explore how researchers can enrich their knowledge and understanding from diverse experiences. Before pursuing the process of reflection it is necessary to provide a description of the context of the FMI and the brief for the EFMI evaluation project.

### **FMI AND EFMI: ACCOMMODATING DIVERSITY?**

There has been considerable critical comment on the bureaucratic nature of first generation Australian competence based training. Changes in politics of the VET landscape (ANTA 1998) have led to the development of a quasi training market and the associated freedoms of choice, or alternatively the dislocation of learning relationships (Anderson 1996 ; Childs and Wagner 1998). Enterprise based training, emphasis on learning and user choice, have increased the flexibility of programme delivery and given rise to the second generation of CBT training packages. It can be argued that the FMI is the forerunner of these second generation packages. The evaluation of the FMI is therefore not just a pilot evaluation process for second generation competence, but will provide evidence that will be used to shape the next generation of training practices.

In addition, the FMI development programme is potentially a catalyst for a much wider development strategy. Developed from recommendations in Enterprising Nation Report (Karpin 1995), the goals for the FMI were not limited to individual learning but to subsequent and related organisational, business and national benefits. It may therefore be instrumental in developing what could be termed *an ecology of training*. The FMI is of specific VET interest because it represents the emerging form of CBT, an open market training package, based upon facilitation in the organisational context, and underpinning moves towards continued situated learning and knowledge development for adaptive organisational cultures (Barratt-Pugh 1999).

During 1999, a multi disciplinary and geographically dispersed team was assembled and successfully gained the NCVER contract for the evaluation of the FMI (EFMI). Entering such a competitive process involved the research team in the pre project construction of the evaluation framework. As Sonnie Hopkins remarked at last years conference, this was the political reality of our situation when striving to be part of the VET funded research community.

The methodology for the evaluation of the FMI was developed in May and June 1999. It was informed by three main sources. The first source was recent Australian experiences of competence based evaluation projects (Billet et al 1999; Mulcahy and James 1999). The second source was the causal chain outlined by the Karpin report for Frontline Management development linking individual management development to business prosperity. The third source was prior UK based research on competence based management development programmes, notably the Management Charter Initiative (Winterton and Winterton 1997; Leman 1994). The proposed methodology was developed further in July and August 1999 towards a more outcome based evaluation. A broad National survey would be followed by targeted telephone interviews and then in depth case studies in five states. The case studies would be selected to fit into a grid matrix that would provide the evidence to test several stated hypotheses. There would be case studies of both strategic and non strategic approaches to the FMI, and an equal number of case studies would be chosen to represent strategic and non strategic approaches to non competence based management development programmes to provide a comparative framework.

In terms of this paper, the subsequent development of this evaluation framework offers an empirical platform for reflective examination. The evaluation team has during the past months gained a greater

understanding of the diversity of FMI practice which was "engineered to be invisible" (Quirk 1999). This knowledge has led to reflexive discussion between the team and the adaptation of the research methodology. To what extent is such an evaluation framework still a representation of a bureaucratic agenda rather than a mirror of practice?

## EVALUATION AS A POLITICAL PROCESS

Aspinal, Simkins, Wilkinson and McAuley (1992) state that evaluation is concerned with making judgements about worth and contributing to decision making. Stufflebeam and Shinkfield (1985) indicate that the goals of evaluation are improvement and accountability, where often evaluators may be cast as either historians or astrologists. Evaluation from these perspectives is similar to any other technology, in that it can be used to serve good and bad purposes, and often serves the dominant commercial and ideological interests (Reeves 1997).

Evaluation is an inherently political process defined by the recipient and the purpose ; for whom, and with what agenda. It should also be noted that many VET researchers add their own agendas to this basic framework. Tabachnick (1998) questions the *values* of research, and asks the questions, *useful for what, and useful to whom?* Tabachnick suggests that value *should not be separated out* from the outcomes of research and should be aimed at diverse audiences, not specific influential groups. Selby Smith (1998), with a specific research focus on the VET research area, suggests that research outcomes often *shape perceptions and agendas* rather than providing answers for industry and policy. Selby Smith's review highlights the need for mutual responsibility of researchers and industry in a political decision making process that is complex and often like a *rickety bridge* connecting problems with potential solutions. McIntyre (1998), has been less supportive of research evaluation outcomes, suggesting that far from research providing answers for enterprise training and informing, an inverse relationship exists where research is often used *to justify policy*. In such a way policy informs research rather than research informing enterprises and organisations. It is a process of reinforcing existing *truths*.

Each society has its regime of truth, its general politics of truth: that is the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements; the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those charged with saying what counts as true. (Foucault 1980, 131)

Patton (1990) emphasises this political context of evaluation, and the associated ethical dilemmas, stating that every evaluation is a political act. Hendricks (1990) suggests that evaluation is in fact *research orientated political activity*, as what is always clear in the process is who is the client! It always seems that there are unwritten, unarticulated rules for an evaluation (Argyris 1999), which Patton (1996) suggests are often about reducing the use of the evaluation and limiting input and output.

It is these politics that may actually determine the *method* of the evaluation where researchers are faced with what can either be termed as a consistent and coherent set of theoretical assumptions or a mix and match set of techniques and strategies, depending on your political perspective (Morse 1996). It is however unlikely there is one best method of approaching the evaluation.

We are attracted to the idea that there might be an Occam's razor, a single statistic that will cleanly and mechanically determine which among various models should be preferred. (Winship 1999, 3)

Evaluation methods may therefore be more a product of political forces than a logical process of matching appropriate techniques to situations. The same political pressures that encourage the early framing of evaluation projects and shape the evaluation methodology, may also influence the outcomes of the evaluation. While there may be indirect pressures to support certain assumptions in the evaluation, the study may find more direct pressures to at least provide some *certainty* in the evaluation, if only to prove the value of evaluation project itself. Such a search for certainty may be seductive. Mayne (1999) indicates that such political pressures should be resisted.

We need to accept the fact that what we are doing is measuring with the aim of reducing the uncertainty about the contribution made, not proving the contribution made. 10

Mayne (1999) suggests that even without the introduction of a particular program, the observed changes in outcomes may have occurred, maybe at a lower level, or maybe later on. Political pressures for more certain outcomes should be replaced with a more tentative approach to evaluation.

Rather, we need to talk of reducing the uncertainty in our knowledge about the contribution of the program. From a state of not really knowing anything about how a program is influencing a desired outcome, we might conclude with reasonable confidence that the program is indeed having an attributable impact; that it is indeed making a difference. We might also be able to provide a reasonable estimate of the magnitude of the impact. 3

Tierney (1999) similarly encourages us to resist political pressures to become academic sleuths in search of *truth* and instead to report the inconsistencies of the practice being examined rather than the more politically acceptable congruences. He suggests that the challenge in the process is to look at how particular interests are supported denied overlooked or occluded. Funnel (1997) also urges evaluators to resist political influences that direct the evaluation process towards certainty in outcomes.

The purpose of evaluation is not to make a statement about absolute truth, but to lay the working assumptions of program staff on the table. 6

Jonassen (1991) suggests that more constructivist evaluations seek to escape such political agendas, by replacing negotiations for meaning with the clients, by negotiations for meaning with the subjects. There appear to be considerable political pressures that shape the evaluation purpose, methods, style and outcomes. There is every possibility that they will frame the process and direction of the evaluation study. The argument presented here is that the evaluation framework should be shaped to mirror the learning practice that it is evaluating, by continually being informed by that practice. The paper will explore how the EFMI evaluation framework has been informed by FMI practice.

## EVALUATION AS MIRRORING, REPRESENTATION AND ABSTRACTION

If evaluation frameworks are often framed before the project commences in order to gain funding and support, it is likely that the existing political influences will frame the project methodology. Sharp (2000) suggests that engaging the participants with the framework and developing interaction can assist in developing the framework so that it more effectively mirrors the actual practice. Alkin (1990) describes this as a cooperative approach, where evaluators work closely with the programme participants.

Mirrors are of course not ever a *real* representation. We forget that we never see our own face, just a reversal, as we may forget or be blind to factors shaping the evaluation mirror. In the case of the EFMI, the original evaluation framework reflects the causal chain embedded within the FMI project and is based on, individual, organisational and business benefits. Could it be that an evaluation framework based upon examining that causal chain may end up mirroring what was supposed to happen, rather than what is happening? Such an evaluation may actually end up mirroring representations or abstractions of practice, rather than reflecting the actual practices that have developed. Sobel (1998) indicates that the major journals are filled with competing causal theories that may detract from what should guide the development an evaluation framework.

There is no doubt that processes are at least partially causal but .....it is not so clear that the casual aspects of these phenomena are of primary interest....a description of the sequence may be more important. 14

Abbott (1998) suggests future readers will find humour in research which suggests that,

...the world was the way it was because social forces and properties did things to other social forces and properties they called them variables and hypothesised how they affected each other through causal analysis. 149

Pearl (1998) adds there is a need to revitalise the approach to causal analysis with the emphasis on interpretation and underlying assumptions. The obsession with causality misses the clues in rich description (Abbott 1998). To what extent should the EFMI evaluation method, based upon a previously conceived causal chain be reshaped to reflect current practices?

At this point it is important to introduce the Perth International Arts Festival (PIAF) to the discussion. Simultaneously with thinking about the evaluation framework, the arts festival mirrored similar investigative opportunities, and also provoked thinking for new meaning. One of the central exhibitions of the festival "H2O" explored the same issue of mirroring, through art rather than evaluation, and suggested that there was an oscillation between the polarities of abstraction and representation (Stringer 2000). This reflected the similar debates between the value of causal chains and rich descriptions, the issues of competence as a representation of practice, and of FMI texts as an abstraction of practice. The exhibition explored the inherent duality and synchronic relationship of representation and abstraction providing *a script crowded with exceptions* (Stringer 2000). In the "Lure of Paris" within the H2O exhibition, Stephen Bush presents a large totally sepia canvas. It realistically portrays a wild ocean crashing on a rugged coast line. Abseiling down the cliffs are three 1920 style Ba Ba the elephants, complete with crowns. The irony here is that the juxtaposition of representative forms provokes abstract conceptualisation. Should evaluators seek to represent or abstract meaning?

Sometimes search for definition illuminates the inherently nebulous nature of our symbols. Representation is the presentation to the mind (Delbridge et al 1998), a symbolic expression or construction within the prevailing ideology (Murfin and Ray 1997). Abstraction is about retaining representational characteristic and expressing them through other forms (Delbridge et al 1998), not to create clear images but to convey concepts (Murfin and Ray 1997). The irony is that these polarised processes strive toward to similar goals, that is the interpretation of meaning, as does the evaluation process. To what extent do our needs as evaluators to represent practice and at the same time provide abstracted recommendations, have a similar synchronic relationship?

Lombardi (1999) suggests that somewhere in our subconscious, experiences transform from representations to fragmented abstractions, while for Schwabsky (1998), the abstract can be a little of each, both a representation of reality and a sample of its processes.

Having established previously that there is a political frame for each evaluation, it is equally true that there is no research without presupposition (Cavanagh and Rodwell 1992). Each individual researcher conducts research through a particular lens which has a bearing on what is seen, recognised as significant and ultimately reported (Wideen et al 1998). Our attempts to represent practice, or provide abstracted concepts will be coloured by our own agendas and the diversity of our individual perceptions.

Just as competence is both an abstraction and a representation of vocational practice, a rarefied form, so the evaluation of vocational practice mirrors the same contradictions. As John Mayher (1990) suggests,

...there is no knowledge without a knower. 79

Mayher forces us to recognise that our production of knowledge, either as learners, or in this case as evaluators, is inherently an individual or social process of creating beliefs about causal relationships. From Mayher's perspective there really is little knowledge lying out there, waiting to be found. The concern should be that when we attempt to represent or make abstractions from practice, certain beliefs may be excluded, and that some beliefs expressed may not be shared by all. In this way the texts of the learning technology, the policies, guidelines and competences only provide us with representations and abstractions of the actual practice. They may obscure some of the realities of the actual practice, in the same way that organisational *Mission statements* may not reflect the every day experience of employees. The caution for evaluators is that we too seek meaning through our own particular *lens*, and should be aware of, and declare those interests.

### **THREE EVENTS OF LEARNING**

It was such thinking about the political nature of representation, abstraction and the process of mirroring which prompted a re-examination of the evaluation framework. How could the original framework, pre-framed for prior acceptance, be developed with transparent motives to represent and mirror practice and provide a platform for abstraction? The paper now explores three specific developments that have occurred to the project methodology as the evaluation framework was informed by a greater understanding of FMI practice. Concurrently the paper illustrates how each of these three evaluation framework developments *mirror* new meaning that was generated during the

PIAF. How change in knowing in one lifeworld develops or reflects new understanding and meaning in another. As Manen (1997) suggests this exploration of method,

...is not to claim that, above others, there is one correct or superior mode of inquiry to ascertain the truth, other meaning of something. There is no true meaning just as there is no uncontested truth....Rather to discover suppositions that hold promise.....become sensitive to the principles that may guide our inquiry. 45

### **The first learning**

In the "Angel Project" by Deborah Warner, the viewer follows a city walk discovering angels, representations of angels and angelic forms, in various locations, from visual and written clues and in the process discovers the city. The viewer's preconceptions about the event, the city and angels are reshaped by the experience.

This experience mirrored the process of gaining an understanding of the FMI. If the traditional patterns of prior research in the UK were followed (Winterton and Winterton, 1997), the categories pre-defined in the framework matrix would be *filled* with case studies, even though the prior research had resulted in a near desperation sampling and questionable case study allocation processes. The teams *preconceptions about the project* had been informed by these prior evaluation practices. Continuing to follow the same practices might be dysfunctional to the evaluation process. The team's perceptions of FMI had now been *reshaped* by their local Australian experiences. The decision was made that the pattern of FMI adoption would provide a more effective *frame* for case selection than such a predetermined matrix. The FMI project would therefore be used to inform the evaluation method, the experience to reshape the conceptualisation.

The pattern of adoption within the FMI has not just been driven by the variety of enterprises, but by the negotiated delivery strategies. The FMI as a learning technology provides a fluid framework that has and is being interpreted by both traditional instructional design approaches (Merrill et al. 1990) and more constructivist approaches. The flexibility offered by the FMI would appear to invite more constructivist approaches, breaking away from a curriculum that teaches that *what we learn is a replica of a well structured world...and that this independent ontological reality determines our experiences* (Jonassen 1990). However even constructivist approaches belong to a very broad church with social and radical cognitive extremes (Tynjala 1999). The FMI process is therefore liable to exhibit similar diversity and the evaluation framework should be developed to mirror such diversity.

### **The second learning**

In "Kayassine" by Les Arts Sauts, the audience lies within a purpose built inflatable dome, high arched with gantries, and finds that through the smoke, bleak cello and obscure vocals, futuristic figures swing and perform aerial ballet. A combination of known elements produces an experience that could not have been predicted.

The FMI was similarly constructed with *known elements*, but it seems it has grown in unexpected ways. The frame for the evaluation was based on the causal chain evident in the Karpin report (1995) and outlined in abstracted form by Leman (1994). However it became evident from the initial interaction with FMI users that this learning technology had been developed by users into some configurations that had not been *predicted*. The use of on line delivery, the involvement of Universities and the linking to non competence based courses indicate interesting developments. It suggested that what should be examined was not just what the initiative was intended to be, or how it had been developed, but also what it might be. This could be expressed as trying to achieve an *ecology of evaluation*, developing the scope and longevity of the evaluation. As activity theory demonstrates (Engestrom 1993), a focus on the immediate learning activity discounts the richness and dependence on the surrounding growth relationship patterns. It is impossible to predict how a particular initiative will develop with complexity of interface interactions. Trist and Emery (1990) term such dilemmas as the *causal texture* of the environment.

The main problem with studying organisations is that their environments change, their causal texture. 72

There is an inseparable web of relationships which creates such developments when an initiative is seeded in the causal texture of the environment (Wideen 1998). The evaluation framework may benefit from investigating what is happening rather than what was expected to happen.

### The third learning

In "The Messenger " by Bill Viola, a Christ like figure emerges from, and then descends into, a translucent watery void in slow motion, washed by his own waves and surrounded by his own air bubbles. This large video installation had a compulsive aura due to the immense size and multi sensory impact. It demonstrated how the use of current technology was a deep resource for current artists.

Perhaps artists and observers should focus more on innovative practices rather than traditional forms of representation? The framework for the EFMI project had been based on previous studies that made comparative analysis between FMI sites and non FMI sites. On reflection it appeared that considerable resources had been allocated to an analysis of past practice, in search of comparative *proof*. This seemed to deny the opportunity to use the resources to complete a more detailed exploration of the new *technology* of FMI. If a change had occurred, perhaps there was more learning in exploring that change, rather than re-examining past practice, in some dubious search for proof of improvement. The move away from using a baseline control group towards a greater case study depth would provide the team with far more vibrant narrative from case study material. Atkinson (1997) argues for the rich qualities of such interview material, *the use of narrative and thick description*.

Story provides a simple agent through which we can communicate complex meaning. (Snowden 1999, 1)

This of course steers the evaluation process towards the representation of diversity and away from the abstraction of singular knowledges. Emery (1997), cautions against more clinical approaches to evaluation which preserve the existing social hierarchies, and where,

Sound knowledge, truth, is found by eliminating the idiosyncratic. 233

The advancement of knowledge is seen quite literally as a ladder of abstraction . . . abstracting the universal from the particular. 243/4

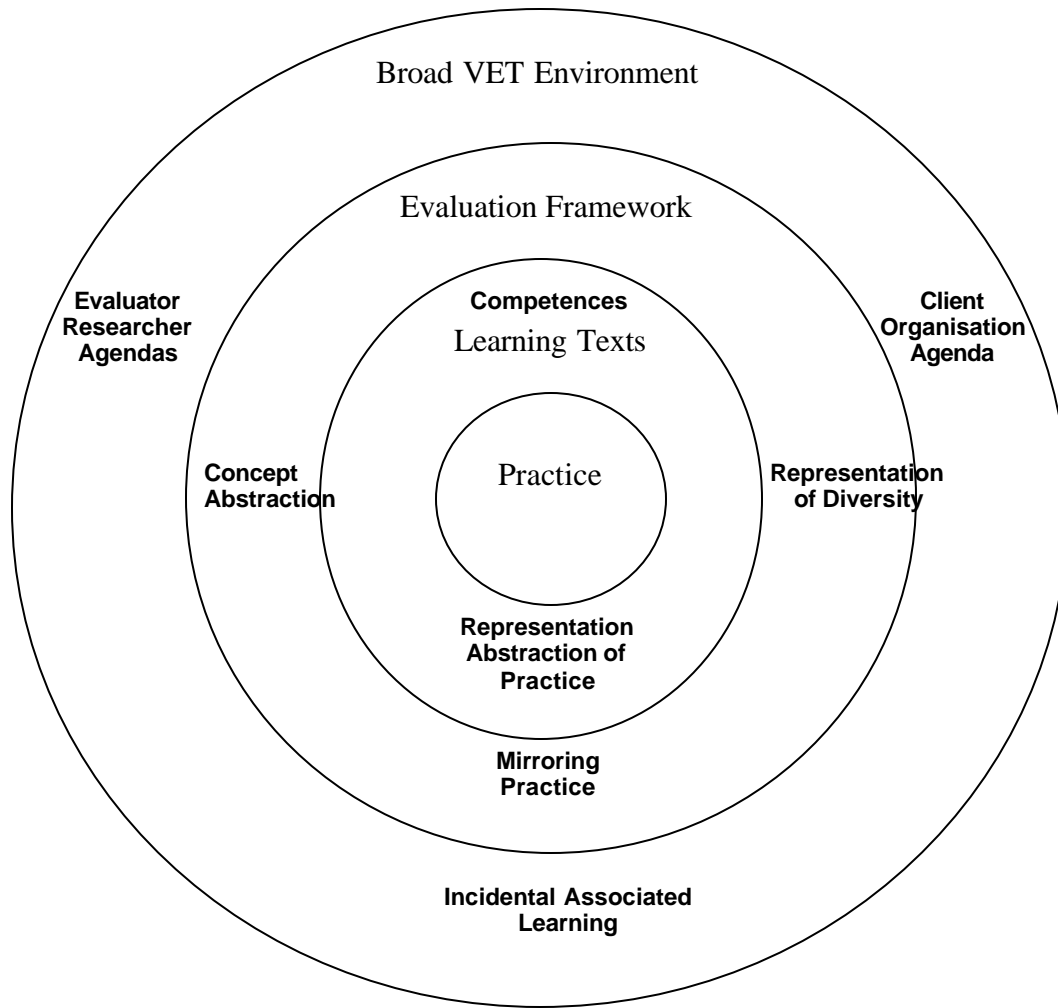
Emery (1997) insists that our role is to represent the confusions that are found within the evaluation and learning processes, rather than to try and construct a pattern of seeming order.

.....finding order in the symbolic representations of our observations is a very different kettle of fish particularly when those ordering principles are contaminated by the ordering systems of our symbolic representations. The mind is not a clean slate and the perceptual world confusing. 247

Thick description from case studies attempts to preserve the subject's meaning. However Luke (1997), a recognised supporter of such analysis, still describes it *as an academic and political activity*. Luke (1996) asserts that such analysis has the ability to show the power relationship in apparently mundane texts at work. Luke (1996) cautions that the analysis of the discourse of practice, can tell us more about what is valued by the evaluators in learning, than the subject practitioners. Capturing more narrative data does not totally remove the influence of the researcher agendas.

### MAPPING THE CONTEXT OF THE EVALUATION FRAMEWORK

The dynamic tension between practitioners, government agencies and researchers interact to construct and develop evaluation frameworks (Barratt-Pugh 1999). This paper has attempted to extend the examination of this process through the initial stages of the project. The development of this evaluation project has provided an opportunity to examine how pre-framed evaluation frameworks may be adapted to mirror the practice which they are examining. Pre-framed evaluation processes are more likely to mirror the representations or abstractions of the actual practice, the policies, procedures and guidelines (the learning texts), rather than the practice itself. It is also evident that evaluation frameworks will always mirror the political agendas of both the clients and the evaluators. The paper has also sought to display how *other* learning from parallel but discrete contexts can contribute to the evaluation development. The relationships that have emerged in this evaluation development process are *modelled* in the following diagram, and portrayed as *layers* surrounding *the practice*. From the perspective of the evaluation framework, the *Learning Texts* act as an opaque shrouding of practice, while the *Broad VET environment* exercises political influence, but also provides the opportunity for *reflection*.



## IN CONCLUSION

As evaluation explores practice, this paper has attempted to explore the evaluation process. The paper has cautioned against frameworks constructed around the simplicity of cause and effect relationships, as in learning environments, VET researchers confront the intractable dilemmas of human interaction. It has also examined the difficulties of mirroring practice through representation or abstraction within an inherently political establishment of views and meaning which is directed by the agenda of the learning texts, the evaluation clients and those of the researchers themselves. Argyris (1999) describes them as *the unwritten rules of research construction*.

The paper has also sought to introduce the existence and influence of other worlds in the VET researchers environment. Here there is a message to all VET researchers who struggle to find another life. We may plan to widen our perceptions by inviting diverse comment on our own practice, but ironically unless we invest some of our time exercising our minds in other domains away from our VET research obsessions, our work may be the poorer without such reflected light.

Finally the paper has sought to look at the evaluation process beyond the frame of the mirror. The challenge is to make evaluation processes more than just a reflection of history and the weighing of past practice, and to view evaluation as an investment which will contribute to future learning technologies. Much of the 90's CBT VET development was rooted in UK precedents just as much of the management learning and research in Australia has been rooted in American precedents, a prisoner of their gurus, texts and culture. Clegg (1999) chastised Australian management researchers for determining value, and therefore their emerging culture, in terms American yardsticks, and in so betraying the opportunities of *this unique discursive space*. There is evidence to suggest that with the



emergence of more flexible CBT approaches the representations and abstraction of practice upon which new Australian VET forms are based is more reflective of Australian diversity. The same opportunities present themselves to VET researchers with every study of Australian practice, to develop a unique VET future.

My hope is that the team will continually be influenced by a wider team of evaluation participants. Perhaps the final contribution will not be so much justifying or modifying the FMI scheme itself, but in the contribution to the third generation of training technologies, what ever they may be, and to placing the evaluation of training activity as a significant player in the development of organisational cultures.

The intent of the evaluation process is to maintain the same openness and inclusion, the same "strategic impression" that underlies effective flexible learning technologies like the FMI, so the EFMI framework will be generative. Only by involving a variety of contributors and critics will the team assist in legitimising the outcomes and knowledge contributed by the project to the wider management and practitioner community. As Patton (1996) suggests,

the most significant impact of the study .....that we really had not realised, was on the subsequent decisions on other programmes. 36

***I wish to acknowledge the contribution of the EFMI research team, specifically Dianne Mulcahy in this instance, in providing the stimulation to explore the ideas within this paper, and an unknown reviewer for shaping the final structure.***

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