CAPTURING INNOVATION: ENTREPRENEURIAL ACTIVITY WITHIN AN EDUCATION ORGANISATION

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February 2005

An exegesis submitted in fulfilment of the requirements for the degree of

Master of Education (Project) from the Royal Melbourne Institute of Technology.

CERTIFICATION

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; and, any editorial work, paid or unpaid, carried out by a third party is acknowledged.

KERRY ELIZABETH STRAUCH

15 February 2005

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

■ v ■

CAPTURING INNOVATION: ENTREPRENEURIAL ACTIVITY WITHIN AN EDUCATION ORGANISATION

ABSTRACT

The 1990's in Victoria saw a political and economical shift away from the social justice themes of previous years to an economic rationalist approach to public sector services. Like other countries, educational reform initiatives focused on the introduction of market-oriented commercial practices. These were characterised by increased accountability for expenditure, pressure to supplement publicly funded income with commercial ventures, rationalisation of staff, privatisation of some services and a business-oriented approach to service provision. As part of this shift TAFE Institutes in Victoria were actively encouraged to embark on a business-based, entrepreneurial approach to training delivery in a competitive, user-choice market.

This changing external environment is the context for this 'practitioner research' investigative project - the development of a motorsports program as a case study of innovation and entrepreneurship at Wodonga Institute of TAFE. A participant-observer research approach was applied to examine the perceptions of the stakeholders about the development of the program. Data was collected through semi-formal interviews with stakeholders, maintaining a reflective research journal and reviewing related literature.

Analysis of the data identified emergent themes (enabling factors and barriers), reflecting at a micro level, similar themes and issues from current research and debate at national level. The themes are similarly reflected in literature on innovation, organisational change and entrepreneurship.

The products generated from the investigative research project are:

■ *Capturing Innovation: Entrepreneurial Activity Within a Publicly Funded Educational Organisation,* an exegesis examining innovation and entrepreneurship at Wodonga Institute of TAFE through a case study (the motorsports program)

■ *What a Great Idea! Where to From Here?,* a set of guidelines for Wodonga Institute of TAFE practitioners about what is required in presenting their ideas to Senior Management (Appendix 1 and Appendix 2), and

■ a Professional development workshop agenda to support promotion of the guidelines (Appendix 2)

■ recommendations to Wodonga Institute of TAFE Directorate (Director/CEO and two Deputy Directors) for supporting the development of innovative ideas (Chapter 6).

These outcomes aim to increase the success rate of innovative ideas being captured and developed into training programs and products at Wodonga Institute of TAFE.

Chapter 1
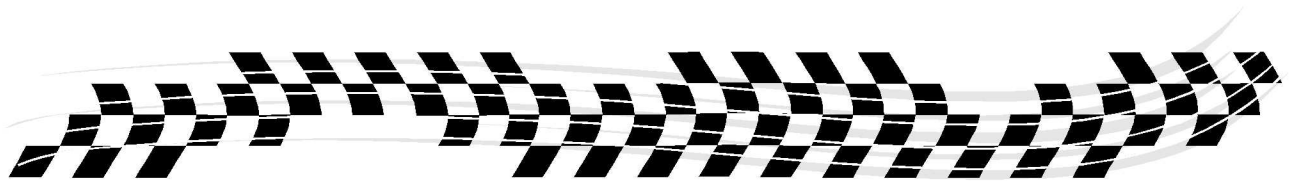
INTRODUCTION

'Innovation by definition will not be accepted at first. It takes repeated attempts, endless demonstrations, monotonous rehearsals before innovation can be accepted and internalised by an organisation. This requires 'courageous patience'.'

(Warren Bennis, Organisation Theorist and Chairman of University of Southern California's Leadership Institute, Australian Flexible Learning Framework www.flexiblelearning.net.au/leaders/, accessed May 2002)

'… if you're going to get a new idea, and a new program up and running … without the passion and the commitment from staff and the same from management it is very difficult to jump hurdles.'

(Motorsports instigator)
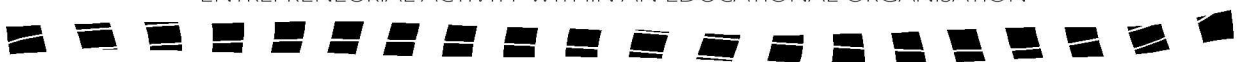
This study was undertaken as part of the Royal Melbourne Institute of Technology (RMIT) Master of Education by Research (by Workplace Project) program. The study was an investigation of innovation and entrepreneurship at Wodonga Institute of TAFE. It looked at the development of a program in motorsports as a case study to examine potential enabling factors and barriers to successfully capturing innovation.

1.1 The research framework

1.1.1 Masters by work-based research project model

In line with practitioner research philosophy, the Master of Education by work-based research (project) model provides a framework for practitioners to explore an aspect of their workplace culture. Through the intertwining of practical research and academic study, they can develop a better understanding of factors which influence workplace practice (Brown 2002).

The interaction between the research and academic disciplines is shown in the following diagram:

[Copyrighted material omitted. Please consult the original thesis.]

Figure 1: The interaction between work and academic study of the Master of Education through a work-based project (Brown 2002)

The model aims for beneficial outcomes for all stakeholders.

■ For the practitioner – to increase their understanding of workplace practice and culture, becoming a more effective contributor to their workplace and ideally an agent for positive change in organisational and their own work practice.

■ For the practitioner's organisation – to increase understanding of workplace processes and culture, creating opportunity for improvement.

■ For the related body of academic knowledge – continual evolution in understanding as a new perspective is added.

The model provides a structure for achieving these aims but doesn't guarantee they will be the outcomes. Practitioner and organisational willingness to examine work practice, receptivity to the research results and readiness to embrace change will be significant factors influencing the outcomes of this investigative research project.

1.1.2 This investigative research project

This investigative research project looks at the development of a motorsports training program as an example of entrepreneurial activity by a practitioner and the capture of innovation (in this case an innovative idea) at Wodonga Institute of TAFE.

It examines the development of the motorsports program from the perspectives of those who were involved at various stages. By analysing their reflections, keeping a research journal of observations and informal conversations and examining related literature, the project aims to identify enabling factors and barriers to innovation and develop strategies for Wodonga Institute of TAFE to better capture the innovative ideas of its practitioners.

1.1.3 The products

The products of this investigative research project are:

■ an exegesis detailing the research and an analysis of the results

■ *What a Great Idea! Where to from here?* a set of guidelines and professional development workshops for Institute practitioners for developing innovative ideas

■ a set of recommendations to Institute Directors for encouraging innovation and supporting entrepreneurial practitioners.

The guidelines and recommendations constitute the research portfolio component of the Masters degree and represent the practical implementation of this exegesis.

1.1.4   The research question(s)

The original research question was:

'Why has motorsports been successful when other ideas/ventures haven't?'

In exploring this question it seemed logical that there were specific factors which enabled motorsports to be successful and barriers which had to be overcome. If these were identified, could the enabling factors also support other innovative ideas? Could the barriers be addressed to make it easier for entrepreneurial practitioners to develop innovative ideas?

Thus the 'research question' became a series of related questions about innovation and entrepreneurship at Wodonga Institute of TAFE:

1   What enabling factors supported the development of motorsports from an idea to a program?

2   What were the barriers to its development?

3   How can Wodonga Institute of TAFE better capture the innovative ideas of its practitioners?

The investigative research project takes as a given that entrepreneurship and innovation are needed so that products (training programs) and processes (delivery methods) are continually rejuvenated for Wodonga Institute of TAFE to remain competitive.

1.1.5 The relationship between the 'research question' and work practice

Billet (2001) points out in his study of workplace learning that the nature of the work significantly influences what gets learnt and how. As an instructional designer the practitioner has been exposed to a wide range of individuals and organisations within and beyond Wodonga Institute of TAFE. This has included exposure to a number of projects which were recognised as innovative.[1]

Wodonga Institute of TAFE's 'grassroots' culture regards itself as innovative. This is reflected in Institute literature (Wodonga Institute of TAFE Strategic Plans 1995-2004) and informal conversations between practitioners.

During projects, staff professional development initiatives and other related work, practitioners (teachers) have talked about their ideas for servicing niche markets. Of these, motorsports has been one of the few ideas which has progressed to a program and become part of 'mainstream' delivery for Wodonga Institute of TAFE. This observation led to the initial research question, with the practitioner wondering why so many good ideas remained just ideas. In looking for research outcomes which were beneficial to the Institute, the original research question became the three follow-on research questions.

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[1] Business Skills Development framework which preceded the Business Skills Training Package, Outdoor Works Curriculum Framework, Diagnostic Skills CD-ROM (winner of the 2002 Automotive Training Australia Innovative Product award).

1.1.6　The research outcomes

As one teacher very succinctly put it: '*We all have great ideas, but most of us haven't got a clue about what to do next!*' (informal discussion, Health, Social and Community Studies Department teacher 2000)

The aims of this investigative research project were to:

■　identify enabling factors and barriers to innovation at Wodonga Institute of TAFE through investigating the development of the motorsports program as a case study

■　gain a better understanding of how innovation might be better captured at Wodonga Institute of TAFE

■　develop strategies for Wodonga Institute of TAFE to better support its entrepreneurial practitioners and capture innovative ideas.

1.2　Defining innovation and entrepreneurship

Within the context of this investigative research project, creativity and lateral thinking are seen as the basis for innovation. Innovation and entrepreneurship are defined as:

> Entrepreneurship ... *the personal traits of individuals which enable them to identify an opportunity and respond with creative/innovative ideas and solutions to meet the needs of learners*

Innovation *… new and/or creative ideas or implementation of solutions to an opportunity or problem.*

The ideas/solutions are considered by others to be innovative.

Innovation may be classified into four basic types (Kuratko and Hodgetts 1995, Williams in Mitchell, et al 2003):

■ invention: the creation of a new product or service

■ extension: the expansion of a product, service or process

■ duplication: the replication of an existing product/service with extras so that they are better or more appealing

■ synthesis: combination of existing concepts/factors into a new formulation.

The development of the motorsports program reflects two of these types:

■ invention (the development of specific motorsports curriculum)

■ synthesis (contextualising existing engineering competencies and adding new motorsports competencies to make engineering training more appealing to prospective students).

Within this framework and the above definitions, the motorsports program is innovative.

1.3 The following chapters

Chapter 2 details the background to this investigative research project. Motorsports as a program sits within and is subject to the influences of its surrounding micro environments (the department and Wodonga Institute of TAFE) and macro environments (the state and national vocational education and training environments and the motorsports industry).

Factors influencing these environments are examined for their impact - cascading down from the national vocational education and training (VET) sector to the Victorian VET sector, to Wodonga Institute of TAFE as a regional public VET provider, to the Engineering Department of the Institute and ultimately to the development of the motorsports program.

Chapter 2 shows how factors such as globalisation and the consequent changing nature of work and work environments have impacted on industry and consequently their training requirements. Increased commercialisation of the VET sector is identified as a key environmental influence. The impact of this factor on TAFE institutes, Wodonga Institute of TAFE and decisions about motorsports is examined. The development of the motorsports program is detailed and the nature of the motorsports industry described, providing a context for the development of the motorsports program.

Chapter 3 presents the research methodology of this investigative research project. Through the case study of the development of the motorsports program the participant-observer model of practitioner research is used to explore the multiple realities of work practice and organisational culture. Data was collected through semi-structured interviews, a research journal and a literature review. The ethical framework for collecting data is presented. The role/s played by the practitioner and how they influenced the type of data collected, as well as the relationship of the practitioner to the data and the foreknowledge and understanding the practitioner brings, is examined. Emergent issues relating to the methodology are analysed.

Chapter 4 is the analysis of the data, identifying emergent themes. The relationship between innovation and entrepreneurship is examined. Innovation emerges as the development and implementation of ideas within an organisation and entrepreneurship as the skills and abilities of practitioners to create ideas and make the innovation happen. These skills and abilities can be classed as an extended skill set comprising market research, presenting plans, developing implementation processes and sharing the vision. In addition to these extended skills, the research participants identified three key success factors - passion, perseverance and belief in the idea. They were seen as critical in keeping the idea alive and developing despite the organisational and organisational culture barriers which arose. Differences in management style at executive and department level are analysed to identify enabling factors and barriers. The organisational culture and environment emerges as an important theme. Organisational change was seen as positive, creating opportunities for innovative ideas. Differing (role-related) perspectives, workload and the restraints of being a public institution emerged as barriers, hindering implementation and the full potential of motorsports.

In **Chapter 5** the emergent themes of Chapter 4 are examined for their implications for work practice in Wodonga Institute of TAFE and the VET sector. The themes are drawn together into four categories as a means of looking at work practice - organisational change, supporting entrepreneurial practitioners, capturing innovation and utilising human resources within the organisation. The implications of the themes for wider practice within VET are briefly examined within the context of staff development and minimising barriers to innovation within VET organisations.

Chapter 6 takes these implications and translates them into recommendations for practitioners and Wodonga Institute of TAFE. They form the basis for the guidelines, workshops and recommendations of the research portfolio. The recommendations have been developed within the framework of the practitioner's knowledge of the working environment at Wodonga Institute of TAFE, the impact of being a public provider on the Institute's choices and an understanding that sustainable change involves changes in attitude and culture as well as processes.

Chapter 7 concludes with the practitioner's learning from the research - about research itself, innovation and capturing innovation within Wodonga Institute of TAFE.

The project products are contained as Appendices to this exegesis.

Appendix 1 is a copy of the booklet *What a great idea! Where to from here?* It is a set of guidelines to support Institute practitioners develop their ideas to a stage where they are ready to present the ideas to Senior Management. It is intended to be available on the Institute's staff intranet.

Appendix 2 details a potential agenda for professional development workshops which could be conducted for Institute practitioners. The agenda is designed for delivery to Institute department staff meetings.

Appendix 3 comprises the questions which formed the basis of the semi-structured interviews. These were undertaken with key stakeholders in the development of the motorsports program.

Chapter 2
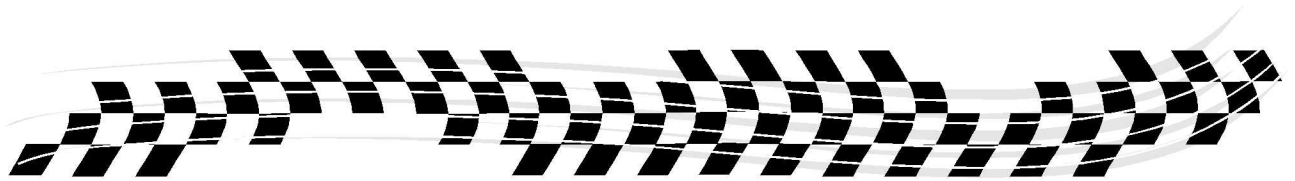
BACKGROUND AND CONTEXT

'Political and economic structures of the larger society influence educational practice.'

(Coomer 1984)

Practitioners at Wodonga Institute of TAFE are affected and influenced by factors occurring within and beyond the organisational environment. The Institute is subject to the influences of the Victorian and national Vocational Education and Training sectors. They, in turn, are subject to the impact of global factors.

2.1 The Vocational Education and Training sector

Over the last 10 years or so the Vocational Education and Training (VET) sector has operated in a national environment characterised by accountability of public monies, privatisation of government instrumentalities and a demand for an increasing commercial focus on those departments/instrumentalities remaining under government control. This is not just an Australian phenomenon.

> *'It seems that pressures such as globalisation of economies, dissatisfaction with public services and fiscal crises have generated in a number of western countries (Australia, Great Britain, Canada, New Zealand, the United States) a desire to improve government productivity.'*
>
> (Osborne and Plastrik 1997 in Downes 1998)

Rising complexity and uncertainty in our societies have accelerated rates of change, highlighting the importance of enterprises and their practitioners being able to adapt quickly to new requirements and market factors. Multi-national companies and their ability to move operations to take advantage of 'localised conditions in a global environment' are impacting on the structures of industry and work in Australia. The resulting growth of part-time and casual employment, a move from manufacturing to service and technology based industries, and off-shore decision making are influencing Australian workplaces and their training needs. Knowledge has become a 'tradeable' commodity along with value proposition - where individuals need to demonstrate their value to organisational output (Mitchell, et al 2003).

These factors are reflected in directions in the VET sector - the policy of user choice[2], industry-led Training Packages, a national framework of qualifications and quality control[3], flexible delivery and technology in training delivery and the identification of innovation as a key theme.

'High-quality, accessible and innovative vocational education and training has never been more important.'

(ANTA Shaping our Future: National Strategy 2003, p4)

The VET sector itself is seen by the Australian National Training Authority (ANTA) as having enormous potential to contribute to a more innovative Australia. Innovation is important not only for industry, who needs flexible, adaptable and creative practitioners but also for the capability and competitiveness of the VET sector itself.

'The ongoing challenge for VET sector organisations, and the individuals within them, is to use the new and existing tools to help develop innovative enterprises and a culture of ideas and innovation within the Australian community … As well, organisations within the VET sector, including ANTA, must also learn to 'walk the talk' and ensure that our own workplaces are supportive of innovation.'

(Scollay 2001)

In Victoria, TAFE Institutes have been encouraged to become more entrepreneurial and adopt a corporate business approach to organisational management.

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[2] Statement of User Choice Policy - endorsed by Ministers for Vocational Education and Training, May 1997 and amended by Ministers in November 2000.

[3] Australian Quality Training Framework, endorsed by the Commonwealth and State and Territory Ministers in June 2002.

'Leaders and staff in Victorian institutes learned a great deal during the last decade. Their significant achievements in innovation and entrepreneurship were based on adaptive behaviours - the formation of new relationships, investment in innovative people and processes, proactive exploration of new markets, and early adoption of new technologies. As a result, TAFEs are efficient and entrepreneurial. They secure more revenue from entrepreneurial activity than their counterparts in any other state ...'

(Institute Workforce Working Party Report, OTTE 2002, p6)

During the 1990's initiatives such as the change from curriculum to competencies, development of online delivery modes, and the move to compulsory competitive tendering illustrate innovation in the VET'sector. From 2000, Innovation' became an explicit focus in state government policy, including recognition of perceived staff development needs in entrepreneurial and client-focused approaches to training delivery (Growing Victoria Together 2001; Trends in the Victorian TAFE Institute Workforce 2000). This is set within a framework of accountability of public expenditure and the accompanying increase in reporting requirements, outcomes based reporting and funding and, particularly in Victoria, a market-based approach to the distribution of government training funds.

For Wodonga Institute of TAFE, these factors have resulted in increased documentation and recording requirements, increased competition from private providers and other TAFE Institutes outside the regional area, industry demand for more flexible course delivery, more specialised delivery and reduced funding availability. Wodonga Institute of TAFE, as a regional VET public provider, operates within its communities but also within this wider VET environment.

2.2 The organisation – a regional Institute of TAFE

The Victorian State Government established Wodonga Institute of TAFE in 1986. Based in one of Australia's larger regional centres with a population of around 100,000 and a vibrant industry base, the main campus of the Institute is located in Wodonga with small satellite campuses located in Corryong and Mt. Beauty.

Wodonga Institute of TAFE comprises nine semi-autonomous delivery departments, providing training and consultancy services in the areas of access to education, agriculture, architecture and timber studies, building and civil construction, community services, educational research and resource production, electrotechnology, engineering, fitness and recreation, forestry, health, horticulture, hospitality, industrial training and licensing, information technology, interior design, Indigenous education, management and communication, media production, motorsports, metal fabrication and welding, science, food and food technology, tourism, transport, storage and materials handling. This diversity reflects Wodonga Institute of TAFE's obligation as a regional public provider to offer a wide variety of training to cater for the diverse training needs of its region. Along with state-funded delivery budgets, departments are set annual commercial targets.

Wodonga Institute of TAFE annually delivers approximately 2,000,000[4] student contact hours from all funding sources annually to clients of the region, other parts of Victoria and interstate. A significant proportion of training activity (approximately 20%) is commercially-based with training tailored to fit specific enterprise or niche industry needs.

Since its inception, Wodonga Institute of TAFE has experienced continued significant growth rates averaging 8% annually[5]. Contributing factors have been the initial training needs of enterprises attracted to the region because of its 'national growth centre' status, support by governments and business for training and multi-skilling of

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[4] Source: Institute STAFFNET management reports. Enrolled hours for 2003 (~2,000,000), 2002 (~1,900,000), 2001 (~1,800,000).

[5] Source: Wodonga TAFE *Strategic Directions and Objectives* statement 2004-2006.

personnel as a means of maintaining international competitiveness, a sustainable funding structure for regional TAFE Institutes, and community support for a public provider of vocational training in the region.

However during the last seven or so years, cessation of specific government support for the region as a national growth centre, a general downturn in manufacturing industries, the abolition of the regional differential subsidy for some years and then its reinstatement at a lesser rate, have impacted on the availability of student contact hours to meet demand and the ability of Wodonga Institute of TAFE to address delivery infrastructure costs.

A review of TAFE provision in the north-east in 1996 recommended the merging of Wodonga Institute of TAFE with the then Wangaratta and Shepparton Institutes of TAFE. Strongly supported by its regional communities, Wodonga Institute of TAFE argued vigorously to maintain its separate identity. The result was a merger between Wangaratta and Shepparton Institutes of TAFE with Wodonga Institute of TAFE retaining its own identify.

In serving a regional community stretching from southern New South Wales to north-central Victoria, there are areas where Wodonga Institute of TAFE competes with other Institutes of TAFE, private providers and an interstate Institute. Metropolitan TAFE Institutes also target this region for commercial delivery of training.

These factors, along with the need of departments to meet their commercial targets, have contributed to a strong organisational culture of flexibility within Wodonga Institute of TAFE. Wodonga Institute of TAFE prides itself on its ability to respond in innovative ways to identified market gaps in training delivery. Practitioners are encouraged to be proactive in liaising with industry, listening to their needs and exploring new and effective means of delivery.

Within the context of Victorian TAFE Institutes Wodonga Institute of TAFE would be regarded by size, to be a smaller player. Innovation and responsiveness are regarded by Wodonga Institute of TAFE to be key factors in maintaining its competitiveness in the regional and wider VET environment.

The key to Wodonga Institute of TAFE is its practitioners and their ability to provide innovative and valued training to Institute clients - leading the Institute in its vision of:

> *'Leading with educational programs, products and partnerships that support the sustainable development of communities, enterprises, individuals and the environment within the greater … region and beyond.'*
>
> (Wodonga Institute of TAFE *Strategic Directions and Objectives 2004–2006*)

2.3 The Department

The motorsports program sits within Wodonga Institute of TAFE's Engineering Design and Timber Studies Department. In 2000 the Engineering, Metal Fabrication, Welding, Architecture and Timber Studies Departments were merged under one manager. The idea for motorsports originated in the Metal Fabrication Department, but the program resided as a section of the Engineering Department before the merger.

Prior to the 2001 merger, the Engineering Department had three managers in three years. Enrolments had been declining for some time coinciding with a nation-wide reduction of manufacturing enterprises in the 1980s and 1990s and a corresponding downturn in demand for engineering trade training.

The Metals and Engineering Training Package was introduced in 1998. Institute clients were requesting enterprise-specific combinations of the new engineering competencies. Responding to these requests required considerable flexibility as reduced enrolment numbers limited ability to run classes in all of the competency areas requested.

The Engineering Department found it difficult to meet the diversity of client needs. Informal discussions with department managers of other TAFE Institutes (Chair Academy program 2001-2002) indicate Wodonga Institute of TAFE's Engineering Department was not an isolated case. Whilst it delivered sound engineering training, it was not a department which could be described as dynamic and innovative.

The Metal Fabrication Department had a different culture. The staff were close-knit, and had developed a strong relationship with industry clients in the region. Student numbers were healthy - defying a state trend. The Metal Fabrication Department staff were aware of the downturn in engineering enrolments and saw the potential threat of a flow-on effect to their own department. In 1998 Wodonga Institute of TAFE lost a major contract which resulted in many trade staff redundancies. The Metal Fabrication Department staff became concerned about the future of their department. Over a period of months they brainstormed ideas for new and innovative ways of delivering engineering and metal trades training. Motorsports training was one of the ideas generated from this brainstorming.

2.4   The motorsports program

Motorsports at Wodonga Institute of TAFE began during a chat over a beer between an Institute metal fabrication teacher (with a motorsports background) and two members of a local professional motorsports team. One of the motorsports team members grumbled about there being training for everything except motorsports.

The teacher realised that here was an unmet need for training for motorsports team technicians. Market research of motorsports teams showed the need to be real, immediate and continuing.

After extensive lobbying of Institute Directors and intensive liaison with industry representatives, weeks of work were put into developing two courses - contextualising two Engineering qualifications and adding fee-for-service motorsports specific modules. With some well-timed exposure through motorsports media, local secondary colleges were visited, the courses were advertised and the Engineering Department was inundated with enquiries from all over Australia. Motorsports delivery began - with a long waiting list for the second intake. Over the next three years the Motorsports Department delivered engineering training contextualised for motorsports at Certificate III and Diploma levels.

In 2002 Automotive Training Australia, the national Automotive Industry Training Board, supported the development of motorsports specific competencies and qualifications. Based on extensive industry consultation and training

delivery occurring in Wodonga Institute of TAFE's Motorsports Department, 33 competencies and five qualifications from Certificate II to Diploma were developed. They were accredited as part of the Automotive Retail, Service and Repair Training Package. The practitioner worked with the Motorsports Department in producing the original motorsports specific curriculum-based modules and learning resources and then the motorsports competencies and qualifications.

Motorsports training has come to be regarded as a flagship of Wodonga Institute of TAFE - an example of an innovative response to an identified training need.

2.5   The motorsports industry in Australia

'The Motorsports sector of the automotive industry is a diverse, unique, highly competitive and entrepreneurial sector. It ranges from go-karts, historics, drag cars and motorcycles, to Formula One [sic], Formula 3000, V8 Supercar, Indycar, and the pinnacle of Formula 1 ...'

(Automotive Training Australia Ltd 2001, Scoping Project, Appendix 6, p1)

Beginning as an amateur sport in the early 1900s motorsports has moved into the professional arena to become one of the largest spectator sports in Australia.

Competition is intense with professional survival depending on being at the forefront of technological developments, sound business management and, most importantly, top performing people. Although the driver is the public face of the team, technical staff are a key success factor. The team behind the driver comprises managers, marketing/promotions officers, data analysts, dieticians and cooks, transporters, and the critical element … technicians.

'The skills required to work within the motorsports industry are very specific and currently nothing exists that allows us to recognise the skill standards of prospective employees. At the same time, no clear career path exists for people who aspire to work within the industry.'

(Neil Bates, Toyota Team Australia, [Motorsports Competency Development Final Report to Automotive Training Australia Steering Committee – unpublished 2001])

For teams to survive in the current world of motorsports, they need technical personnel trained to exacting skill levels with the attitudes and industry knowledge needed for intense competition.

Factors driving change in the motorsports industry include:

■ the increasing competitiveness and professionalism within the sport

■ sponsorship

■ the cost of running teams and maintaining vehicles worth hundreds of thousands of dollars

■ multi-million dollar television coverage of events and associated advertising income and issues

■ motorsports being a high-risk sport and the associated insurance liabilities and risks

■ new technologies around race data collection, component manufacturing and vehicle design

■ the human element.

Despite the importance of new technology, no team has monopoly on its use. Most teams acknowledge that a critical component of winning is the performance of team members. Technical team members are highly valued. Those that are regarded as very promising are constantly being poached ... and guarded against being poached.

' ... Motor racing traditionally been such a small industry that training had largely been gained on the job, and no specific relevant formal qualifications have existed. However, it is now a large and highly viable worldwide industry, with annual turnover in the order of billions of dollars. In this environment, specific skills training and career path planning is now appropriate.

Also relevant is the fact that Australian mechanics and engineers have an excellent reputation in the industry, and are generally sought after. If they can enter the sport with suitable relevant qualifications, then their progression up through the industry will no doubt be accelerated.'

(Malcolm Oastler, British American Racing, [Motorsports Competency Development Final Report to Automotive Training Australia Steering Committee – unpublished 2001])

The instigator of the motorsports program recognised that there was no accredited training in Australia addressing these needs or providing career paths for motorsports technicians. Despite being a multi-million dollar industry with links to international motorsports, the way motorsports technicians found positions in professional teams was by working their way up from the bottom (through amateur teams) or by knowing existing team members and being recommended. Wodonga Institute of TAFE's motorsports program was developed to meet this training gap.

Accredited training was the key to the motorsports program. As such it had to meet a dual set of outcomes - those of the motorsports industry and those in the VET sector. The development of the program and its ensuing implementation was influenced by factors occurring within and beyond the organisational environment of Wodonga Institute of TAFE, the motorsports industry and VET sector.

Chapter 3
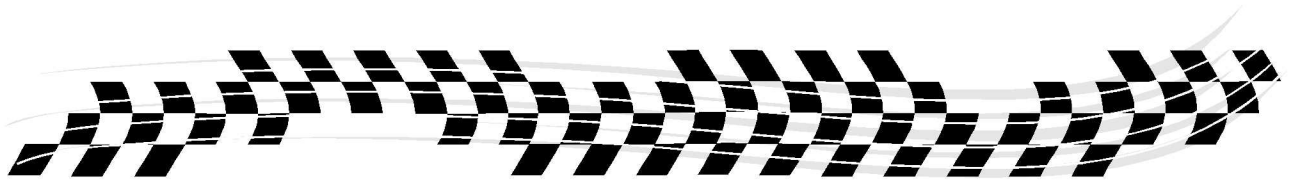
METHODOLOGY

This investigative research project sits in the qualitative research framework of naturalistic enquiry. In seeking to increase practitioner understanding of work practice and the working environment through the intertwining of practical research and academic study, it reflects the philosophy of practitioner research. As an employee of Wodonga Institute of TAFE it is acknowledged that it is impossible for the practitioner to be completely impartial in approaching the research. Instead, it was decided to capitalise on the inside knowledge of the practitioner by using a qualitative research approach which utilised reflective learning and the working relationships established prior to this investigative research project.

An ethnographic enquiry (specifically participant observer) approach utilised the practitioner's access to information that would not be readily available to an external researcher to develop a deeper understanding about innovation and entrepreneurship at Wodonga Institute of TAFE. This methodology also incorporated elements of interpretive research (McIntyre in Foley 1995) in looking reflectively at the development of the motorsports progam to better understand the capture of innovation at Wodonga Institute of TAFE.
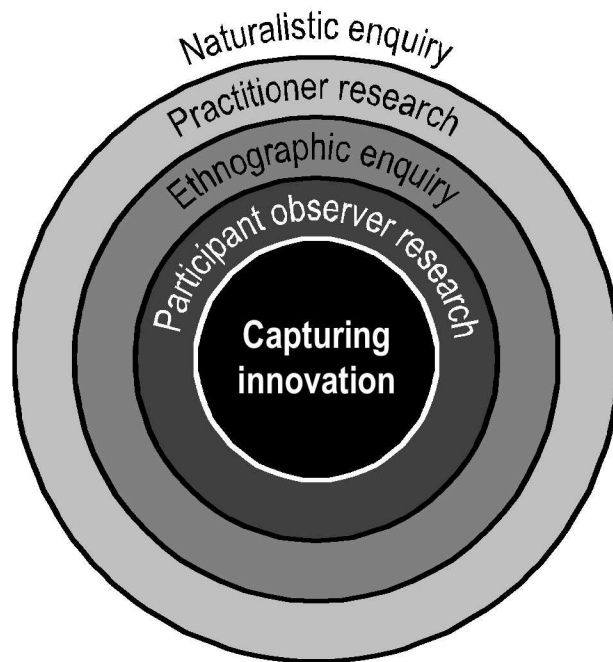
Figure 2: Setting the investigative research project within a theoretical paradigm

3.1 Naturalistic inquiry – practitioner research

As the pace of global and technological change increases, organisations are increasingly exposed to competitors within and beyond their industry sector. To survive, enterprises need knowledge about their business environment, the market, competitors and themselves - how they operate, their potential and how that potential can be harnessed.

Practitioner research focuses on practitioners learning more about their work practice to create a more effective and efficient workplace (Jarvis 1999). Through questioning and examining their practice, practitioners build a body of content and process knowledge about their practice and the environment in which it occurs. This participative enquiry (of which practitioner research can be seen as a sub-set) is a living process of practitioners 'coming to know' (Reason in Denzin and Lincoln 1996) more about their work environment. Through the research portfolio component, this investigative research project aims for Wodonga Institute of TAFE 'coming to know' more about its own internal operating environment and workplace culture.

Practitioner research, and this investigative research project specifically, sits within the axioms and characteristics of naturalistic enquiry (Lincoln and Guba 1985). The research methodology and methods explore the notion of holistically studying multiple constructed realities to increase understanding. Each of the participants in the investigative research project had a unique 'reality framework' about the development of the motorsports program. Important and unpredicted aspects of understanding were developed from comparing and contrasting these realities.

In the conduct of the project, the practitioner and the matter being researched have interacted, each influencing the other. This relationship allowed an opportunity to access information (perceptions, opinions, reasons for action) that would not necessarily have been available to an external researcher, adding an important perspective to the data.

As a form of naturalistic enquiry, practitioner research draws on a range of methodologies and approaches to research (Brown 2002), vigorously linking research theory to work practice. It provides a relevant vehicle for the practitioner to critically examine their practice whilst being in the midst of that practice and its ever-evolving nature.
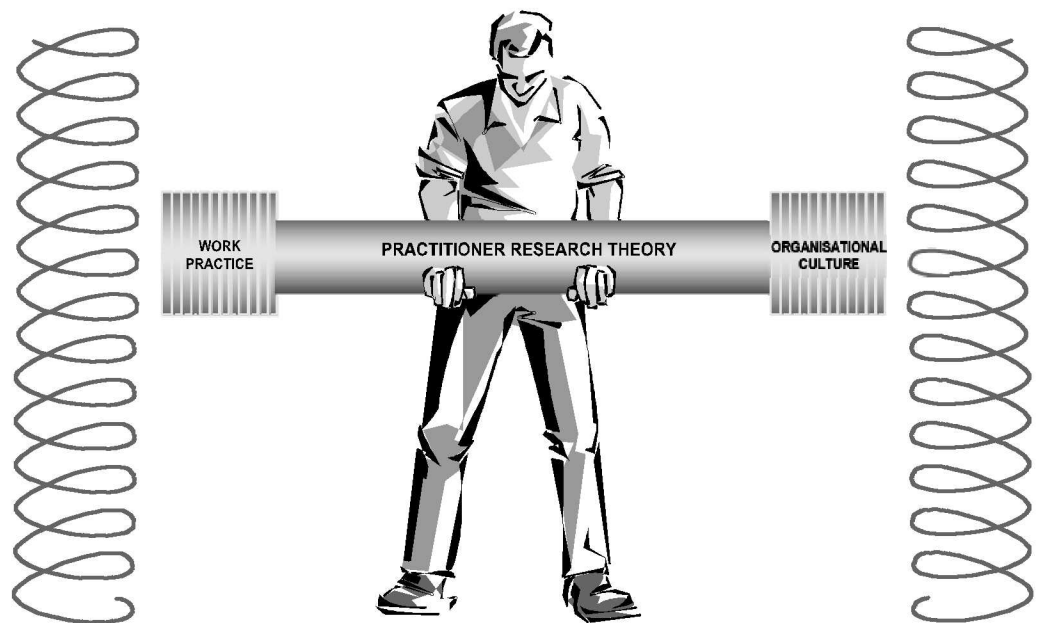
Figure 3: Practitioner research theory within the context of work practice

3.2 Ethnographic inquiry

3.2.1 Reflective research – participant observation

The investigation utilised an ethnographic approach to examine the behaviour, attitudes and concepts of those involved in the development of the motorsports program at Wodonga Institute of TAFE. The practitioner became the participant observer 'tool' for the research, with the research being the vehicle for examining the different realities of those involved, and through these, the multiple realities of work practice (Guba and Lincoln in Denizen and Lincoln 1994).

Initially the investigative project appeared to sit within an action research framework as it was an addition to the motorsports program contributing to the measurement of the program's effects on Wodonga Institute of TAFE and its systems (Moore 2000). However as the investigation progressed, it became obvious that the methodology fitted most closely with the concept of the researcher as participant observer, situated within a reflective research paradigm.

Participant observation is a specific form of observation which involves the researcher observing and researching events in which they are also participating (Boucher 2001). Through participant observation, the practitioner sought to gain a deeper understanding of the environment at Wodonga Institute of TAFE as a means of becoming a more effective practitioner (Bartenuk and Louis 1996).

3.2.2 The multiple roles of the practitioner

Participant observer research theory recognises that the research is coloured by the practitioner's perspective and that the research itself has, in turn, influenced the practitioner's perspective (Senge 1990).

PRACTITIONER PERCEPTIONS
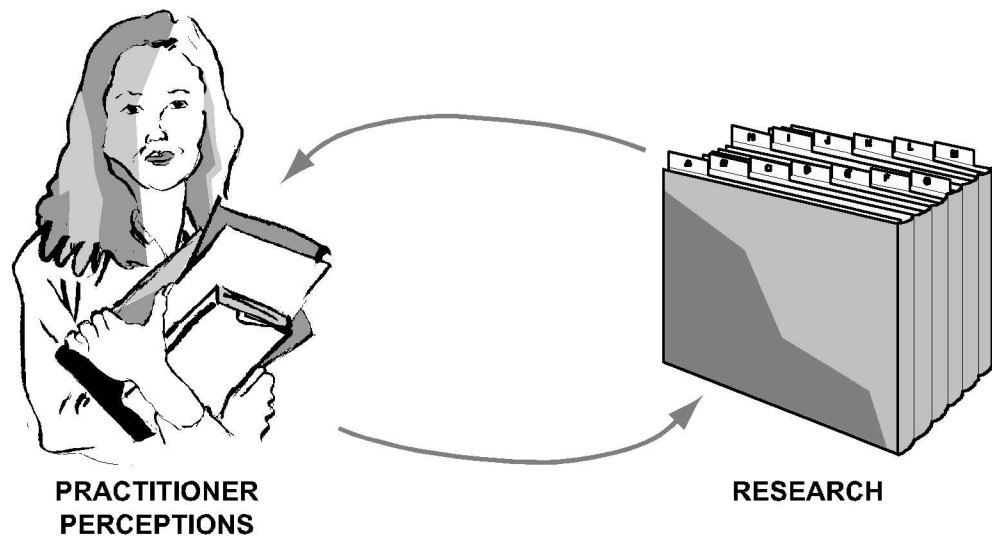
RESEARCH

Figure 4: Mutual influence of research and practitioner

As the investigative research project evolved, the participant role of the practitioner took on distinct additional aspects in response to input from the research participants.

As an observer, the practitioner examined the development of the program through the research data collected and analysed. As a participant, the practitioner was part of the program development at critical points through the development of curriculum, resources and competencies. This was an explicit role related to the practitioner's work practice as a training designer at the Institute.

OBSERVER

FORMAL PARTICIPANT

INFORMAL PARTICIPANT

Conduct interviews
Attend meetings
Review literature

Development of curriculum
Development of resources

Informal discusions
Being a sounding-board
Development of urgent action plan
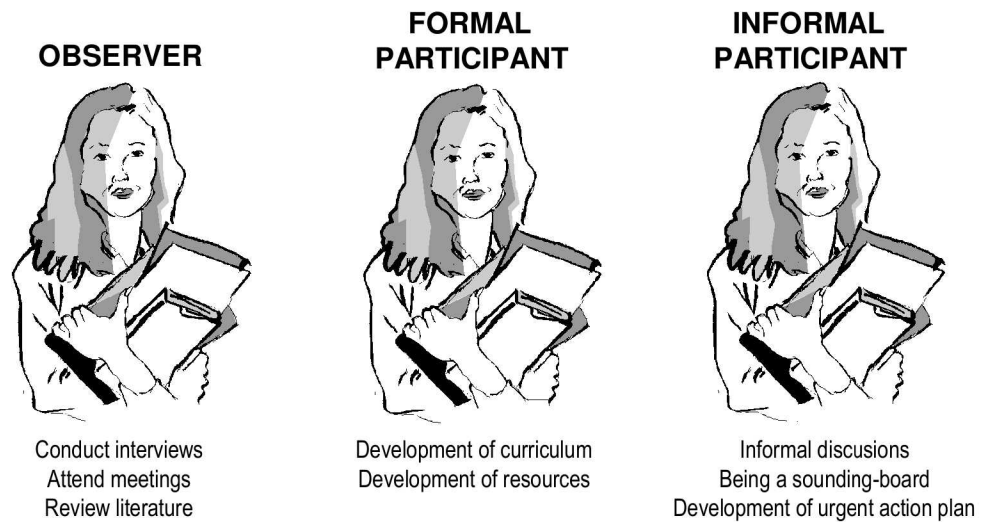
Figure 5: Multiple roles within the participant observer context

As working relationships developed through this participant role, the research participants began to share information informally (recorded in the research journal). In particular the core research participants (motorsports teachers and Directorate) began to utilise the researcher as a sounding board. The knowledge of the practitioner about other parts of the Institute and work practice in other projects added to this with the practitioner able to make connections between the information needs of the instigator and those in the Institute with the skills and knowledge to meet these needs.

Thus the practitioner played an insider and outsider role (Bartenuk and Louis 1996) or what Cherry (1999) refers to as an agent-actor working with those involved in the development of the motorsports program.

There was a range of practitioners involved in the development of the motorsports program. The core group comprised the instigator of the idea, the Motorsports Department (motorsports teachers) and Directorate. The extended groups comprised significant others - internal stakeholders who were lesser but critical influencers during the development of motorsports and external significant others (representatives of the Victorian Office of Training and Tertiary Education - OTTE).
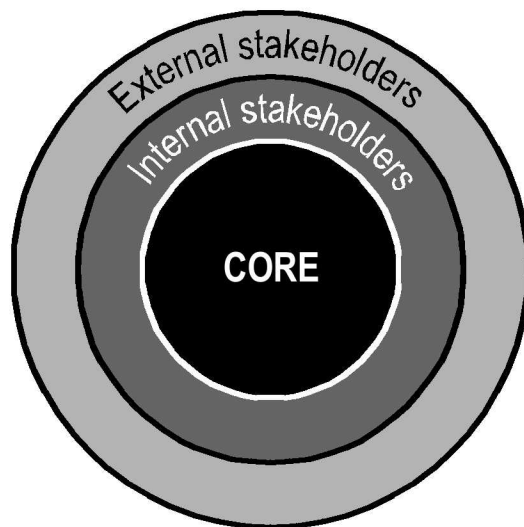
Figure 6: Research participants

The internal extended group (internal significant others) provided a counterpoint to the experiences and perceptions of the core group and that of the practitioner as participant observer. Later, recognising the value of multiple realities and having a counterpoint to internal perspectives, two external stakeholders were added as an external extended group. Two Senior Managers from the Office of Training and Tertiary Education (OTTE) were interviewed following the opening of Wodonga Institute of TAFE Motorsports Centre of Excellence.

Formal primary data was collected through semi-formal interviews where the practitioner took on the role of observer. Informal primary data was collected through the research journal - entries which detailed where the practitioner, acknowledging tacit knowledge of the participants and the research environment, challenged perceptions to draw out further data (Cherry 1999). As the investigative project progressed, the practitioner became a connector, critical friend and influencer. Receipt of confidential information through these roles enabled consideration of data which added considerable depth to that collected through the interviews and review of literature. Issues relating to these multiple roles are discussed further into this Chapter.

3.2.3   Data integrity

One of the key criticisms of post positivist, qualitative research is the apparent 'lack of objectivity' compared to the tightly planned and controlled research methodologies of positivist research. The participant observer methodology is an ethnographic enquiry through an interpretive perspective. Both, the practitioner as researcher and other stakeholder participants, look reflectively into a past experience to understand its deeper meaning. The key challenge in collecting data is recognising that reality is more than negotiated accounts - that the practitioner and the participant stakeholders are both shaped by and shapers of their worlds. The data collected via this methodology is and must be subjective, however to maintain data integrity and analysis validity the data subjectivity must be controlled. In this investigative research project, critical subjectivity was maintained by comparing the three types of data:

■   a research journal, documenting reflections of the practitioner within the context of the course development, and the interplay between the participants of the investigative project

■   interview data

■   a review of literature.
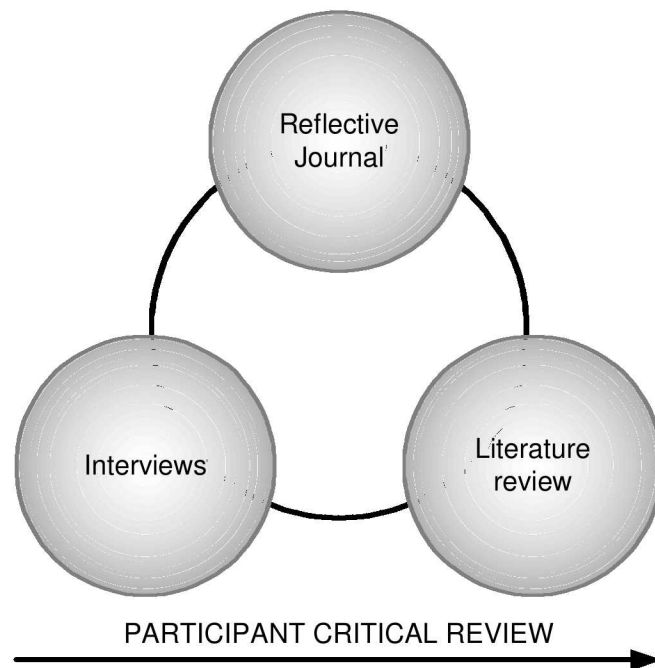
Figure 7: Maintaining critical subjectivity

The reliability and trustworthiness of the data was supported by a review of the draft exegesis by participants to ensure the analysis and interpretation of the data was a credible reflection of their reality (Lincoln and Guba 1985; Lather 1986).

Comparing the data and participant review enabled dialogue and dialectical tension (Reason in Denzin and Lincoln 1996) to be reflected between the insider perceptions of the research journal, interviews and confidential discussions and outsider perspective of the broader literature on innovation and entrepreneurism.

3.3   Ethical considerations

In participatory research there are ethical considerations in the public and private domain (Adler and Adler in Denzin and Lincoln 1996). This is particularly so in participant observer research in the workplace where the practitioner establishes a significant trust relationship because of their belonging (participant) but removed (observer) status. In the case of this investigative project, the trust relationships established resulted in confidential data (private 'chats' or 'discussions') being collected in addition to the primary data (interviews and research reflective journal).

3.3.1   Private domain: ensuring confidentiality

Confidential information received through the development of a professional trust relationship between the practitioner and other participants (Bartenuk and Louis 1996), presented an ethical dilemma in publishing analysis and results of the investigative project. This data, given within the context of being confidential, has made an important contribution to the analysis of issues - particularly those around communication, management style and identification of barriers and their implications for innovation at Wodonga Institute of TAFE.

Confidential data relating to work practice (especially that of others) and its perceived impact on others, was particularly sensitive from a research perspective. In some instances it was felt the information was given to elicit an opinion about issues pertaining to the program. Thus the data given had to be kept confidential and the practitioner, in answering questions, had to ensure that the replies did not contravene confidentiality of other data. Maintaining ethical confidentiality made the roles of 'connector' and 'influencer' quite complex. However the richness of the data collected more than offset the complexities of obtaining it.

To protect confidentiality, no participant has been named. Participants have been classified into groups - the Motorsports Department, Directorate, significant others (internal and external). The instigator is the exception and has been identified as such with permission.

All raw data was kept confidential, accessed only by the practitioner who also transcribed the interview data. Data included in the exegesis was de-identified and only attributed to a member of the groups identified above. The exception was data relating to the instigator. This data could not be identified without losing meaning and context. It has been used with full permission of the instigator.

3.3.2   Public domain: communication of observer status

Prior to the topic being accepted for research, Directorate was presented with a paper outlining the proposed research. This was accepted and put forward for consideration by RMIT. An application to conduct the research was put to, and accepted by, the RMIT Ethics Committee. In accordance with the ethics application, all research participants were informed verbally and in writing of the aims and nature of the investigative project prior to participation. They were advised that they would receive a copy of the draft exegesis to review prior to publication and that they could request withdrawal of any comment they felt could be attributed to them which they did not want made public. They were also advised that participation in the research was voluntary, with no expectation of Wodonga Institute of TAFE concerning their participation. All participated voluntarily, with no-one who was approached declining to participate.

3.3.3   Power relationships

No power relationship existed where the practitioner had 'power over' any of the participants. No participant directly or indirectly reported to the practitioner. There were however, power relationships between internal practitioners and Institute management (Directorate) involved in the motorsports development. The instigator, Motorsports Department, department manager and significant others report to Directorate. Directorate reports to OTTE Senior Managers (external significant others).

Internal participants in the investigative project[6] were given a draft of the exegesis to review and advised they could withdraw permission to reproduce any quotation or comment they felt could be attributed to them. In recognition of the existing power relationships between those interviewed, the review of the draft exegesis was conducted in reverse power relationship order. The instigator was the first to be given the draft to review. His feedback was incorporated, then the modified draft given to the remaining motorsports teacher. This teacher's comments were incorporated, then the further modified draft was given to internal significant others. Again their comments were incorporated prior to the further modified draft being given to Directorate. Directorate comments were incorporated and then the final draft was sent to the 'external significant others' (OTTE Senior Management representatives) prior to publication. This process ensured that all research participants were able to review the 'publication' prior to it being seen by someone with whom they had a power relationship.

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[6] Excepting the manager of the Motorsports Department and one teacher who left Wodonga Institute of TAFE prior to the first draft being finished. These participants were given a copy of the documentation of their interviews. On review they indicated that the notes reflected their reality and intent and gave signed permission for de-identified data from the notes to be used in the exegesis.

3.4   Research strategies

The research strategies aimed to gather formal, objective data and informal subjective data capitalising on the complexity of data which can be captured through a participant-observer approach. This diversity of data enabled issues and consistencies to be identified through comparing and contrasting responses to interview questions with diary entries.

3.4.1   Literature review

Related literature was reviewed to identify themes around innovation and entrepreurship in organisations - particularly Vocational Education and Training and government organisations. The literature and primary data was examined for similarities and differences in themes, in order to understand what made the development of the motorsports program within Wodonga Institute of TAFE unique, and where it reflected/embodied conclusions from related research. The literature review is incorporated throughout the exegesis.

3.4.2   Research (reflective) journal

A research (reflective) journal was kept for the duration of the investigative project. In the journal the practitioner documented content of conversations and observations as a participant observer, about those conversations. The aim of the journal was to keep an ongoing record of practice and reflection to distinguish between the roles of participant and observer and to add depth to the information gleaned from the semi-structured interviews and literature search.

3.4.3 Semi-structured interviews

The interviews were structured to cover a range of pre-determined areas. These areas served as a basis for encouraging those involved in the development of the motorsports program (research participants) to share their reality and perceptions (Moore 2000) about the motorsports program development.

Clandinin and Connelly note that '*The way an interviewer acts, questions, [sic] and responds in an interview shapes the relationship and, therefore, the ways participants respond and give accounts of their experience … the kinds of questions asked and the ways they are structured provide a frame within which participants shape their accounts of their experience*' (in Denzin and Lincoln 1996, p420).

There were ten internal research participants. Each was given a copy of nine questions (Appendix 3). Reflecting a collaborative inquiry approach, the questions sought to elicit:

■ information about the research participants' knowledge and perceptions concerning the development of the motorsports program

■ what helped and hindered the development of the motorsports program

■ what they would, in hindsight, do differently and

■ recommendations to other practitioners who had innovative/entrepreneurial ideas.

Where appropriate incidental supplementary questions were asked during the interview for clarification, elaboration or to draw out further information.

In interviewing external significant others (OTTE representatives) the aim was to provide a contrasting context for Directorate perceptions of the external environment. To gain this information, supplementary questions focused on the Victorian perspective of innovation in VET.

3.4.4   Observation at meetings

During the course of the investigative project two planning meetings and one planning day were attended. The first planning meeting comprised Institute staff and a major potential sponsor of the motorsports program. The second planning meeting was between Directorate and the Motorsports Department. The department planning day comprised Motorsports, Engineering, Metal Fabrication, Architecture and Timber Studies Departments. The practitioner participated as an observer-participant during these meetings. Observations were documented in the research journal, informing analysis of the data and the emergent themes (Chapter 4).

3.5   Emergent methodology issues

The analysis of this investigative project data reflects the understandings, assumptions and relationship of the practitioner to Wodonga Institute of TAFE as a working environment (Atkinson and Hamersley in Denzin and Lincoln 1996). The emerging themes identified are an interpretation of the empirical data set within the context of a review of related literature.

3.5.1   The participant-observer model

This investigative research project has been an enquiry from the inside (Evered and Louis in Bartenuk and Louis 1996). The practitioner was an observer (outsider) - being outside the key groups of the Motorsports Department and Directorate; and a participant (insider) - being a developer of motorsports curriculum and resources and an Institute employee.

The practitioner's position in the organisation was an opportunity (Lincoln and Guba 1985) to bring an insider's perspective and tacit knowledge of organisational culture to the data analysis and interpretation.

Argyris (1999) argues that understanding the influence of covert culture and the way people act within it (theories in use) can only be achieved by continuous interaction. Functioning as an observer and participant and reflecting in the research on shared understandings and differences in perceptions has made the research meaningful (Lincoln and Guba 1985). The participant-observer research model enabled access to participant perceptions, resulting in added depth to the analyses and corresponding learning by the practitioner about the role of research in the workplace, the multiple realities existing within workplace culture, and most importantly about innovation in Wodonga Institute of TAFE.

3.5.2   The development of multiple roles

Being a participant in the project led to the development of multiple roles - reflecting the reality of functioning within an organisation (Senge 1999). Conceptualisation of these roles within the research methodology framework is illustrated as follows:
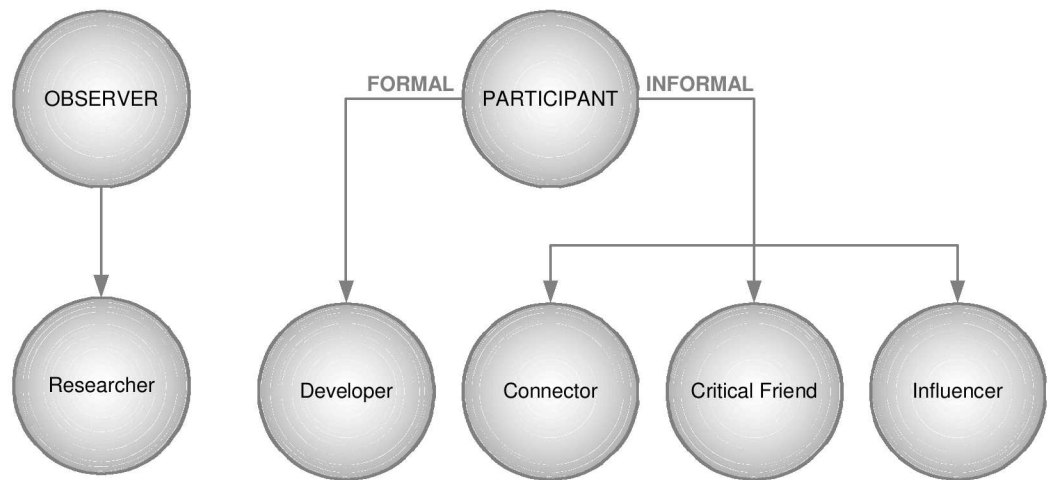
Figure 8: Multiple roles in the investigative project

The observer (researcher) role consisted of conducting interviews with all stakeholder groups, and attendance as a researcher at meetings. A degree of detachment was implied (and necessitated) by the observer status (Layder 1993), with supplementary questions only being asked to elicit further information where the initial response provided minimal data. Although the ethical processes to protect confidentiality were explained to each participant prior to interviews, participants were conscious of the formal nature of the relationship. This was reflected in the data not reflecting the range of views of the research participants. A number of emerging themes were identified through analysis of the interview data, it was the informal data which gave the themes added texture and depth, adding to the learning from the research.

The participant role comprised a formal component and an evolving number of informal components. As a training designer at Wodonga Institute of TAFE, the practitioner was tasked to work with the instigator and motorsports team to develop specific curriculum and learning resources. As the working relationship developed, this formal participant role became a springboard for the development of the informal roles, conceptualised by the practitioner as that of 'connector', 'critical friend' and 'influencer'.

i   Connector

The development of motorsports specific curriculum and resources generated discussion about motorsports delivery and its requirements between the practitioner and motorsports staff. Having worked with other practitioners throughout Wodonga Institute of TAFE, the practitioner became a 'connector', advising where other Institute staff could meet the needs identified by the instigator/Motorsports Department (Journal entries: Dec 00, Feb 01, Jul 01). This led to involvement in motorsports by others including Wodonga Institute of TAFE's Research and Planning Department, Print Production Unit, Marketing Department, Media Production, and Resource Development. One of these became a participant in the research (internal significant others). The connector role was the direct link between the work practice of the practitioner, the motorsports program and the research.

ii   Critical friend

All internal stakeholders regarded the practitioner as someone who was involved but not central to the development of the program. Informal conversations about motorsports with stakeholders would often move into analyses about issues. Conversation can be seen as a personal experience method of collecting empirical data.

> *'Conversation entails listening. The listener's response may constitute a probe into experience that takes the representation of experience far beyond what is possible in an interview. Indeed, there is probing in conversation, in-depth probing, but it is done in a situation of mutual trust …'*
>
> (Clandinin and Connelly in Denzin and Lincoln 2000)

The working relationships (and corresponding trust that had developed) enabled the practitioner to take on the role of 'critical friend' with all key internal stakeholders - asking the 'hard' questions to challenge perceptions.

iii   Influencer

The role of the practitioner as influencer evolved. Initially, the practitioner was seen as a confidential 'sounding board' by all internal stakeholder groups. Receiving these confidences and with the organisational understanding of an 'insider' led to the practitioner's perceptions being challenged by those of the participants. Through informal discussions with Directorate the practitioner's understanding of external factors impacting on decision-making and the flow-down effects on the Motorsports Department was extended.
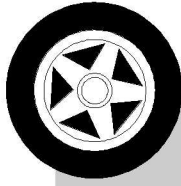
Being the connector resulted in receiving information about issues which Directorate was unaware of, but which had a potential negative impact on Wodonga Institute of TAFE. The practitioner, as influencer, facilitated a meeting of the Motorsports Department to develop an urgent action plan for submission to Directorate. The end result included further curriculum development in which the practitioner played a formal participant role.

The above example reflects the complex interactive nature of ethnographic research and the participant-observer model and the integral part the practitioner plays in the research.

Through these three informal participant roles, the practitioner became a tool for participants to reflect on their perceptions and their role in the development of the motorsports program.

In collecting the data, the practitioner functioned as an activist, an influencer – and ultimately a learner. The nature of these roles allowed the data to be analysed from different perspectives, adding layers not achievable by an external researcher (Cherry 1999).

3.5.3   Data trustworthiness

The issues of trustworthiness and reliability of data have been addressed through the data collection methodology and analysis framework.

In the interviews, each participant was asked the same questions, enabling an analysis of variations in responses. In keeping with an interpretivist perspective, having an identical structure for each interview allowed the 'reality' of the interviewee to be analysed and compared with that of other interviewees (through a response matrix) and the practitioner (through the research journal).

All the stakeholder groups (excepting the instigator) comprised more than one interviewee. Consistencies and differences between perceptions within the groups were compared and contrasted, then viewed within the framework of the confidential data documented in the research journal.

3.5.4   Building knowledge from the data

One of the issues of practitioner research is that by its nature it is subject to the inherent biases and understandings of the practitioner - particularly where the data collected is confidential (research journal). Conversely, the value of confidential data to the research is that it is a rich source of perceptions and reasons for actions of participants. This gives a depth to analysis and interpretation that would otherwise be lost.

The research journal became a vehicle for capturing the perceptions of stakeholders and the practitioner. A summary of 'chats' and 'discussions' was recorded, along with practitioner perceptions, analyse, connections to other data and conclusions. It provided a counterpoint from which to examine covert organisational culture, differences between participants' theories-in-action and theories-in use and how these differences related to organisational culture.

Through construction if a data matrix themes from the interviews were identified and compared to themes extant in the literature. These are discussed in the next chapter. De-identified quotes from the research journal have been included as a means of ensuring the analysis and interpretation retains the integrity of the dialogue that characterised the data collection (Atkinson and Hasmmersly in Denzin and Lincoln 2000).

Chapter 4
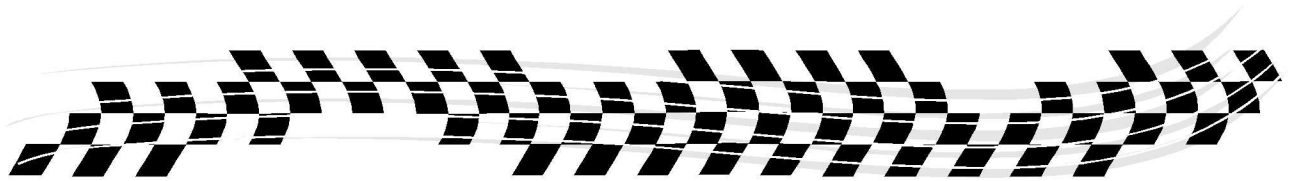
DATA ANALYSIS

'Reality is but a point of view.'

(anon)

This chapter presents the themes identified from analysing the research participant interviews, appraising the reflective research journal and conducting a literature review. They are defined as:

- the relationship between innovation and entrepreneurship

- being entrepreneurial - an extended skill set

- management - an enabling factor and a barrier

- culture and environment

- workload

- being a public institution.

Whilst these themes emerged consistently through a data matrix analysis of interviews, the detail has, in many instances, been significantly influenced by the differences between the perspectives of the research participants (including the practitioner) - reinforcing the notion of work practice being the product of multiple realities (Guba and Lincoln in Denizen and Lincoln 1994).

4.1   Emerging themes

4.1.1   The relationship between innovation and entrepreneurship

Much of the recent VET literature aimed at practitioners alludes to innovation as being the development of new ideas and the skills needed to generate them (Scollay 2001, Innovation Ideas that Work competency standards, 'Insight' 2003, Innovation Shaping Our Future 2003, Eadie in Downes 1998). Analysis of data from interviews conducted for this investigative project indicates a subtle but important difference between these two notions.

Firstly there is the development and implementation of ideas within an organisation. The idea itself can be innovative, and, where an innovative idea is implemented utilising the organisation's systems and resources to varying degrees, the resulting outcome may be judged by others to be innovative. There may or may not have been an intent to be innovative. In the case of motorsports, those involved in developing the idea and driving its implementation did not regard it as innovative - to them it was a workable solution to a problem. The label 'innovative' was attached by others to the idea and then later, the program. This indicates a judgemental and reflective element about the term innovation, reflected in the definitions of innovation set out in Chapter 1.

'Entrepreneurial' applies to the skills and abilities to come up with innovative ideas and make innovation happen. The following characteristics (a combination of traits, approaches to life and skills of the instigator) were identified by the research participants as significant factors in the motorsports program being successful:

■　persistence (nine participants)

■　a passion for the idea (seven participants)

■　the ability to think laterally (five participants)

■　being prepared to challenge the status quo (five participants)

■　being able to operate in an environment of uncertainty (four participants)

■　being prepared to take risks (three participants).

They are consistent with the findings of Kuratko and Hodgett's (1995) research into characteristics of entrepreneurs:

■　personal initiative

■　ability to consolidate resources

■　management skills

■　a desire for autonomy

■　risk taking

■　aggressiveness

■　competitiveness

■　goal oriented behaviour

■　confidence

■　opportunistic behaviour

- intuitiveness

- reality-based actions

- ability to learn from mistakes

- ability to employ human relations skills.

Many of these characteristics have been demonstrated by the instigator in the development of the motorsports concept and ensuing program. Personal initiative, risk taking, competitiveness, ability to employ human relations skills and confidence, were demonstrated in the early stages - garnering industry support, gaining support from Welding and Metal Fabrication Department manager and staff, selling the idea to Directorate. Ability to consolidate resources, goal oriented behaviour, intuitiveness and reality-based actions underpinned the pilot program - particularly the team placements for students. Opportunistic behaviour, ability to learn from mistakes, and a desire for autonomy were reflected in the refinement of the program and moving into new areas such as the 'Brute Utes' (utility racing - a category of motorsports).

Whilst it would be simplistic to assume that these characteristics are necessary to be entrepreneurial, in the case of motorsports a practitioner with these characteristics was better able to operate within an innovative scenario - typically characterised by unpredictability, risk and opposition or apathy to change. Having entrepreneurial traits appears to be an enabling factor in successful innovation at Wodonga Institute of TAFE.

However the motorsports case study indicates there is one critical characteristic missing from Kuratko and Hodgett's list above. Perseverance of the instigator was the factor identified by almost all participants in this investigative research project as being the factor most critical to successful implementation of the idea. Perseverance in the face of rejection of the idea by some practitioners, perseverance despite an inordinate amount of personal time needed to make and reinforce the vital connections with industry, perseverance with extremely limited resources to replicate industry conditions (for industry credibility)and perseverance to continually push the boundaries of Institute systems and thinking. At this point in time, perseverance was identified as a critical factor in innovation at Wodonga Institute of TAFE.

4.1.2 Being entrepreneurial – an extended skill set

The motorsports program and its development reflects the changing nature of the role of TAFE teachers (Kronemann 2001 in Giltrap 2003). TAFE is expected to be entrepreneurial. For TAFE teachers this means that entrepreneurial skills may no longer be an option but a requirement (albeit unstated) of the job.

In developing the motorsports program, the instigator needed to move beyond his specific teaching area. New roles such as learning manager, facilitator, mediator, strategist (Mitchell and others 2003), marketer, negotiator, organisational change agent, activist, business advisor and analyst were taken on. These roles required a skill set beyond that required for normal teaching duties - more than knowledge and skills that integrate their industry understanding and experience with their understanding of training pedagogy (Professional Voice 2002). It required part of a skill set that is normally associated with business and business professionals such as marketers, accountants, analysts, economists and futurists.

This was recognised by the Directorate:

'... they are not first up business people. They're not accountants, they're not economists, they're not sales people. They've learned a bit of all of those things on the go. But they were teachers and trainers ... people have had to adapt and adopt and learn languages and skills that they didn't have before ... if you want to really develop the ideas ... then you have to think about those skill parcels that they need to obtain ...'

(Senior Manager, interview 2002)

To gain Institute support (time, physical resources, finance, human resources), the motorsports case study showed that practitioners needed to be able to 'sell' the idea to Directorate - convince them that the risk and outlay is justified by the benefits.

Analysis from the data indicated this required skills in:

i   Undertaking market research demonstrating the training need or product need and the benefits and risks of the idea

'The Senior Management team then directed the department to develop a business plan ... They looked at what would be the opportunities for us ... particularly also what would be some of the costs involved ... and very early on we looked at the risks associated with developing this sort of program.'

(Senior Manager, interview 2002)

Directorate was prepared to look beyond direct benefits such as financial return or entering a new industry area to indirect benefits. Interview data revealed that positive exposure within the local community, the development of new partnerships, raising the profile of Wodonga Institute of TAFE or further skill development of practitioners were also seen as significant outcomes when considering proposals.

ii Presenting the idea and plan for developing and implementing the idea

Practitioners, who are experienced and confident in presenting to students, can sometimes find it daunting to present to management - particularly Directorate. Motorsports Department practitioners commented informally on this, and their frustration at not knowing what information Directorate wanted. They presented their ideas a number of times but needed to go back and do further research because Directorate had queries about implementation. The guidelines resulting from this investigative project aim to rectify this communication gap and provide information about where practitioners can find assistance in presenting their data.

iii Developing processes to implement the idea

When the motorsports idea emerged, there were no processes/systems to assist in implementing the idea. Motorsports Department practitioners voiced considerable frustration that their implementation processes were often based on trial and error. Finding the right person to ask (and sometimes this was not the person whose job role it was) when developing new delivery sequencing/methodologies and the consequent changes in statistical reporting took a lot of time. The coordination time allocated to the instigator did not allow for the extra time needed to 'learn the system'. Administrative requirements then ate into time allocated for other coordination aspects, and through a flow-on effect, into the instigator's personal time. In an anecdotal conversation, this factor was identified as a barrier to achievement by a former Wodonga Institute of TAFE practitioner who developed an innovative program. Despite the Institute having supported the idea by funding the development of a specific resource and strong industry support, she found the time it took to learn about the required administrative procedures was not covered by her coordination allocation. To fulfil her responsibilities in coordinating existing

programs, she had to utilise significant amounts of her own time. It was a significant factor in her eventual

decision not to pursue the idea any further. It cannot be assumed that individual teachers have the globalised

organisational knowledge of Wodonga Institute of TAFE to implement their idea. Therefore they need to have the

skills to seek out the appropriate personnel for advice.

iv   Sharing the vision

Unless the idea can be implemented by one person alone, the instigator of the idea needs to be able to share

their vision in such a way that others also become committed. Shared vision is rooted in an individual's set of

values, concerns and aspirations (Senge 1990). Getting others to share a vision, to join their dreams with the

idea takes time, patience and effort. But unless the vision is shared, and others also become its champions, it

is unlikely to get support.

These extended skill areas are an important component in TAFE teachers being able to respond innovatively within the training environment (Scollay 2001, Kronnemann 2001, Mitchell 2003). That it is an extended skill set, and one that has not necessarily been required in the past is recognised in the recent development of innovation competencies and support materials designed to develop innovative skills in VET practitioners (INNOVATION IDEAS that WORK 2002).

Scollay identifies collaboration as an important component in capacity for innovation, however collaboration also needs to be considered from an organisational context - particularly in TAFE which functions more in the way of medium to large organisations with business expertise concentrated in specialist personnel.

At Wodonga Institute of TAFE, financial planning, forecasting and strategic planning, market research, curriculum and resource development expertise currently rests within Directorate and corporate related departments. All of these skills were needed in the development of the motorsports program. This research indicates that collaboration is needed to effectively harness specialist expertise within the Institute to provide support to entrepreneurial practitioners with innovative ideas. Because the approach to using this expertise was unplanned, the instigator and motorsports staff ended up putting a lot of their own time into the development and implementation of the idea. The guidelines and professional development workshops of the research portfolio aim to address this barrier.

4.1.3   Key factors – passion, perseverance and belief in the idea

Despite not having all of the extended skill set, and finding specialist expertise within the Institute through a trial and error process, the motorsports instigator and motorsports staff persevered with their idea - convinced they had a realistic training solution to a clear industry need. All internal research participants identified the passion, perseverance and belief in the idea by the instigator and the Motorsports Department as key factors in the innovative idea becoming an innovative program. The significance of these factors can be seen in the sample quotes below. They reflect the nature of the comments of all the internal research participants about the 'drive' of the instigator and motorsports staff.

'Purely because of the passion of the people involved … those of us who come from that background know that you don't take 'no' for an answer, you just keep on going until you achieve your end.'
(Motorsports teacher, interview 2002)

'Dogged determination I'd say … The people involved in the motorsports area here had a clear vision, they could see a definite need in the motorsports industry … They identified that need and weren't prepared to let the idea go …'
(Significant other, interview 2002)

'If they haven't got the drive to push the idea, then it's difficult to convince the other executive roles within Wodonga Institute of TAFE that this is a good idea for Wodonga Institute of TAFE, because essentially we're all busy doing our core business anyway, why would we take on a new bright idea if you weren't prepared to push? … If you can't garner that support in the first instance, there's very little [chance of getting the idea] in … place.'
(Senior Manager, interview 2002)

Thus there are some factors that are more than skills developed through training. They are inherent factors in people's make-up, enabling them to persevere where others will give up.

4.1.4 Management – an enabling factor and a barrier

From an organisational perspective, passion and the ability to sustain belief in an idea can be supported, or inhibited by management style and organisational culture.

i Senior Management

The management style of Wodonga Institute of TAFE encourages departments to function as parts of a differentiated organisation, characterised by mechanisation and standardisation (systems and quality control), specialisation (functional, management and work processes) and coordination (Bennis, Parikh and Lessen 1994). There have been a number of Directorate-instigated innovative projects[7] showing a personal commitment to innovation and leading by example (Dunphy and Stace 1992, Eadie in Downes 1998), but at the time of the motorsports program this did not extend to any systemic way of supporting practitioners to develop entrepreneurial skills.

However, the Motorsports Department identified Directorate support as critical to the success of the program's development. The impact of Directorate was seen as having three key aspects - two enabling and one a barrier.

---

[7] The QuickHut project , supporting the first program of Flexible Learning Leaders, Artist-in-residence program, Institute Innovation Committee 2003 and the Staff Exchange project with an inter-state TAFE Institute.

The first aspect was willingness to consider an idea outside the normal program areas of the Institute. Directorate was seen by the Motorsports Department to be medium risk-takers in committing some resources to the development of a program in a new area.

> *'... my manager above me and Wodonga Institute of TAFE managers were very lateral in their thinking. I think if I had have tried this 10 years ago, this may not have got off the ground, even past presentation stage ...'*
>
> (Motorsports instigator, interview 2002)

The second aspect was having a champion at Directorate level. The motorsports training idea had been put forward before:

> *'The previous head of department of engineering ..., he had a real passion for motorsports. Unbeknown to me he'd come up with a similar concept many years before, but he approached a Director of Wodonga Institute of TAFE who was pretty cosy in his job, things were ticking along okay, so he didn't need to go out on a limb with a concept like that.'*
>
> (Department manager, interview 2002)

The current idea was put forward to another member of Directorate, but received no support. However when the idea found a champion at Directorate level willing to push the idea and its value to the Institute, the idea was seriously considered. This strategy, of finding a champion within Directorate, appeared to overcome the organisational barrier of having no system to process innovative ideas. The champion was able to act as a conduit to Directorate from the department, giving guidance on what information Directorate required.

The third aspect was the manner in which the program was supported. This was identified as a barrier to development by a significant number of interviewees (motorsports staff and internal significant others). Directorate was perceived as to be mainly interested in the bottom line, accountability-focused and somewhat adversarial in their approach. Requirements for justification of each proposed stage - being in the form of written proposals, statistics to justify expenses, and reports, was viewed by those 'at the coalface' as 'unnecessary paperwork' and a barrier to be overcome rather than risk management.

'The management was ... much and all as they were supportive, and they were ... and I can understand it being tentative ... maybe should have been a bit more risktakers ... it was like putting business plan after business plan and taking these little, short steps every time.....to me I would have taken the quantum leap.'

(Motorsports instigator 2002)

This perception may have been significantly influenced by the multiple realities of work practice (Guber 1994) within an organisation. It was echoed by one Directorate research participant who articulated the difficulty in communicating to practitioners the reality of having to make hard decisions on allocating limited resources to competing priorities. It can also be seen in the fact that, despite identifying the importance of having a Directorate champion, no Motorsports Department member or significant other identified Directorate as a resource - an additional skill set which could have been utilised. Whilst there is an inherent tension in Directorate wearing two hats, that of the expert consultant and the judge, amongst Directorate there is a valuable skill set not being utilised in the process of developing innovative ideas at Wodonga Institute of TAFE.

ii   Department management

At Wodonga Institute of TAFE, a practitioner with an innovative idea generally approaches their Manager. They may be supported and the practitioner encouraged to follow through with further research and development of the idea ... or the idea may be dismissed. Ideas which are dismissed are then lost to the organisation.

The management style of the Metal Fabrication and Welding Technology Department at that time could have been described as visionary and developmental, where emerging opportunities were seen as part of the department's organic development. It had the characteristics of a 'pioneer organisation' (Bennis, Parikh and Lessen 1994), a strong identity, flat management structure, flexible approach to operation, commitment of practitioners, intimate knowledge of customers and supported entrepreneurial creativity.

There was some discomfort felt by Directorate with the management style of the department, which was seen as too loose and not always meeting accountability requirements. However this style of management actively encouraged practitioners to take an entrepreneurial and proactive approach to addressing issues.

> '... my management style is as far away from authoritative as possible and I try and encourage the staff ... it's a total open door policy ... All that, I believe, works towards having a staff that will generate ideas. You'll never have an entrepreneurial approach or create a situation where good ideas, good work practices can come if you don't have a good workforce. You can't force people to come up with ideas, you've got to create the environment for that to happen, and I think that's what I've achieved here.'
>
> (Department manager, interview 2002)

The motorsports idea eventuated from the department's deliberate approach to addressing the perceived issues of a future downturn in demand for their training. In conducting informal brainstorming sessions over a number of months, the department manager created an environment which encouraged an entrepreneurial approach to problems and stimulated innovative ideas to be put forward.

4.1.5 Culture and environment

'... a key factor in fostering innovation is a supportive workplace environment.'

(Department manager, interview 2002)

Environments which foster innovation show a number of critical characteristics (ANTA, Shaping our Future, Innovation through Partnerships 2003):

■ learning and workforce development

■ a culture that embraces experimentation, risk, diversity, permission to try and rewards entrepreneurial behaviour

■ providing intellectual space (allocating people time and resources from the pressures of everyday workloads to think innovatively)

■ entrepreneurial leadership, where management is proactive in demonstrating and supporting innovation and entrepreneurial behaviour

■ an organisational culture of trust, encouragement, confidence and empowerment to express ideas.

These factors were reflected in the management of the Metal Fabrication and Welding Technology Department.

'So, we sat down, just our department, the Metal Fab Department, ... and decided to pour a lot of energy into ways that we could reinvent ourselves ... We sat down just about every smoko or lunch - we all sit together and share ideas and in all staff meetings and after work around a beer we'd talk about ways we could go forward ... We would have come up with more than a hundred ... ideas during the course of the year. Most of the ideas weren't new and we were just rehashing things that we'd probably done in the past, and none of it really had the legs. Then we hit on the idea (around about probably August) we hit on the idea of motorsports training.'

(Department manager, interview 2002)

In contrast, the environment and culture of the Engineering Department did not appear conducive to innovation and change. Although their enrolment rates were declining (reflecting an industry and statewide trend), there had been no ideas from the department about different ways of doing things to try to stem the decline. Teachers were not seen as entrepreneurial. (Journal entry: [planning day review] Sep 01)

'No [the Engineering Department] were totally disinterested [sic]. The manager that was in there didn't want to be a part of it at all. He found it quite confronting and felt that all we were interested in was taking over ... We got a similar feedback from Electrotech, we got a lot of resistance from there as well.'

(Department manager, interview 2002)

The then manager of the Metal Fabrication Department deliberately worked to create an organisational environment and culture within his department which encouraged staff to be entrepreneurial. That the motorsports idea was the one 'idea with legs' out of all the ideas considered over a long period of time supports the notion that to capture innovation, it's important to have a culture that supports new ideas and accepts the risk of failure of some ideas.

The VET system has embraced innovation as a key focus in moving forward. Wodonga Institute of TAFE, through its strategic directions and objectives (2004), aims to build its innovation systems and programs. This investigative project supports the view that successful innovation at Wodonga Institute of TAFE needs practitioners with entrepreneurial skills working within an environment that fosters innovation. The challenge for the Institute is to create that environment. There is a need to examine its organisational structure and culture.

i   Organisational change

It seems that the timing of the idea of motorsports was serendipitously fortunate. If motorsports hadn't been seen by Directorate as a solution to declining enrolments, wasn't pushed by persistent people, and hadn't emerged at a time of organisational change (a new CEO) would it have eventuated. Most probably not. At that time (2000), there was no organisation-led, systemic approach to capturing innovative ideas, and no formal, documented systems to support the development of new initiatives.

In 2003, Wodonga Institute of TAFE formally recognised the importance of innovation and the need to respond organisationally. An 'Innovation Committee' was set up, beginning initially with a band of enthusiastic volunteers who were tasked to come up with strategies to support innovation. Even in the early stages, lack of time, or being too busy to change was noted as a problem (Journal entry: [Innovation team meeting notes] Jun 03). Innovation Team members found it difficult to attend meetings regularly as this was a role in addition (and not factored into) their job roles. 'Growth' of the committee and its influence stopped because lack of time was an unavoidable constraint (Senge and others 1999). Those that did attend were unable to give much support to follow-up tasks because of other commitments and 'core business' priorities. 'Being too busy', identified by others as a barrier to organisational change (Eadie 1997 in Downes 1998), was, and continues to be, a barrier to organisational change in Wodonga Institute of TAFE.

In other instances where support for change has included financial and authorised human resourcing, the results appear to have been more positive. Less visible, longer-term strategies supporting the development of innovation at Wodonga Institute of TAFE have included:

■ supporting flexible learning fellowships (a program for practitioners to explore the latest developments in flexible learning strategies and their potential for organisations)

■ supporting flexible learning leaders (a program for practitioners to link with other leading practitioners in sharing and further developing ideas about flexible learning strategies)

■ supporting professional development (Masters program, post-graduate educational leadership program)

■ appointment of an innovation and professional development coordinator

■ supporting action-learning models of professional development (Learnscope, Reframing the Future projects).

All of these strategies have been formally recognised (and resourced), not just an addition to people's current roles. However they are not necessarily 'visible' to the majority of Institute personnel who would not perceive these activities in terms of supporting innovation. Only one non-management research participant made any reference to these strategies supporting innovation at the Institute (Journal entry: Sep 03).

This investigative research project supports the notion that to develop an entrepreneurial culture, Directorate must foster an environment that promotes, encourages and rewards innovation (Douglas in Australian Institute of Management 2001).

ii   Multiple realities within an organisation: role-related perspectives

In the motorsports case study, encouragement was seen by the instigator and Motorsports Department to be minimal, with no extrinsic rewards to balance the extraordinary amount of work required to develop the program. They perceived the 'reward' for their effort to have come from industry recognition, not acknowledgement by Wodonga Institute of TAFE. The Directorate view, articulated in interview, is different. They perceive the Institute has given significant support to the program within the Institute's limited discretional spending.

Like most organisations, and certainly all publicly funded educational organisations in Australia, Wodonga Institute of TAFE has a hierarchical structure. It is entrenched within the management structure of Wodonga Institute of TAFE and its culture, and reflected in roles and responsibilities, access to information, participation in issue discussion and consequent knowledge and understanding of what is happening throughout the Institute.
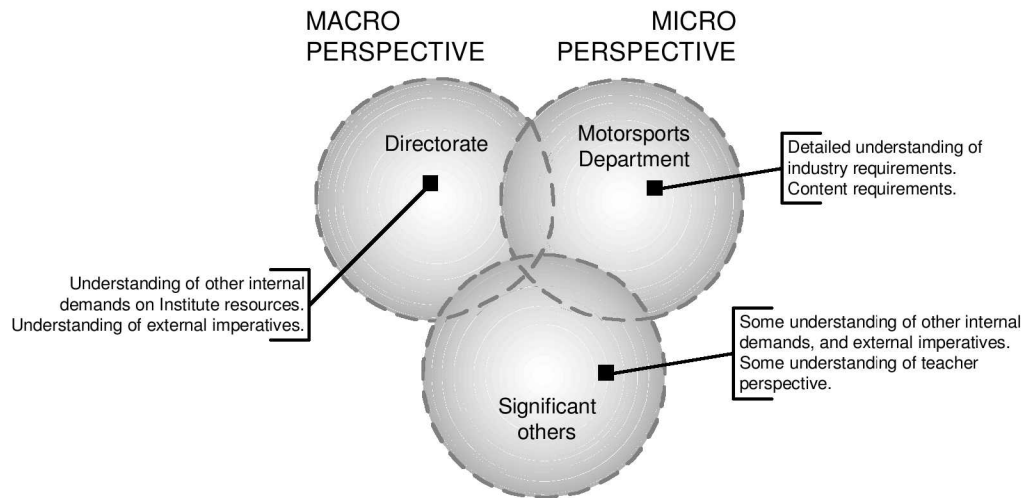
Figure 9: Interaction between work hierarchies

Directorate has access to all information pertaining to Institute operations and must set priorities and make decisions on resourcing competing demands. They have a much deeper understanding of the impact of national and particularly state policy on the organisation, and some of the constraints that creates. They operate from a macro perspective within Wodonga Institute of TAFE. They do not have a detailed understanding of the nature of the industry sectors of motorsports, the industry imperatives which drive it and the 'culture' or ethos of the sector.

Motorsports Department teachers operate within a micro-perspective within Wodonga Institute of TAFE. Their expertise and value to the organisation lies within their extensive knowledge of their teaching area, the depth of understanding they have of the related industry sectors, the contacts they have within these sectors and their ability to bring industry and education together through vocational education and training.

These differences in realities (Guba and Lincoln in Denizen and Lincoln 1994) were reflected in tension between the two groups which often stemmed from lack of understanding of others' viewpoints (Journal entries: [planning day] May 01, May-Sep 01, [planning day] Sep 01, Feb-May 02, Sep-Nov 02).

This was recognised by Directorate:

> '... It became clear that although I'm sitting here and I'm dealing with the whole of Wodonga Institute of TAFE and can see the whole of Wodonga Institute of TAFE and all the interconnections and the limitations and the constraints and the opportunity cost and balancing the demands of different departments, when people are emotionally involved and sitting in a position which gives them quite a different view of the organisation ... it's a very hard thing to convey across ... We all have some assumptions about what people do understand, and no matter how much you broadcast it, people lock into things that are of interest and close to them ...'
>
> (Senior Manager, interview 2002)

Unless there is some communication of the boundaries, it can be difficult for practitioners to perceive management constraints. This was reflected in Motorsports Department comments on resourcing decisions and reporting requests made by Directorate (Journal entries: Nov 01, Mar 02, Sep 02, May 03, Aug 03). General teaching and administration staff have limited exposure to broader issues such as the competing demands by Institute departments on limited resources and planning for long-term developments. The differences in perspectives emphasise the importance of shared decision-making and of communicating perspectives.

There were two formal planning sessions where the Motorsports Department and Directorate jointly set directions for the program's development. The differences in perspective were quite obvious during the sessions observed by the practitioner. As a model for a joint approach to dealing with implementation issues of innovative ideas (projects/programs), the planning day (Sep 01) provided a constructive environment for joint exploration of these issues - provided all recognise that diversity of opinion is an important part of working collaboratively.

4.1.6   Workload

The amount of work involved in implementing motorsports was identified by all participants as a significant issue. Participants identified that to implement an innovative idea, the thinking, planning, researching, gathering evidence and canvassing industry support had to be done in personal time. Workload calculations in the Institute do not allow for the extra time needed. There is no visible system for accessing release to do these tasks. In the case of the motorsports program, there were three distinct stages of 'effort'.

First there was initial groundwork in researching the idea and gaining industry support. Refining the idea and researching the practical delivery and industry requirements involved a significant amount of time over a six month period. This was largely the instigator's own time at night and over weekends as he continued to fulfil his normal teaching commitments during working hours.

'It's a lot of hard work. And if I didn't have a very supportive partner … if she hadn't been so supportive and put up with my late nights of pacing the floor and not being able to sleep … I don't think anyone else could nearly do it. I owe a lot to her.'

(Motorsports instigator, interview 2002)

The second stage of effort was presenting the idea to Directorate and undertaking further research to answer their queries.

'The Senior Management team then directed the department to develop a business plan … They looked at what would be the opportunities for us … particularly also what would be some of the costs involved … and very early on we looked at the risks associated with developing this sort of program.'

(Senior Manager, interview 2002)

Once Directorate was convinced it was an idea worth exploring, resources were made available to undertake further research into its feasibility. This was the first instance of tangible organisational support for the idea after a significant amount of personal time and effort had already been expended.

'… we invested in the business planning stage. We gave them $5,000 to buy some time to get somebody to do that within the department in the very early stages.'

(Senior Manager, interview 2002)

The third stage was the time needed to implement the program. In responding to industry requirements, the Motorsports Department had to ensure the training met all competency requirements, prepared the students for the exacting performance standards required by the motorsports sector and set up a structure for students to gain wide-ranging race-support experience. The selling point of the program to industry was the ability of students to slot neatly into existing race teams. Motorsports students had to be seen working at race meets for the program to have wide-spread industry credibility.

'… A lot of their ideas are developed in their own time - and they put an inordinate amount of hours into it … A lot is a labour of love, they wanted to do it, they were incredibly enthusiastic …'

(Senior Manager, interview 2002)

'Nearly every week there were more and more opportunities, and we couldn't and we still can't follow up on them because we are one person each and there just aren't enough hours in the day.'

(Department manager, interview 2002)

How many teachers/practitioners have innovative ideas but do not follow them through because they are unable (or unwilling) to devote the personal time needed to developing the idea? The quotes above indicate that, at the time of the development of motorsports, a practitioner with an innovative idea would need to be prepared to devote a significant amount of their personal time to developing and implementing the idea.

4.1.7 Being a public Institution

One of Australia's broader economic and social objectives is to build its innovative capabilities capitalising on the 'knowledge economy' (ANTA 2002). Australia lacks the population base, employment conditions, economic infrastructure or global positioning to compete with other countries on a mass production basis. It can however, become a key strategic player through:

- value adding to raw and partially developed products by developing refined processes (for example niche manufacturing, new technology components)

- developing expertise in niche areas with low-volume but high-return such as biotechnology (for example cochlear ear implant), applied medical research (human genome project), pharmaceutical research and agricultural research (disease resistant wheat strains)

- developing expertise in niche areas supported by global communications (specialised software development).

'TAFE [is] seen to play an important role in supporting innovation in Australian businesses through skill development, applied research resulting in new products and processes, and its flexible delivery methods enabling it to meet the challenges of providing training to small, dispersed populations.'

(TAFE Directors Australia 2003)

This is recognised by the Victorian Office of Training and Tertiary Education through its 'New and Emerging Skills Unit' which has a primary focus of investigating and supporting emerging skills, new technologies and work organisation and their implications for VET (Shea 2004). However the dilemma for TAFE in needing to be innovative and entrepreneurial in servicing the growth of the knowledge economy and its need for more intangible skills and knowledge, is to be able to continue to meet the immediate [but declining] labour market needs in more traditional areas (Noonan 2001).

In regional Australia particularly, TAFE institutes play a critical role in the educational and economic infrastructure of their regions (Skilling Australians for the Future 2001). They are expected to:

■ meet diverse community expectations

■ cater for disadvantaged groups

■ provide programs in a range of areas for which there is low demand and which may be economically unviable to deliver.

Meeting these expectations and community service obligations strains available resources - particularly when student numbers for classes are close to being economically unviable. With development of its regional community as a nominated goal and direction from 1995 to the present (Institute Strategic Plans and Directions 1995-2004), Wodonga Institute of TAFE takes its corporate citizenship role seriously. Wherever possible it meets regional training needs although often this stretches available human and financial resources (Institute over delivery statistics 2000-2004, CEO/Director end-of-year address to staff 2000, 2001, 2002, 2003).

The Office of Training and Tertiary Education is the Institute's major client. OTTE views itself as an outcomes purchaser with TAFE institutes (as semi-autonomous entities) making funding decisions within their global budgets (OTTE Senior Manager interview 2003). However it is not an equal relationship. Wodonga Institute of TAFE is also accountable to OTTE for its operations and subject to meeting OTTE nominated directions. In some areas the Institute cannot decide not to offer training (for example traineeships). The need to maintain the provision of a public service according to OTTE requirements and community expectations can hamper TAFE Institutes' ability to support innovative ideas.

'... a lot of people had put their heart and soul into this grand vision, and we also had to remind people a little bit, that fundamentally and primarily, we are a public provider of education and training - that's our mission. The government charges us to be entrepreneurial to some degree ... but that's all. That should never become the primary reason why we do things.'

(Senior Manager, interview 2002)

Directorate clearly identified this as a dilemma in decisions about supporting the motorsports program.

This limitation can be seen in the quote below:

'... we couldn't service the debt alone and the state wouldn't allow us to borrow ... This Institute's publicly owned, it's not a company that can just go out and invite a partner in, create a joint venture, borrow a few million bucks and go and invest it ...'

(Senior Manager, interview 2002)

As a public institution, Wodonga Institute of TAFE needed to balance the demands of motorsports (which at one stage was seen by the Motorsports Department as having potential for multi-campuses nationally and internationally) with the public duty of continuing to service the vocational education and training needs of the local community.

i   Infrastructure within TAFE as a public provider

Being run within a public training provider, the motorsports program was also subject to the existing student management, time-tabling and room allocation systems. Motorsports training has pushed the boundaries of flexible and holistic delivery within Wodonga Institute of TAFE, highlighting some inflexibility. The motorsports delivery and assessment methodology, particularly the strong emphasis on race team participation, put pressure on timetabling of rooms, reporting of results, timetabling teacher loads, student supervision and tracking of student contact hours.

Current Institute systems do not appear to be conducive to holistic delivery and assessment of multiple competencies over a 12 month period. This presents some barriers to motorsports training because of the critical importance of knowledge transfer. Students need to be able to apply their knowledge to a variety of machines in a range of situations (workshop, racing, rallying, testing). This happens throughout the year as they get experience working with different race teams. It cannot necessarily be done in a 'term' or 'semester'. However being able to demonstrate this knowledge transfer is an important part of employability in the industry and a selling point for motorsports training and student placement with race teams.

For the motorsports industry it is imperative that students have considerable race environment experience - to have the technical skills is not enough. Students are required to perform their skills at industry standard - significantly higher than competency (in terms of speed, responsiveness and problem-solving approach). Motorsports staff identified that delivery was best done holistically, with assessment being a summative 'project' rather than at the end of individual or small groups of competencies. This presented some challenges to Institute result reporting systems and department assessment recording. Whilst contextualising existing competencies (engineering) to the motorsports environment created opportunity for motorsports, the resulting challenge was to continue to meet industry expectations within the more rigid framework of Registered Training Organisation reporting and record-keeping requirements (Journal entry: [planning day] Sep 01).

An obvious frustration of the Motorsports Department practitioners was the budget limit on equipment. An observation by a 'significant other' was that the department was lean on equipment of the type used by technicians in race teams (Journal entry: May 02). This frustration was echoed by Directorate but from a slightly different perspective. They could see motorsports being an 'equipment budget black hole'. Reconciling these two perspectives within the budget of a regional TAFE Institute that needed to offer a broad range of programs to its community, was a cause of considerable tension. The tension also reflected the differing perspectives related to roles. Motorsports staff were very clear about the type of equipment they needed (and when). Their perspective was driven by what was happening at the race track and in team workshops. Directorate was very conscious of needing to address the equipment needs of all departments whilst maintaining overall fiscal sustainability. This resulting tension indicates a need for more involvement of Directorate as a resource in feasibility and planning stages so that each group develops more understanding of the constraints and driving factors of the other.

ii   Meeting twin imperatives

A factor clearly identified as a key reason for the motorsports idea gaining support was that it met an organisational imperative of Wodonga Institute of TAFE as a local public VET provider in the region (Journal entry: [motorsports planning day] Sep 01). Packaged within the Metals and Engineering Training Package, motorsports was presented as a way of rebuilding Engineering, enabling the Institute to stimulate demand for engineering training as well as meeting an unmet market need. The motorsports 'solution' could be implemented within a reasonable cost framework. For Directorate this was an acceptable risk.

'... be mindful that we had to deliver the whole of the Diploma requirement because it is publicly funded, and see what the gap was. Now if the gap had have been huge, it wouldn't have been a viable idea ... it wasn't just about earning entrepreneurial dollars, it was about fully utilising our public funding. This is a program that started always with twin imperatives.'

(Senior Manager, interview 2002)

4.1.8 Summary – enabling factors and barriers to innovation at Wodonga Institute of TAFE

In addressing the first research question, this chapter has identified significant enabling factors which contributed to the motorsports program making the transition from innovative idea to innovative program.

These were:

■ the idea addressed an organisational imperative as well as being innovative

■ specific entrepreneurial traits of the motorsports instigator including passion for and belief in the idea, the ability to work around and beyond barriers, a willingness to take significant risks and capacity to work in an uncertain environment for extended lengths of time

■ supportive management at a departmental level, and a departmental environment which encouraged innovative ideas and entrepreneurial practitioners

■ a champion at Directorate level and

■ Directorate willing to take a risk.

There were also barriers which made the transition from idea to program more difficult. In addressing the second research question, they have been identified in this chapter as:

■ the limitations as a public provider of VET

■ the extra work required beyond existing workloads to get the program up and running

■ inflexibility of Institute systems in regard to extended holistic delivery and assessment

■ the extra skill sets needed to meet information requirements of Directorate

■ multiple role-related realities and lack of communication to overcome these

■ lack of support systems to assist practitioners to develop skills needed to follow-through with their innovative ideas

■ lack of resources and competing Institute priorities for existing resources.

These enabling factors and barriers, summarised above, have obvious implications for work practice within Wodonga Institute of TAFE and the wider VET sector. In the next two chapters the work implications of these enabling factors and barriers are explored to look at the third research question - how innovation may be better captured at Wodonga Institute of TAFE.

Chapter 5
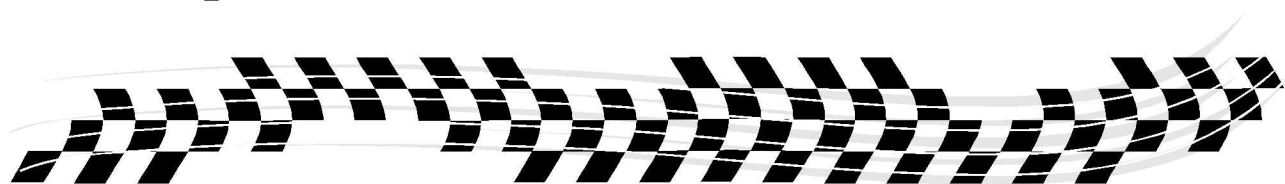
IMPLICATIONS FOR PRACTICE

'There is no absolute truth - only what is useful to increase our understanding and enrich our lives.'

(Anon)

The emergent themes identified in Chapter 4, reflect the different perspectives (multiple realities) of those involved in the development of the motorsports program. This chapter looks at their implications for work practice - from these differences what can Institute practitioners and the Institute itself learn? What are the implications for vocational education and training in Victoria?
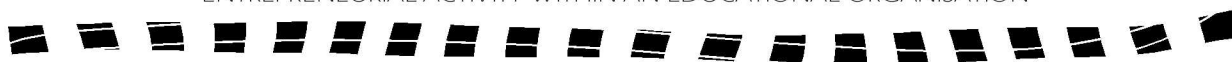
5.1 Within Wodonga Institute of TAFE

'... the more effective organisations are at learning the more likely they will be at being innovative or knowing the limits of their innovation.'

(Argyris 1999, pxiii)

5.1.1 Organisational change

'Entrepreneurial behaviour in an organisation usually derives from an internal culture that actively fosters such activities.'

(Douglas in Innovation and Imagination at Work 2003, p64)

Individuals have mind-sets and value systems which can initiate, support or resist change. Organisations have cultures and share a paradigm - basic operating assumptions that hold a system together. They're based on shared or accepted values, perceptions and practices. They are rarely explicit but exist often unquestioned and unchallenged (Kuhn in Bennis, Parikh and Lessen 1994; Simsek and Seashore Louis 1994). Having worked at Wodonga Institute of TAFE for ten years, this practitioner's perspective is that the Institute has long regarded itself as innovative. Innovation has been part of the official (strategic plans) and unofficial rhetoric (end of year Director's speeches), but development of innovative ideas appears to have been largely serendipitous.

This view is supported by data from this investigative research project which indicates that innovation is happening at an individual level, rather than organisational capability for innovation being the main driver.

There have been some 'whole of organisation' developments, but they appear to have been dependent on obtaining specific external funding. They include participation in the initial Flexible Learning Leaders Program (Horton 1999), development of the LIRNspace[8], and a number of small to medium projects through OTTE's SME (small to medium enterprise projects) funding[9]. Directorate has delegated some decision-making to collaborative management teams comprising a cross-section of management within Wodonga Institute of TAFE. These teams also provide advice to Directorate.

However, for ideas which have arisen from within, there has been no systemic support. Practitioner initiatives such as the motorsports program, introduction to VET programs for people with a disability, delivery in interior design, forestry training in rural areas, have all developed serendipitously. There has been no explicit, planned, whole-of-organisation approach to innovation and developing innovation as an organisational capability.

In contrast, Swinburne Institute through a 'whole-of-organisation' approach has planned and is working to make innovation a core capability. Innovation is perceived as a value-creating activity rather than value-adding (Bissland, et al 2004, Mitchell, et al 2003). Its Innovation Framework for 2003-2005 (Bissland, et al 2004) details how Swinburne Institute plans to develop characteristics of an innovative organisation (Callan in Karmel 2004). Through analysis of divisional arrangements and processes, promoting and resourcing innovation in teaching and learning, professional development in innovation skills and developing strategies to increase learner innovation capability; Swinburne Institute is involving its whole organisation in absorbing, internalising and consciously concentrating on innovation.

With evaluation strategies developed for each stage, practitioners are encouraged and resourced to undertake specific professional development in innovative and entrepreneurial related areas. Through these strategies Swinburne Institute is supporting practitioners to become committed to a shared vision, as opposed to being merely compliant (Senge 1990).

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[8] The LIRNspace was a major redesign of a student learning area and associated office space to incorporate multiple computer workstations with helpdesk support in a 'library-like' environment. A technology-driven, innovative approach to student support and learning, it appears to have been highly successful. Patronage is high by both Wodonga Institute of TAFE and La Trobe University students.

[9] Jumpstart: education for disengaged youth, delivery of Diploma of Hospitality by flexible delivery, flexible learning for Aboriculturalists, distance delivery of Certificate IV in Community Services.

Reflecting the findings of this investigative research project, Swinburne Institute's Innovation Team has identified that having a 'true believer', an enthusiastic and dedicated 'champion' at executive management level, was the critical factor in Swinburne Institute taking this active, 'whole-of-organisation' approach to fostering innovation within (discussion with Bissland, Papalia 2004).

Whilst innovation is implied as an important value of Wodonga Institute of TAFE, and part of the way Wodonga Institute of TAFE conducts its core business, work practice and organisational systems place it on the periphery. For innovation to be more than serendipitous at practitioner level, it must be addressed through a 'whole-of-organisation' approach - with the same level of Directorate and management commitment that is given to fiscal management. Supporting innovation should be a key performance indicator for all managers from the Director downwards. This investigative research project indicates that innovation support should include business development assistance, financial resourcing and promotion and development of support strategies for practitioners.

5.1.2 Supporting entrepreneurial practitioners

'Entrepreneurship is the link between invention, innovation and success.'

(Douglas in Australian Institute of Management 2001)

According to Kuratko and Hodgett (1995) employees within an organisation who exhibit entrepreneurial characteristics can be said to be intrapreneurial - that is, operating in an entrepreneurial way within the boundaries and structures of an existing organisation. They define the term intrapreneurship as:

'... entrepreneurial activities that receive organisational sanction and resource commitments for the purpose of innovative results.' (p95)

To respond with creativity and flexibility to training issues and opportunities, employees need the capacity to operate with a high degree of autonomy (Downes 1998) as an innovative environment is one which is unpredictable and characterised by continual subtle shifts. Intrapreneurs need to be encouraged and supported, instead of being seen as a threat to the status quo. Passion, perseverance and belief in ideas are key factors in successful innovation and for Wodonga Institute of TAFE's continued growth and development.

'To establish corporate entrepreneuring, companies need to provide the freedom and encouragement that intrapreneurs require to develop their ideas.'

(Kuratko and Hodgett 1998, p98)

The challenge for Wodonga Institute of TAFE in supporting entrepreneurial practitioners (intrapreneurs) is balancing AQTF accountability requirements with allowing intrapreneurs enough autonomy to be innovative. This requires a cultural shift at Directorate level in delegating responsibility down the management chain, as well as making current systems more flexible - particularly those around authorities, signing, reporting and planning.

Kuratko and Hodgett (1995) suggest four organisational factors in supporting innovative thinking:

1   the presence of explicit goals

2   a system of feedback and positive reinforcement

3   an emphasis on individual responsibility (confidence, trust and accountability)

4   rewards based on results.

These factors provide a useful basis for planning Institute strategies to support entrepreneurial practitioners (Eadie 1997 in Downes 1998) and a process for engaging the Directorate as an organisational resource through:

■   *Capacity to lead* - Encouraging and practising open communication, resourcing innovation and embedding innovation in 'whole of organisation' strategies and action plans.

■   *Capacity to innovate* - Supporting professional development of practitioners in extended skills such as planning, researching and presenting ideas; becoming more knowledgeable about specialist expertise within the organisation, and developing the skills to identify resources (financial and human) needed to support the development of ideas.

■   *Capacity to implement* - Developing systems to support innovation and developing and implementing strategies to develop an innovative culture.

Wodonga Institute of TAFE must find a way of balancing the value of innovative activity with core activity -

reflected in the power balance that must be achieved between the management role of Directorate and the

implementation role of departmental practitioners. This investigative research project supports the contention that

both organisational roles must be valued equally if the contribution of practitioners to Wodonga Institute of

TAFE's continued growth and development is to be optimised.

5.1.3 Capturing innovation

The process the Metal Fabrication Department adopted in fostering new ideas provides an example of Institute

practitioners acting in an entrepreneurial and innovative way.

That this process was sustained for almost 12 months indicates it was not just happenstance, but a considered

analysis of the external environment, scenario planning and a deliberate attempt to harness the creativity of the

department practitioners. In the case of motorsports training, innovation was clearly captured at a department

level. The research question 'How can the Institute better utilise this knowledge to better capture innovative

ideas?' looks at how innovation can be more effectively captured throughout the organisation.

Downes (1997) identifies three critical factors for implementing change which can be applied to embracing

innovation as a core organisational value and function:

■　　special structures and processes dedicated to implementation

■　　adequate resources

■　　strategies for dealing with human resistance.

Wodonga Institute of TAFE does not appear to address any of these factors. There is no explicit whole-of-organisation approach to supporting innovation at practitioner level. Currently, Institute practitioners need organisational 'know-how' to get what they need. This is inefficient. Those who are new or don't 'know the system and who to ask' are left unsupported. In theory, department managers should have this organisational knowledge and pass it onto practitioners in their department. In practice a manager may not be supportive, or be too busy with the day-to-day running of the department to give the support needed.

There is no explicit support for other practitioners to be able to commit their time to exploring innovative ideas/directions. There doesn't appear to be a mechanism for reducing a teaching load to explore an innovative idea or to develop a proposal for Directorate consideration. This is a key issue in supporting innovative ideas to develop to the point where they can be evaluated.

Whilst innovative projects are included within the role of the manager of strategic projects, supporting innovation across and within the organisation involves more than individual projects. With the Innovation Committee currently in abeyance, no mechanism exists within Wodonga Institute of TAFE for formally capturing innovative ideas, and by extension, keeping old ideas alive or revisiting old ideas and conceptualising new uses for them. Putting promising ideas to the test is reliant on the 'idea instigator' having the preparedness to invest large amounts of their own time in the development of the idea, the skills to research the required information and the ability to pull all this together into a proposal.

The semi-autonomous nature of departments within Wodonga Institute of TAFE's organisational structure both enables and forces department managers to explore entrepreneurial activity to meet their commercial targets. However moving from core training provision (for example the 'recognised' training areas) to more entrepreneurial opportunities (for example specific niche areas such as motorsports) requires both business management expertise as well as educational expertise and industry knowledge. The 'Learning by Design' professional development program run through the Workforce Development and Learning Innovation Unit addressed some of the entrepreneurial skills needed by practitioners. However this was a one-off, OTTE funded program, there is no **systemic** approach to encouraging the development of the extended skill set identified earlier.

> *'There is no point in promoting your organisation as innovative or encouraging staff to be imaginative if there are no mechanisms to assess the ideas that will be generated.'*
>
> (Giugni in Australian Institute of Management 2001, p42)

Developing innovative skills (and supporting entrepreneurial traits) in practitioners is only part of the equation. For innovation to be supported at Wodonga Institute of TAFE there also needs to be a mechanism for capturing and recording all ideas. This is an important issue for Wodonga Institute of TAFE - unless the ideas are captured and documented when they are raised, potential and value-creating opportunities are missed.

5.1.4 Utilising human resources within the organisation

Traditionally, innovation tends to come from small businesses who have the flexibility and capacity to respond quickly and creatively to change. Like most TAFEs Wodonga Institute of TAFE operates in a similar way to a medium-sized business. Innovation in medium to large business often gets bogged down in bureaucracy, committees and untimely decision-making and resourcing (McKenzie in Innovation and Imagination at Work 2001). Whilst usually seen as a negative, the structure of larger organisations can support innovation ... with a little bit of tweaking.

Wodonga Institute of TAFE has, within its 'corporate services', expertise in:

■ research and planning (Research and Planning Unit, Strategic Projects Department)

■ financial management, budgeting and forecasting (Directorate, Finance Department)

■ human resource utilisation (Strategic Projects Department, Human Resources Department)

■ understanding of the VET system, issues and impact of national and global factors (Directorate, Research and Planning Unit)

■ flexible delivery options and technology enhanced delivery (Flexible Delivery Services, Workforce Development and Learning Innovation Unit)

■ curriculum and resource development (Training Design Department).

There appear to be three barriers to utilisation of this expertise by Institute practitioners - lack of knowledge, current organisational culture and resourcing.

Practitioners may not be aware of the specialised skill sets of corporate staff. Department managers play a critical role in bridging this awareness gap, but may not themselves be fully aware of what skills they can access. The 'connector' role of the practitioner (see Chapter 3) which developed during the investigative project is testimony to gaps in practitioner and department manager knowledge of the skills and services which can be accessed within Wodonga Institute of TAFE.

The organisational culture of semi-autonomous departments and internal charging for some services (particularly by Training Design) does not encourage practitioners to seek 'corporate' expertise. These costs are perceived by departments as unjustifiable, given there is no revenue yet coming from the idea. Whilst delivery departments are now (from 2004) able to access some supported expertise from the Workforce Development and Learning Innovation Unit, they must fund the time of the idea instigator. For some departments this is feasible, for others with slimmer budgets it is not. Promotional strategies and agreements between departments and Directorate need to consider the issue of real (hidden) versus perceived (visible) costs of services if innovation is to be embraced within Wodonga Institute of TAFE. Departments such as Training Design, Research and Planning, Marketing, Finance and Strategic Projects need to consider strategies to promote the full extent of their skill set within the organisation if they are to be better utilised by practitioners.

> 'Innovation can be driven from the bottom up or the top down, but if it is to be sustained it often needs both group and organisational support.'
> (Mitchell, et al 2003, p74)

Much of the extended skill set identified by various interviewees in this investigation rests with Directorate and corporate services within the organisation. They are untapped resources which could be utilised to support innovation.

i   Senior Management

This data from this investigative research project suggests that Directorate could be more fully utilised as a 'resource' during planning - particularly in the early stages. Their global perspective would help practitioners position their idea within Wodonga Institute of TAFE's business context. This involves a change in culture by practitioners and Directorate.

Practitioners would need to accept Directorate as a valuable resource within the organisation, not just as decision-makers. Directorate would need to move from the notion that practitioners should always come with a solution for discussion rather than presenting problems. This can be a limiting or discouraging factor (Senge, et al 1999), with practitioners reluctant to utilise Directorate as a sounding board/resource during the process of working out a solution to a problem. There would also need to be a maturing of the organisation to recognise that there will be times when all may work together and times when Directorate will need to make decisions - sometimes unpopular ones.

The change would also involve closer and more open communication between Directorate and practitioners, allowing issues to be worked through as they emerge rather than after they had developed. This may negate the development of the tensions prevalent in the development of motorsports - much of which was the result of differing, role-related realities.

5.2   Wider practice within VET

'The capability of TAFE staff is the single most important source of future value in the TAFE system.'

(Schofield 2002 in OTTE 2002)

5.2.1   Staff development

The importance of practitioners is recognised in official VET literature with the knowledge-based model of development placing a high value on the capacity of the individual to specialise and innovate (Ministerial Advisory Committee on TAFE 2002, p6). As Australia moves into a global society where knowledge is a tradeable commodity and innovative approaches and process become the tool of succes, the ability to learn, adapt, think creatively, and apply new and existing skills and knowledge in new ways becomes critical (Aspiring to Excellence, Nov 2002).

Professional development in entrepreneurial skills (INNOVATION: IDEAS that WORK 2002) will be particularly important for the VET sector in successfully capturing and supporting innovation through its most important resource - its people (for Wodonga Institute of TAFE, its practitioners and management).

The data from this investigative research project supports the importance of an extended skill set for VET practitioners … and managers. An evaluation of the success of the Swinburne approach will have significant implications for the VET sector and TAFE in particular, in supporting practitioners to develop the extended skill set needed to be entrepreneurial.

5.2.2 Minimising barriers

i Industry links

Significant success factors for the motorsports program were the links and credibility of the instigator and practitioners with the motorsports industry. With an ageing permanent workforce whose industry experience becomes less relevant with time, younger teachers on short-term contracts and shrinking funds for private providers, the VET sector may be limiting its links with industry, and its ability to respond and current knowledge.

The VET sector may need to consider the ways it interacts with industry sectors (particularly emerging sectors, for example bio-technology) and explore strategies such as industry exchange, development partnerships (between industry, TAFE and private providers) and symbiotic hosting (for example TAFE hosting an enterprise unit or an enterprise hosting a TAFE unit as part of a partnership project). This involves a cultural shift for TAFE Institutes, recognising that private providers may be competitors but also offer opportunities for valuable partnerships, and considering how to make TAFE more attractive as a career to industry practitioners.

ii Supporting innovation

There is a view held in OTTE that innovative programs come within an Institute's overall budget and support for these programs is a budgeting decision within each Institute (Senior Manager, OTTE, interview 2003).

'TAFE [is regarded] as entrepreneurial businesses supported by the autonomous college model in Victoria, with funding allocation by performance agreement.'

(AEU 2001)

Whilst it is possible for larger TAFE Institutes to support innovative ideas and pilot projects, for regional Institutes finding the necessary funds may be more difficult. There are not the economies of scale across the organisation to carry a large investment for the needed 'lead' time.

'Structures and practices exist within the sector which profoundly impact opportunities for the emergence of entrepreneurship.'

(Sadler in AEU 2001)

Funding for innovation in Victoria has traditionally been drawn from other funding areas in VET. With innovation funding capped, Institutes cannot access the extra funding needed to support the development of innovative ideas. Whilst innovation funding allows conversion of existing profile (government funded) training hours into new areas, for those Institutes who have used up their student contact hours meeting demand, there are no spare hours to convert. The result is performance punishment. Conversely, those Institutes who do not have the demand imperative have spare hours that can be converted into innovative areas. There does not appear to be any mechanism at present which allows resources to be redistributed to meet areas of high demand (Journal entry: Sep 03).

'There is general agreement that funding models need to be more flexible to support innovation at the local level to assist responsiveness to changing demand for work skills.'

(Australian Training Magazine Mar 2003)

This reluctance to redistribute funding from 'non-performing' to 'performing' TAFE Institutes appears to reflect the constraints of OTTE as a government department supporting public provision of VET. There may still be some distance before OTTE itself is prepared to 'walk the talk' in terms of practical support for building infrastructure to support innovation, rather than funding tied to specific program or operational outcomes.

The enabling factors and barriers identified in Chapter 4, and their implications as discussed in this chapter, form the basis for the recommendations in the next chapter.

Chapter 6
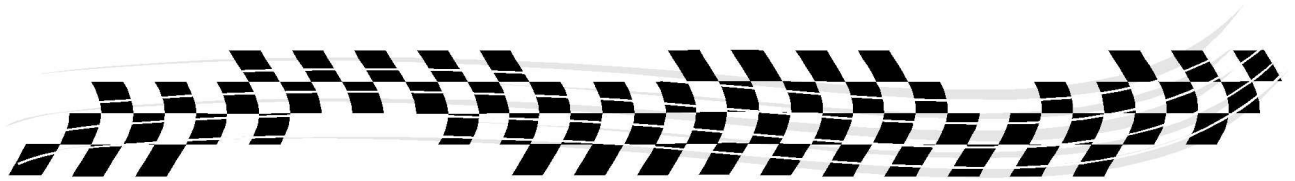
RECOMMENDATIONS

'To make it happen you've got to dream the dream and walk the walk and put up or shut up.'

(Motorsports teacher 2002)

Entrepreneurial development is seen as both a problem and an opportunity for Wodonga Institute of TAFE. The Institute has in the past and continues to identify significant opportunities for innovative development. Problematic for Wodonga Institute of TAFE is a lack of guidelines to support practitioners with an educational rather than business management background in converting perceived opportunities to viable enterprise development.

The implementation of any action from this investigative research project will depend on the extent to which it is blocked by individual and/or organisational defence routines such as day-to-day pressures, human resistance to change, inadequate resourcing, unanticipated events (Downes 1998), no advocate and lack of vigilant monitoring (Arygris 1999). It will also depend upon the perspectives of the decision-makers.

Entrepreneurial practitioners with innovative ideas place pressure on Wodonga Institute of TAFE's systems and processes. The personal qualities which enable practitioners to be innovative also result in inevitable challenges to the status quo. Innovative approaches to training make new demands on space usage, student supervision models, coordination models, technology infrastructure, etc.

Mitchell and Associates (2003) identify a number of strategies for fostering innovation in the Vocational Education and Training sector. They include:

■ unlocking resources, both financial and human intellectual

■ upgrading skill sets through practitioner training in entrepreneurship

■ better information sharing

■ partnerships to share the risk of innovative activity.

Although Mitchell and Associates' findings are directed at state training authorities, they are also relevant to individual organisations. The following recommended strategies for practitioners and the Institute respond to the third research question - how to better capture innovation at Wodonga Institute of TAFE. They are based upon data and analysis from this investigative research project and correlate strongly with the findings of Mitchell and Associates.

6.1 Recommendations for Institute practitioners

6.1.1 Evaluate your commitment to your idea

Do you have the sustained passion to sell your idea again and again and again? You will need to have enough belief in your idea to persevere in the face of rejection - by colleagues or management.

> '... you don't take 'no' for an answer. You just keep on going until you achieve your end.'
>
> (Motorsports teacher, interview 2002)

Developing your idea into a proposal takes considerable time and effort. Do you have the commitment to your idea to devote significant amounts of your own time to turning it into a proposal?

6.1.2 Share the vision

Explain, talk about the idea to others, listen to their perspectives. Sharing the vision creates allies and support, brings in other areas of expertise and shares the workload.

6.1.3 Be able to justify the idea and the resources needed

The justification doesn't have to be in financial terms; it may be in social capital, benefit to the community, market position for Wodonga Institute of TAFE, etc.

> '... [B] ... has some great ideas for the youth program ... none of which would have a significantly positive impact in dollar terms on Wodonga Institute of TAFE ... but would make a hell of a difference on the stress levels of our teachers so there's the benefit - the stress levels of our teachers are reduced. Be prepared to explore all sorts of benefits to Wodonga Institute of TAFE ...'

> '... If it's entrepreneurial in the financial sense in that it's going to make money ... that's one dimension to it ... but be prepared to explore socially entrepreneurial ideas as well. Are they good for the community? Good for Wodonga Institute of TAFE's standing within the community?
> Think of entrepreneurialism as more than just the financial benefits to the organisation. What are the social impacts and the social benefits of running these particular programs? ...'
> (Senior Manager, interview 2002)

6.1.4 Show a clear market gap with potential long-term need

The development of innovative ideas requires a significant investment of time, effort and money. With competing demands for a limited amount of funds, Directorate cannot afford to support ideas that answer a short-term need only. The outcome value to Wodonga Institute of TAFE - whether financial or social, must exceed the investment needed ... and be feasible within Wodonga Institute of TAFE's operating budget.

'... .we're a small TAFE Institute, resources are always limited, and even though it's a very good idea,

unless it starts in a way that the organisation is capable of dealing with, you're just wasting your time ...'

(Senior Manager, interview 2002)

Market research needs to clearly show that the need addresses an unmet training solution. The strengths, weaknesses, opportunities and threats to the idea need to be detailed in a cost-benefit analysis, with basic resource requirement estimates. This gives Directorate some idea of the extent of risk against the proposed benefits to the Institute.

6.1.5   Link the idea to Wodonga Institute of TAFE's core business or strategic directions

This allows more flexibility in accessing funding sources within and beyond the Institute.

'One of the things about this at the time, it wasn't just about earning entrepreneurial dollars, it was about

fully utilising our public funding. This is a program that started, always with twin imperatives.'

(Senior Manager, interview 2002)

6.1.6   Find a champion at Directorate level

Directorate must, in justifying money diverted from other Institute activities, rigorously examine the proposal put forward.

'Get your manager on board, or a powerful mentor, someone who knows their way through the system a bit and can help you negotiate ... someone that you feel has got a bit of pull in the system to try and put it through ...'

(Senior Manager, interview 2002)

A champion at Directorate level can advise of the risks Directorate needs to consider, potential limitations beyond the Institute and advocate details which may not be in the proposal.

6.1.7   Identify the risks

Map out an action plan for the implementation of the idea - identify the risks and control strategies so that they are manageable (particularly the financial risk). Directorate needs to balance the needs of the whole organisation. Their management responsibility is to ensure no one venture places the organisation at unacceptable risk or damages the Institute's credibility as a public provider to its community.

6.1.8   Use the specialist skills within Wodonga Institute of TAFE

Specialist departments and staff can provide advice for developing your idea and proposal. They include:

Marketing research	■ Marketing ■ Research and Planning Department
Forecasting	■ Research and Planning department
Course structure and training needs analyses	■ Training Design Department
Flexible delivery options and technology based course development	■ Flexible Learning Services
Budgets	■ Finance Department ■ International and Business Development Department
SWOT analyses	■ International and Business Development Department
Environmental scanning	■ Directorate ■ International and Business Development Department
Potential funding sources	■ Directorate ■ International and Business Development Department

6.2 Recommendations to Directors regarding supporting innovation at Wodonga Institute of TAFE

6.2.1 Recommendation 1 – Develop a system for capturing and evaluating innovative ideas

Wodonga Institute of TAFE Flexible Learning Centre is currently investigating the creation of a an ideas support mechanism (*Bright Ideas Exchange*) through the Institute's intranet. It is recommended that this development continue and be linked to a database. The 'Bright Ideas Exchange' would be promoted to all staff (including sessional staff) through:

■ Wodonga Institute of TAFE intranet

■ the online news prepared by the Marketing Department

■ a flyer with staff payslips

■ a presentation at teaching managers' meeting

■ presentation at department staff meetings

■ LIRNspace (Learning Innovation Resource Nexus) lunch presentations.

Through monthly or term themes staff could be encouraged to come up with ideas related to specific themes identified by the Systems Management and Review Team.

All ideas would be considered. The idea instigator would receive acknowledgement within a week and feedback within the month. It is recommended a formal mechanism be set up to provide a framework for reviewing all ideas submitted according to Institute priorities, strategic directions and capability (both human and financial), providing feedback to the idea instigator, and where the idea is considered worth following mentoring and assisting in the development of the idea. Through this mechanism, ideas instigators would be able to access staff with the required expertise within Wodonga Institute of TAFE. Membership would comprise representation from Directorate, management, practitioners, professional development, administration and corporate services, with annual nomination to each category. Participation would be recognised as an official Institute 'duty' as per existing formal committee systems (for example Board of Studies). Ideas worth further development would be allocated resources to support investigation of their feasibility. Managing this process would be explicit in the role of a Senior Manager (potentially the Strategic Projects Manager). Regular reports would be made to Directorate.

6.2.2 Recommendation 2 – Develop a mechanism for recording innovative ideas

It is recommended that a database be developed which would record all ideas by staff - including those not currently feasible. The database would be available to all staff through the Institute intranet, with regular reviews of past unfeasible ideas by the Innovation Committee. The database would be maintained and managed through the Strategic Projects Department.

6.2.3 Recommendation 3 – Set defined proposal guidelines

It is recommended the Institute accept *'What a Great Idea! Where to From Here?* Guidelines for presenting innovative ideas to Senior Management. These guidelines about Directorate requirements for innovative proposals have been developed as part of the research portfolio of this investigative research project. The guidelines indicate the boundaries Directorate acts within and the type and extent of information they require. The guidelines would be available through Wodonga Institute of TAFE intranet. They would be updated annually to reflect Institute priorities and organisational changes. The guidelines would sit within the responsibility of the Strategic Projects Department.

6.2.4 Recommendation 4 – Encourage staff to seek the expertise of relevant Directors in the idea development

It is recommended that Wodonga Institute of TAFE better utilise Directorate skills through Directors working with practitioners to develop the ideas with significant Institute-wide potential impact (for example delivery programs in new areas, ideas needing substantial capital investment). During development there should be joint decision-making where possible and clear setting of boundaries and expectations early in the development with more regular direct feedback throughout the process. It is recommended that Directorate nominate a Director to mentor proposals considered feasible by the mechanism proposed in Recommendation 1. It is recommended that where ideas have a smaller impact, staff be encouraged to seek an appropriate mentor to assist them in developing proposals and utilising Institute administrative systems.

6.2.5   Recommendation 5 – Provide resources to support an innovation skills professional development program

It is recommended that a professional development program on innovation skills be developed and promoted to practitioners. The innovation competencies (INNOVATION: IDEAS that WORK 2002) would comprise the core of the program, complemented by specific training identified by practitioners and Directorate. This could be run through the Workforce Development and Learning Innovation Unit of Flexible Learning Services - complementing and being complemented by the current technology-based program.

These recommendations are based upon the data of this research. They aim to support Wodonga Institute of TAFE in balancing the requirements of supporting entrepreneurial practitioners with innovative ideas whilst maintaining the system integrity and quality requirements of being a Registered Training Organisation under the Australian Quality Training Framework.

Chapter 7
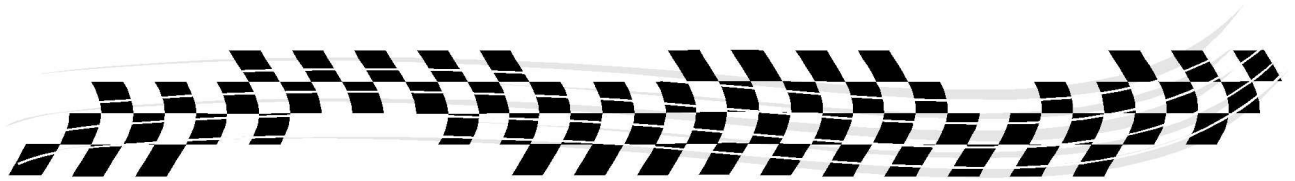
PRACTITIONER LEARNING – REFLECTIONS ON RESEARCH, INNOVATION AND WORK PRACTICE

'… we are continually both influenced by and influencing our reality …'

(Senge 1990, p78)

As outlined in Chapter 1, of this exegesis, the philosophy of practitioner research is to learn more about work practice through the intertwining of practical research and academic study. Reflecting on the evolution of this investigative research project reveals that, as practitioners, we are continually influenced by and influencing our reality. But this is not where it ends. As practitioners in an organisation we are also continually influenced by and influencing the reality of our colleagues and workplace culture, and ultimately work practice - our own and that of others. Through this investigative research project I, as a practitioner, have learnt about research, innovation and entrepreneurships per se, and innovation at Wodonga Institute of TAFE. Articulating this learning is the focus of this final chapter, completing this exegesis.

7.1 Learning about research

The aims of practitioner research and the work-based research model are for practitioners to become more skilled and knowledgable about their work practice, and to make a contribution to professional and scholarly knowledge. This research has resulted in significant learning for myself as a practitioner about research methodologies, research within the context of work practice, and the role research can play as a tool for examining the work practice and unconscious assumptions of self and others.

It has been especially valuable as a tool for examining work practice (my own and that of others) that is unconscious because we are too close to it. The research methodology allowed conscious investigation, giving a distance which allowed for critically subjective reflection. Through the reflection as a research practitioner, I was able to learn more about my workplace and the overt and covert factors which influence of my own work practice, and that of my colleagues.

In making a contribution to professional and scholarly knowledge, this investigative research project has highlighted some limitations of practitioner research and role of the practitioner as researcher. Practitioner research is influenced by power structures within the workplace, even if that influence is not direct. The influence affects the extent to which the research is accepted and recommendations adopted by the workplace, and the evolution of multiple roles within the research of the research practitioner. These issues are discussed further on in this chapter and in detail in Chapter 5 and Chapter 6.

Initially, this investigative project focused on action research as a model and methodology for exploring the research questions. It seemed to fit - the practitioner was part of the motorsports development, contributed in a number of ways and input from participants continually influenced analysis of the data. But in exploring the theory of action research further (especially Wadsworth workshop 2000, Cherry 1999) it didn't fit well enough. The active 'driving' of the research by the participants was too limited. It was reading about the participant observer model (Boucher 2001) which generated the 'aha!' moment. The pieces fitted. This model recognised and gave a framework for the multiple roles of the researcher and the reflection on data from participants and self - a key part of identifying and learning about work practice.

For most practitioners work practice is an acknowledged but not consciously realised set of behaviours, perceptions, values and assumptions. Within the limits of our self-awareness, we acknowledge that we tend to behave in certain ways, and have certain beliefs about the way we act and interact with others, the way we approach our work and the standards we set ourselves. What we often fail to recognise are the assumptions we make about the intent behind the actions of others and the impact of workplace culture on our own actions and intent. We also fail to acknowledge the influence our personal values about life, others and the way to do things colours our perceptions and our actions. There is a gap between our theories in action and our theories in use, that is the way we act and the way we think we act (Argyris 1999).

This was most obvious in the multiple realities of the research participants and their differing perceptions about the intent of others. It also manifested through workplace culture in interactions between the research participants. When consensus could not be achieved, people reverted to their perceived roles within Wodonga Institute of TAFE and decision-making became a process of hierarchy rather than a negotiated result. The role of 'researcher' enabled the practitioner to observe how quickly people fell into patterns of behaviour. The research, and the multiple roles the practitioner undertook within the framework of this research, became a tool for all participants to more objectively reflect on their actions and intent - and the actions and intent of others. The discussion which ensued from this (Journal entries: Aug 02-May 03 particularly), showed that participants were able to develop a deeper understanding of their work practice.

It also became a tool for me as a practitioner to gain a deeper understanding of my work practice. I realised that as a training designer working with practitioners and management I had exposure to a range of viewpoints that was more extensive than many within the organisation. A significant learning for me as a result of this project was to not assume that others had the same understanding that I did.

This investigative research project has deepened my understanding as a practitioner about the potential of research to add value to my work practice - specifically development projects. During the investigative project my learning about research methodology and methods has assisted in the development of a national survey tool, an ethics application for conducting interviews in communities throughout Australia, putting together a rationale for giving a client de-identified interview data, and analysing data from semi-structured interviews to become a learning resource.

In reflecting on the research, through the development of this exegesis I have realised that there are a number of realities of conducting research within an organisation - particularly as an insider, that are contrary to research 'ideals'. Firstly, multiple stakeholder agendas and perceptions significantly impact on the research. Theoretically, research should be an objective account and analysis of the data within the ontology of the research methodology. In reality, when the key organisational decision-makers are stakeholders in the research, organisational (and in the case of this research, commercial) sensitivity impacts on the articulation, analysis and ensuing discussion of issues. Secondly, the researcher as a practitioner becomes a 'player of many faces' because of the way they are perceived by the varying stakeholders. In this investigative research project, these faces were conceptualised as those of connector, critical friend and influencer. Multiple roles evolve as the researcher becomes more involved in conducting the research, and stakeholders develop a trust relationship - gradually revealing more and more informal and rich data about their thoughts, opinions and feelings. These were the realities of conducting this work-based research. Anecdotal discussions with other practitioners conducting masters research projects within Wodonga Institute of TAFE revealed similar experiences. As a practitioner, I wonder if this is a characteristic of practitioner-led, work-based research? Perhaps this is an area for future research about the nature of practitioner research.

7.2 Learning about innovation and entrepreneurship

The literature search undertaken for this investigative research project, analysis of the interviews conducted and reflection on the research journal has reinforced the importance of a whole of organisation approach to fostering innovation and entrepreneurial practitioners. Innovative ideas and entrepreneurial practitioners bring a dynamic and creative energy to the organisation as well as challenging conventional thought and approaches - preventing us becoming complacent in our thinking and our work practice. Thus does an organisation continue to survive and grow.

According to Mitchell (et al 2003) innovation must be intentional, not accidental. In deliberately aiming to be innovative, an organisation protects itself from stagnating. However there is a serendipity about innovation that cannot be predicted. My observation of the motorsports program as it developed, grew and made the transition to 'mainstream' program was that the instigator wasn't focused on a need to develop something innovative. It was more a need to find a solution to a problem. The label innovative was attached by others, recognising that the idea was special and different. It was only on reflection that the instigator acknowledged the innovative nature of the idea.

There is a factor of unpredictability in innovation - when it emerges, how it shapes, the direction it goes and how outcomes are achieved. It is this unpredictability that challenges existing thought and systems and is, in itself, the challenge for Wodonga Institute of TAFE because it involves risk. We can however, develop strategies and systems to stimulate it and explore ideas when they occur.

7.3 Learning about innovation at Wodonga Institute of TAFE

There appears to be a range of perceptions about innovation at Wodonga Institute of TAFE. Depending on who you talk to, innovation at Wodonga Institute of TAFE is quietly happening in a systemic way, or is only happening in the rhetoric of management. This reflects Guba's paradigm of multiple realities within organisations (1994), echoed by Arygris (1999) and Senge (1999).

At the time of the development of motorsports:

> 'In terms of being entrepreneurial, it's entrepreneurial because it was good thinking, and it was risky
>
> thinking ... It's entrepreneurial in that the return, whilst it might be at some point profit dollars, ... comes
>
> in many different forms. It comes in placing [Wodonga Institute of TAFE] on the map, it comes in
>
> enhancing the reputation of engineering at [Wodonga Institute of TAFE], it comes in enabling us to fulfil
>
> our public contract, and it comes because it's really a piece of action research that we're learning from
>
> that we can utilise in other parts of Wodonga Institute of TAFE.'
>
> (Senior Manager, interview 2002)

The multiple realities can be seen in the difference between this global reflection by Senior Management and the view of the motorsports instigator, motorsports teachers and internal significant others. Their perspective is that motorsports would not have eventuated had it not been for a number of significant factors (Journal entries: May-Jul 04) not identified in the quote above. First and foremost was the drive, passion and perseverance of the instigator, his manager and then the motorsports team. Had they not persevered, driven by their belief in the idea (and supported by key industry players), had they not put in countless hours of their own time, despite the other enabling factors, motorsports would not have eventuated. Contrary to the rhetoric, Wodonga Institute of TAFE did not, at that time, have the operational systems set up to support entrepreneurial practitioners develop and implement an innovative idea.

As a contrast, at a strategic level, a number of initiatives have been generated during the time of motorsports development. Middle level management staff have been encouraged to undertake professional development through the Chair Academy and RMIT Masters programs; Educational Development Teams have been initiated as a result of a Flexible Learning Fellowship program report; a learning innovation coordinator and workforce development coordinator has been appointed to the Flexible Learning Services Department, technology based professional development offered to practitioners; and the Innovations Committee was initiated. These initiatives reflect a 'building organisational capability' approach to innovation.

Whilst this is admirable, Wodonga Institute of TAFE appears to be missing a vital link - communication of the vision and plan to practitioners. Until the communication link is made there will continue to be a wide gap between the perceptions of Directorate and the perceptions of practitioners about innovation at Wodonga Institute of TAFE. Without being privy to Wodonga Institute of TAFE's strategic view, practitioners can only see a lack of practical support for them to develop and implement their innovative ideas. The capture of innovation at a practitioner level will remain serendipitous at Wodonga Institute of TAFE until there is a transparent planned, 'whole of organisation' approach.

A planned approach would need to take into account factors such as the organisational environment and culture which supports creative thinking and experimentation, allowing opportunities to try ideas, openly valuing reflection and exploring as work 'tasks'. I believe these factors can be linked, as shown in the following diagram developed from analysis of this research to show how innovation can be practically supported in an organisation.
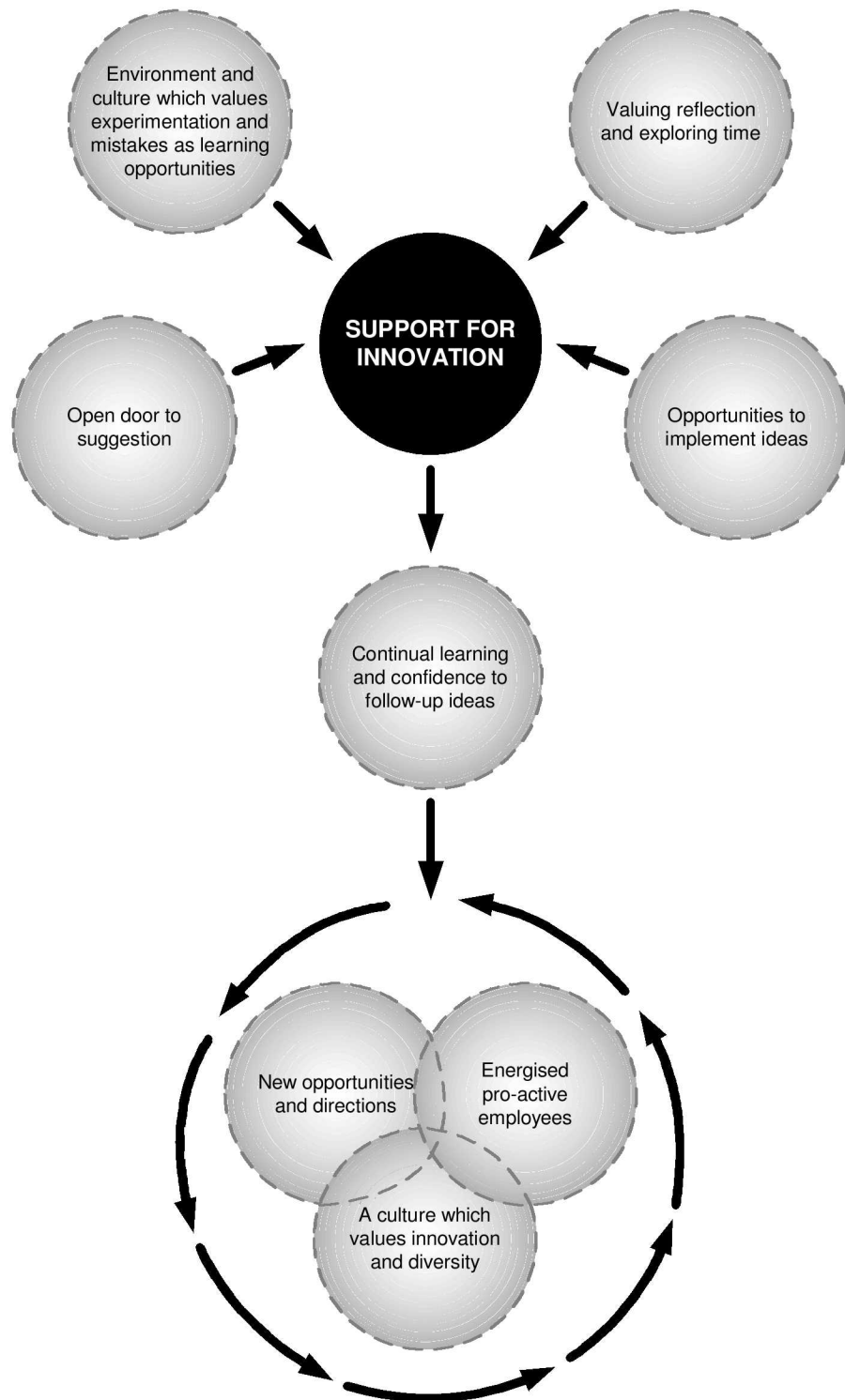
Figure 10: Supporting innovation within an organisation

For this to happen, innovation would need to become an explicit responsibility within roles (or position descriptions) at a Directorate level and an item in Wodonga Institute of TAFE operational plan with planned outcomes and reporting against these. It would be supported by tools (such as the 'Bright Ideas Exchange' and an ideas database) and resourcing (such as time release and professional development in innovative competencies of practitioners).

> *'The ongoing challenge for VET sector organisations, and the individuals within them, is to use the new and existing tools to help develop innovative enterprises and a culture of ideas and innovation within the Australian community generally. As well, organisations within the VET sector, including ANTA, must also learn to 'walk the talk' and ensure that our own workplaces are supportive of innovation.'*
>
> (Scollay 2001)

As a smaller and energetic Institute we have many of the advantages of a smaller organisation. Our Senior Management 'walk the talk' with their open door policy. Any practitioner can access a Director for a discussion. We have practitioners who are passionate about their teaching and the value of vocational education and training to students and industry. Because we are small, and have easy access to our Senior Management, as an organisation Wodonga Institute of TAFE has the ability as an organisation to respond reasonably quickly to opportunity. With a more visible, systemic approach Wodonga Institute of TAFE could better capture innovative opportunities created by entrepreneurial practitioners.

[Copyrighted material omitted. Please consult the original thesis.]

Figure 11: Motorsports Training Australia at Wodonga Institute of TAFE (photograph used with permission)

'... it can be a great idea, so the person instigating it must ... be passionate and push for that idea to be followed up. **NEVER GIVE UP**.'

(Motorsports instigator, interview 2002)

Postscript

From an idea discussed over drinks six years ago, motorsports training has become a mainstream program at Wodonga Institute of TAFE. The Victorian Government Motorsports Centre of Excellence banner is proudly shown at race meets and in Wodonga Institute of TAFE's promotional literature.

Motorsports training is now an accredited stream within the Automotive Retail, Service and Repair Training Package, with specific competency units and five qualifications from Certificate II to Diploma.

Motorsports training has been taken up by a TAFE Institute in Queensland, a metropolitan TAFE in Victoria and feasibility is currently being explored by a private provider in southern country Victoria.

[Copyrighted material omitted. Please consult the original thesis.]

Figure 12: Motorsports Training Australia training equipment (photograph used with permission)

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Appendices

Appendix 1

What a great idea! Where to from here?
Guidelines for presenting innovative ideas
to Senior Management

Introduction

'I've got this great idea, but where on earth do I go from here?'

Got a great idea for:

■   meeting a training need for industry?

■   servicing an emerging industry sector?

■   developing a new product?

■   improving Wodonga Institute systems?

Any new initiative that will impact on the Institute needs the approval of Senior Management before it is implemented. If you have an idea which has an impact beyond the internal operation of your department, you will need to present your idea to Senior Management to gain Institute support.

These guidelines aim to provide an overview of the information the Senior Management team looks for when they make decisions about supporting new ideas. Supporting the guidelines is a list of people within the Institute whose expertise may help in collecting the information you need and developing your presentation.

What does Senior Management look for in considering an innovative idea?

Evidence of:

Market research

■   What is the need?

■   How widespread is it?

■   Is it ongoing?

■   What industry support do you have for the idea?

Analysis

■   What are the strengths and weaknesses of your idea?

■   What opportunities does it present?

■   What are the threats to its viability?

Benefits to the Institute in supporting your idea

■   Financial?

■   Social?

■   New partnerships?

■   New directions?

■   Developing capability?

■   Addressing government policy and/or initiatives.

Risk management

■ What are the risks to the Institute in supporting your idea?

■ How extensive are the risks?

■ What is the likelihood of occurrence?

■ What strategies could minimise the risk exposure of the Institute?

Resource implications

What will it cost the Institute to support your idea - in terms of money, people, rooms, machinery and equipment?

How to use these guidelines

These guidelines have been designed to complement the operation of the *Innovations Generator*. Its aims are to:

■ build *'... an internal system for developing and resourcing innovation projects and activities that build both organisational expertise and intellectual capital'*[10]

■ work with industry to develop partnerships and innovative approaches to training

■ provide Institute practitioners with feedback on the feasibility of innovative ideas, and support them in presenting ideas to the Senior Management team.

For more information contact Mark Chaston (Learning Innovation Coordinator, 02 6055 6521) or Flexible Learning Services.

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[10] Innovations Generator submission document, p2.

Each section of this document describes the types of information that the Senior Management team will be looking for when evaluating innovative ideas. The extent of detail they ask for will depend on the extent of resources Senior Management needs to commit to support your idea.

Whether you are presenting your idea to the *Innovations Generator* or, on recommendation from the *Innovations Generator* to Senior Management, these guidelines are intended to provide a 'map' for the information you need to put in your presentation. This information will assist the Senior Management team to make an informed analysis of the risk and benefits of your idea and the capacity of the Institute within its strategic priorities, to support your idea.

The guidelines conclude with a *Quick Find* guide to accessing specialist expertise within the Institute.

Section 1
Recommendations for gaining support

Evaluate your commitment to your idea

To get your idea up and going you're going to have to convince quite a few people that your idea is worthwhile. This takes time and energy - the majority of it yours! *Do you have the sustained passion to sell your idea again and again and again?* You will need to have enough belief in your idea to persevere in the face of rejection - by colleagues or management.

Developing your idea into a proposal takes considerable time and effort. *Do you have the commitment to your idea to devote significant amounts of your own time to turning it into a proposal?*

If the proposal is successful you will need to drive its implementation. *Do you have the commitment, time and energy to continue driving the idea until it becomes self-sustainable?*

Share the vision

If you have thoroughly researched and thought through your idea and its implementation you will need to bring others on board. Explain, talk about the idea to others, listen to their perspectives.

Whilst you will still be the prime driver of your idea, sharing the vision:

■ creates allies and support

■ brings in other areas of expertise to complement and add to your skills

■ shares the workload.

Find an appropriate champion

In justifying money diverted from other Institute activities, the Senior Management team must rigorously examine any proposal put forward. Once you've done the initial market research, experience from successful ideas has shown that it pays to find a senior supporter who can advocate the idea on your behalf. They'll be able to give advice on the probability of gaining support, extra information you may need to find, potential limitations beyond the Institute and maybe further aspects of your idea you hadn't considered.

Your champion could be your manager, another manager or someone with specialist expertise within the Institute. If your idea will have significant impact on the Institute, or needs significant capital investment, find a champion within the Senior Management team to support your idea.

'Get your manager on board, or a powerful mentor, someone who knows their way through the system a

bit and can help you negotiate … someone that you feel has got a bit of pull in the system to try and

put it through …'

(Senior Manager, interview 2002)

Be able to justify the idea and the resources needed

Your idea will be competing with other ideas Institute priorities for resources. You'll need to justify why resources

should be allocated to support your idea ahead of other areas.

'… has some great ideas for the youth program … none of which would have a significantly positive

impact in dollar terms on Wodonga Institute of TAFE … but would make a hell of a difference on the

stress levels of our teachers so there's the benefit - the stress levels of our teachers are reduced. Be

prepared to explore all sorts of benefits to Wodonga Institute of TAFE …'

'… If it's entrepreneurial in the financial sense in that it's going to make money … that's one dimension to

it … but be prepared to explore socially entrepreneurial ideas as well. Are they good for the community?

Good for Wodonga Institute of TAFE's standing within the community?

Think of entrepreneurialism as more than just the financial benefits to the organisation. What are the social

impacts and the social benefits of running these particular programs …'

(Senior Manager, interview 2002)

The justification doesn't have to be in financial terms, it may be in:

■ *social capital* - does it contribute to supporting/enabling socially disadvantaged sectors of the community? Does it make people's lives easier? Will it make access to education better for sectors of the community? Does it improve teaching/learning conditions at the Institute? Will it make a contribution to VET in this region, the state or nationally?

■ *benefit to the community* - does your idea address a gap/need in education in our community? Will it support the growth of our community (this may be in terms of the local economy, social fabric of the community, viability of community organisations, opening up new opportunities, etc)

■ *market position for Wodonga Institute of TAFE* - will your idea enable the Institute to better compete with other providers? Will it help the Institute respond more quickly, promote the Institute (locally, at a state level, nationally), or make the Institute's position more secure in its market?

■ *opening up new markets* - does your idea allow the Institute to move into a new area of training delivery? Refine its services to fit a niche requirement of a current market area?

■ *building partnerships that will benefit the Institute* - will your idea support the Institute in building beneficial partnerships with industry? Community organisations and enterprises? Government departments? Suppliers? Potential customers?

■ *developing Institute capability* - does your idea support professional development of Institute staff in new areas, support them to refine existing skills, gain recognition for skills previously unrecognised, position the Institute to take advantage of future opportunities?

Most likely your idea will address more than one of these areas. There may also be additional justification that has not been identified above. In '*selling*' your idea, show the full range of benefits to the Institute. As indicated by the quotes on the previous page, the Senior Management team looks for more than just financial return. The Institute's role as a corporate citizen within its community is also important - and from this perspective the Senior Management team will consider '*investing*' in ideas that provide a range of returns to the Institute.

Show a clear market gap with potential long-term need

The development of innovative ideas requires a significant investment of time, effort and money. With competing demands for a limited amount of funds, the Senior Management team cannot afford to support ideas that meet a short-term need only. The outcome value to Wodonga Institute of TAFE - whether financial or social, must exceed the investment needed. Importantly it must be feasible within the Institute's operating budget or be able to be funded through funding sources the Institute is allowed to access.

> '*... we're a small TAFE Institute, resources are always limited, and even though it's a very good idea,*
>
> *unless it starts in a way that the organisation is capable of dealing with, you're just wasting your time ...*'
>
> (Senior Manager, interview 2002)

Link the idea to Wodonga Institute of TAFE's core business or strategic directions

Wodonga Institute of TAFE's strategic objectives are set out in its *Strategic Directions and Objectives* statement (available via Staffnet, or from the Office of the Director, or the Research and Planning Unit of Educational Development Services).

Linking your idea to core business and/or strategic directions shows the Senior Management team its relevance to the Institute's future, and allows more flexibility in accessing funding sources within and beyond the Institute. The International and Business Development Department can provide advice on how your idea can link to Institute core business/strategic directions.

If your idea addresses one or more OTTE (Office of Training and Tertiary Education) priorities, it may also open up opportunity to access extra student contact hours, or student contact hours marked as innovation funding. The Institute has discretion in allocating a small component of student contact hours for innovative programs – providing they meet the specified criteria. Contact Mike Parfitt (International and Business Development Manager, 02 6055 6777) for further information.

Use the specialist skills within Wodonga Institute of TAFE – *access the Innovations Generator*

The Institute is now supporting the operation of the *Innovations Generator*. It provides resources (funding and specialist expertise) to support practitioners develop innovative ideas.

The *Innovations Generator* reviews ideas and provides initial advice on the feasibility of the idea. It also acts as an access point to specialist expertise within the Institute (see Mark Chaston, Workforce Development and Learning Innovation Unit, 02 6055 6521 for further information).

This includes:

■   market research (Marketing Department)

■   conducting surveys, industry area priorities, VET sector directions, etc (Research and Planning Unit)

■   course structure, competency development, resource development (Training Design)

■   flexible delivery options and technology enhanced delivery (Flexible Learning Services)

■   budgets (Finance Department)

■   risk analysis (Strategic Projects Department)

■   potential funding sources (Senior Management team).

Section 2
Doing your market research

Identifying the training need

Market research must show that your idea meets a need.

If your idea addresses an issue with Institute systems you will need to show how your solution is more effective than the current system.

If your idea is meeting a training need, your market research should address the following questions:

■ What is the extent of the need (local, regional, state-wide, interstate or national)?

■ Is it a short, medium or long-term need?

■ What will be needed to sustain the idea?

■ How many potential students are there?

■ Will your idea lead to further opportunities?

Researching industry requirements

If your idea is a training solution you will need to identify:

■ the nature of the industry (particularly if it is an area new to the Institute) or the aspect of industry your idea is addressing, the need and how your idea meets the need

■ benefits to the industry area, particularly in our region. They may be immediate; short, medium or long term - or a combination of these. Consider all potential benefits including financial, workforce capability, market responsiveness, the ability to access new markets, work efficiency, workplace effectiveness (including occupational health and safety) and the development of beneficial networks. You may want to include a summary of the market research you did to identify these benefits

■ any specific industry requirements which may impact on your idea (for example licensing, legislation, industry codes).

Section 3
Cost benefit analysis

This analysis weighs up the benefits of the idea against the costs to the Institute.

Benefit to the Institute

What is the benefit to Wodonga Institute of TAFE of supporting your idea? The benefit may be in a single or multiple areas including any of the following:

■ *Financial* - this may be in terms of increased efficiency (for example saving staff time), revenue (and surplus generated) if a fee-for-service course, accessing additional student contact hours from OTTE. Try to give approximate dollar estimates of financial return or cost savings.

■ *Social* - this may be in terms of improving physical conditions at the Institute for staff/students, improving outcomes for students, reducing pressure on staff, providing a service to disadvantaged groups in the community, building the Institute's reputation as a corporate citizen in its community.

- *New directions* - these may be new industry sectors, or now areas within an industry sector the Institute currently services.

- *Developing industry or community partnerships* - your idea may involve a cost to the Institute, but the advantages of building a valued industry or community partnership that will lead to future opportunities may be of considerable benefit to the Institute in the long-term. Identify how the partnership(s) would benefit the Institute. Benefits may range from financial (such as increased training opportunities, reduced operating costs through sharing equipment/sponsorship arrangements), to increasing Institute capability (for example job exchanges, projects working alongside industry personnel) to social benefits (for example partnerships with community organisations to increase pathways into VET training).

- *Building Institute capability* - your idea may build staff skills increasing Institute capability to respond more creatively to opportunities or bring on board new staff who bring new, valuable skill sets to the Institute.

Links to Institute strategic directions

Does your idea link to a strategic direction nominated by Wodonga Institute of TAFE?

The Institute strategic plan can be downloaded from *Staffnet*. Hard copies are available from the Director's Office or Educational Development Service's Research and Planning Unit. The following people can provide useful advice and perspectives on the Institute's strategic plan:

■ the Manager, International and Business Development Projects (Mike Parfitt)

■ the Manager, Educational Development Services (Chris Horton)

■ the Deputy Director, Training and Delivery (Brian Smith)

■ the Deputy Director, Resources and Systems (Peter DeKoyer)

■ the Director.

SWOT analysis

A SWOT analysis (strengths, weakness, opportunities, threats) helps give a holistic picture of the potential of your idea.

Strengths

What are the strengths of the idea? Consider this from the point of view of:

■ the Institute

■ the industry sector your idea is addressing

■ students (current and future potential students)

■ our region.

Also consider the what would be required to implement your idea. If implementation is simple and cost effective, this may be a strength.

(If there are competitors in the area, consider their strengths. If a 'strength' of your idea is similar to that of a competitor, then this factor can be a 'weakness', not a strength.)

Weaknesses

Where are the weaknesses in your idea? Consider weaknesses from the point of view of:

■ your department

■ the Institute

■ the industry sector your idea is addressing

■ students (current and potential students)

■ the full flow-on 'costs' of implementing your idea (for example if your idea needs five extra teachers, what increased administrative, coordination and management support that would be required? Would staff or management need to be replaced whilst your idea is being implemented? If so are there replacement personnel available?).

When looking at weaknesses from the Institute perspective, consider also Institute systems and their ability to cater to the requirements of your idea (for example if your idea involves significant amounts of training outside normal hours, are teachers available given their current loads? What extra demands would be made on room usage and at what times? Would extra security be needed?)

Opportunities

What opportunities will your idea open for the Institute now and into the future?

Consider the strengths of your idea and where they may lead, particularly for other delivery departments. Are there opportunities which could arise by eliminating some of the weaknesses of your idea?

Threats

What are the threats to the success of your idea? Consider this from an internal (for example Institute systems and requirements) and external (for example competitors, industry trends, OTTTE/ANTA priorities) perspective.

Opportunity costs

What is the cost to the Institute if the Senior Management team supports your idea?

As well as the direct costs such as materials and equipment, staff time, etc, consider the indirect costs to the Institute of supporting your idea. These may include:

■   cost (and the ability) to replace you whilst you implement the idea

■   cost of replacing other teachers

■   having to cancel classes (and risk losing students/clients) because a replacement teacher couldn't be found

■   extra usage of Institute systems (for example information technology, rooms which may already be booked)

■   extra time required of manager/program coordinator to support the idea

■   extra administrative requirements

■   the full costs of employing extra staff.

Section 4
Resource implications

Financial

■   What will it cost Wodonga Institute of TAFE to support the idea? Within the next 12 months, two years? Over a longer term?

■   Is there a capital cost involved? If your idea involves the purchase of plant and/or equipment and technical materials you will need to estimate the cost of acquiring these. (You may be able to reduce costs by considering second-hand plant if it is in good working order.)

■   What is the cost of staffing your idea? If your idea requires additional staff, you will need to consider not only their salaries, but also the on-cost component and make an estimate of the impact on Institute infrastructure (desk space, equipment needs, I.T. requirements, materials usage, etc). Your coordinator, manager and/or the International and Business Development Department (02 6055 6777) can provide information and advice on working out these costs.

■   What travel is involved for industry liaison?

You will need to develop a basic budget to give some idea of the full financial cost of supporting your idea.

Does your budget take into account all costs and allow for a margin? What sort of margin do you expect?

(Give some indication of how you think this will be achieved).

Senior Management will also be looking for a break-even figure (costs equaling income, taking into account *all* direct and indirect expenses). They will also want to know how long you expect it will take before the break-even figure is reached. The Finance and International and Business Development Departments can provide assistance in developing a budget which includes this information.

Is your idea a 'loss leader' - ie, will it cost the Institute in the short-term but will generate acceptable benefits in the medium or long-term. If your idea will bring a nil or negative return to the Institute in the first instance, you will need to indicate how long it will take to 'break even' and when your idea will generate returns and be self-sustainable.

> *This is important information for the Senior Management team. As a small Institute, Wodonga TAFE doesn't have the capital reserves to support many new ideas/programs - even for a short period of time. The Senior Management team will need to consider what costs must be cut elsewhere if they are to support a 'loss leader' for any length of time.*

Human

■ What staff are needed for your idea?

■ Will you require full-time, part-time and/or sessional staff? (The full costs of your staffing requirements should have been identified in *opportunity costs*).

■ Are there staff with the required skill set already employed by the Institute?

■ Do they have a full teaching load?

■ Will you need to advertise for extra staff?

The Human Resources and International and Business Development Departments can provide assistance in working out the costs of staffing.

Materials, equipment, machinery

■   What materials and/or equipment and/or machinery will you need?

■   Is there any material, equipment or machinery that you *must* have (to meet licensing and/or regulatory requirements?

■   What quantities do you need?

■   If you need a capital item, what is its life span?

You may also need to consider amortisation and depreciation of equipment. The Finance and International and Business Development Departments can provide advice on amortisation rates and depreciation schedules.

Institute systems

Which Institute systems will you need?

■   Rooms?

■   Laboratories?

The Student Administration Department can provide information about room usage and bookings.

I.T. support

What type of information technology support will you need to implement your idea? You will need to identify:

■ equipment needs (computers, printers, faxes, scanners, phones, etc)

■ software needs (program, licences - especially where full commercial licences are needed), and

■ likely technician support.

You will also need to estimate any significant impact on existing I.T. infrastructure. For example do you require any specialised software program which will generate files likely to take up significant networking space. The Information and Communications Technology Department will be able to provide estimates of the impact on the Institute's I.T. systems.

Section 5
Risk management

Identifying the types of risk

You will need to identify potential risks that the Institute needs to consider. A risk may be anything which has a negative impact on the Institute. Risks may be financial, human resourcing, exposure to competition, credibility damage, etc.

Identifying the extent of risk

For each risk, estimate the likelihood of the risk occurring (for example, low, medium or high likelihood).

Impact on the Institute

Consider the impact on the Institute. If the risk actually happened, what would be the severity of the impact (low, medium or high)?

You may find the following table a useful way of presenting a picture of the risks.

Risk	Likelihood of occurrence	Severity of impact	Risk rating*	Comments	Management strategy

* Use a risk rating scale to give your judgement of the overall risk on a scale of 1 to 10 (1=low, 10=high).

For example in the case of the motorsports program:

Risk	Likelihood of occurrence	Severity of impact	Risk rating*	Comments	Management strategy
Commercial motorsports teams reluctant to take students on placement	Medium	High	8	Teams can't afford mistakes during races - students have to be able to cope with the race pressure situation.	■ Students work on assignments in teams to tight deadlines ■ Student teams compete in local, regional and state level meets ■ Placement in teams during non-race periods and for practice days prior to race placement

Section 6
Presenting your idea

The *Innovations Generator* team will provide advice on presenting your idea. The following recommendations are a general guide:

■ Your presentation should be succinct, but still contain all the information suggested above. Recommended size is up to ten pages for the initial idea. The Senior Management team (or the *Innovations Generator)* will provide feedback on any further information needed.

■ Set your information out under clear headings. Details can be presented as bullets.

■ Present details of budgets, market research etc as appendices with a summary or overview in the body of the document.

■ Graphs and charts can be a useful way of presenting statistics rather than a paragraph of details.

■ Include an estimated implementation timeline so that the Senior Management team can consider the funding implications within Institute budget priorities.

Section 7
Who can help?
– a quick reference

Budgeting	Manager, Finance Department
	Don Wilkinson
	02 6055 6650
	Deputy Director, Resources and Systems
	Peter de Koeyer
	02 6055 6623
Course development	Training Design Department
	Instructional designers
	c/- 02 6055 6328
Developing a business plan	Manager, International and Business Development Projects
	Mike Parfitt
	02 6055 6557
Developing a presentation	Innovation Coordinator, Flexible Learning Services
	Mark Chaston
	02 6055 6521
Equipment and machinery	Manager, International and Business Development Projects
	Mike Parfitt
	02 6055 6557
Fee for service delivery options	Manager, International and Business Development Projects
	Mike Parfitt
	02 6055 6557

Financial analysis	Manager, Finance Department Don Wilkinson 02 6055 6650 Manager, International and Business Development Projects Mike Parfitt 02 6055 6557
Flexible delivery options	Innovation Coordinator, Flexible Learning Services Mark Chaston 02 6055 6521
Grounds	Manager, Grounds and Maintenance Steve Morris 02 6055 6629 or 0438 576 937
Human resource s	Manager, Human Resources Department Ross Barker 02 6055 6630
Information Technology (I.T.) requirements	Manager, Information Communications and Technology Department Neil Taylor 02 6055 6565
Institute systems	Manager, International and Business Development Projects Mike Parfitt 02 6055 6557
Is it an existing course?	Academic Systems Officer Jenny Vibert 02 6055 6570
Market research	Manager, Marketing Department Robyne Young 02 6055 6537 or 0417 207 749 Research and Planning Unit, Educational Development Services 02 6055 6546
Occupational health and safety queries	Michelle Salmon 02 6055 6350
OTTE requirements	Deputy Director, Training and Delivery Brian Smith 02 6055 6632

Planning	Manager, Educational Development Services Chris Horton 02 6055 6599
Research	Coordinator, Research and Planning Unit Educational Development Services 02 6055 6398
Rooms and buildings	Manager, Client Services Lindsay Hanchett 02 6055 6566
Student contact hours	Deputy Director, Training and Delivery Brian Smith 02 6055 6632
Student support services	Campus Support Services 02 6055 6606
SWOT analysis	Manager, International and Business Development Projects Mike Parfitt 02 6055 6777
Unit of competency development	Training Design Department Instructional designers c/- 02 6055 6328

Appendix 2

Agenda – Professional development workshop
What a great idea! Where to from here?

1 Introduction

- Purpose of the workshop

- Background

2 Learning from motorsports

- Being streetwise at Wodonga TAFE

- Recommendations

3 What is Senior Management looking for?

- Market research

- Cost benefit analysis

- Resource implications

- Risk management

4   **Presentation hints**

■   Sourcing expertise within the Institute

■   Presenting to Senior Management

5   **Any questions?**

Appendix 3

Research interview questions

1   Can you describe your role in motorsports?

2   How did you become involved in motorsports?

There have been numerous instances where staff have had entrepreneurial ideas, but few have translated

into products or delivered programs. Motorsports has made that transition.

3   Why do you think motorsports was able to make the transition from idea to delivered program?

4   What do you think were the critical factors impacting on this transition?

5   Were there any factors which you think made the move from idea to delivered program more difficult?

6   How did these factors cause difficulties?

From your perspective:

7   On reflection, what would you have done differently? Why?

8   On reflection, what changes in the process would have helped make things easier? Why?

9   What recommendations do you have for staff who have an entrepreneurial idea they want to get up and

running?