

**VET Training and Industry Partnerships:
A study in East Java, Indonesia**

Abdullah Helmy

Master of Education, Malang State University, Indonesia

College of Education

Victoria University, Melbourne, Australia

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Abstract

Across Indonesia, training partnerships have formed between vocational education and training institutions and industry to meet the demands of the 21st century labour market. For many industry managers, a partnership has become a necessary means to train unskilled workers as well as update skills required for the current workforce. Vocational education and training institutions, such as polytechnics, are emerging as one of the major and logical providers of workforce training that is necessary to revitalise and maintain the competitiveness of this nation's industries and business.

The purpose of case study research is to explore and examine the impacting factors in four VET providers of industry training partnerships in East Java, Indonesia. A comprehensive partnership construct is based on three factors identified by Lendrum (2003) and Callan and Ashworth (2004): environmental influences upon partnerships, a process/training model, and the role of people and relationships, were used to frame and guide this study.

The research methodology used in this study was a qualitative case study. Case studies were conducted utilising the methods of survey, document analysis and in-depth interviews with key partner stakeholders to provide data. The twenty-two participants included VET coordinators, industry liaison personnel and corporate contacts in East Java, Indonesia.

The key findings for successful VET training and industry partnerships derived from the four case studies emphasised the importance of interpersonal and communication skills for staff to establish trust and maintain sustainable partnerships. The existence of a partnership champion is also crucial in the establishment and implementation of partnerships. Management support and trust are also reported as significant elements in conducting and maintaining partnerships.

Conclusions based on cross-case analysis indicate that VET providers, as academic institutions interested in pursuing partnerships or maintaining ongoing ones, need to recognise the factors and conditions which lead to the maintenance of long-term partnerships between the VET provider and industry partner which consist of open, continuous communication between partners. Flexibility in course delivery is needed including: scheduling, course structure and geographic proximity; delivery of quality training services and products; timely responses to concerns and inquiries; employing qualified and

experienced trainers/instructors; mutual trust; acknowledgement of strengths and limitations; and the needs of both academic and business worlds.

Recommendations include: 1) carrying out training needs assessment to identify the realities of competitiveness faced by industries as they try to build training and skills development continuously into their companies, 2) building better coherence between training materials with the industry needs and the continuous upgrading the quality of product delivery, 3) building components of flexibility and customisation into the training within the budget, 4) continuous staff development in many skills particularly in launching and overseeing big training partnerships, 5) institute a program of succession planning to sustain and build partnership capacity, 6) guaranteeing the commitment of staff in management level for the partnership as early as possible by showing the financial and non-financial benefits to the institution and the industry partner due to the training investment, 7) and continuous assessment on how well the partnership is meeting the industry requirements.

This study is significant for the current and future planning of training partnerships between vocational education and training institutions and industry. A strategic approach to institutional and industry partnerships is offered, particularly through the development of an adaptation of the models for partnerships provided by Lendrum (2003) and Callan and Ashworth (2004). The Strategic Partnerships: An Approach to Institution and Industry Partnerships (Helmy, 2014) provides an adaptation and extension to these earlier frameworks. It also provides additional insight for VET provider administrators and their corporation managers as counterparts seeking to make sense of the opportunities that partnering promises in Indonesia.

Student Declaration

I, Abdullah Helmy, declare that the PhD thesis entitled *VET Training and Industry Partnerships: A study in East Java, Indonesia* is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature

Date

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Glossary of Acronyms

ADB	Asian Development Bank
AusAid	Australian Agency for international Development
BAPPENAS	<i>Badan Perencanaan Pembangunan Nasional</i> (National Development Planning Board)
BNSP	<i>Badan Nasional Sertifikasi Profesi</i> (National Professional Certification Agency)
BPS	<i>Biro Pusat Statistik</i> (Central Statistics Agency)
BPSDMPPMP	<i>Badan Pengembangan Sumber Daya Manusia Pendidikan dan Penjamin Mutu Pendidikan</i> (Board of Human Resource Development and Quality Assurance of Education)
CSR	Corporate Social Responsibility
D1	Diploma 1
D2	Diploma 2
D3	Diploma 3
DGHE	Directorate General of Higher Education
DTVE	Directorate of Technical and Vocational Education
EPSBED	<i>Evaluasi Program Studi Berbasis Evaluasi Diri</i> (Study Program Evaluation based on Self Evaluation)
ESD	Education for Sustainable Development
GSS	General Secondary School
GTZ	<i>Gesellschaft für Technische Zusammenarbeit</i> (German Agency for Technical Cooperation)
ICT	Information and Communications Technology
IP	Industry Partner
IP1	Industry Partner 1
IWS	Indonesian Welding Society
JICA	Japan International Cooperation Agency
JWES	Japan Welding Engineer Society
MoEC	Ministry of Education and Culture
MoU	Memorandum of Understanding
NGO	Non-Government Organisations
OECD	Organisation for Economic Cooperation and Development
OHS	Occupational Health and Safety
PLC	Programmable Logic Controller
REPELITA	<i>Rencana Pembangunan Lima Tahun</i> (Indonesia Five-Year Development Plan)
Rp	<i>Rupiah</i> (Indonesian Currency)
RSS	Religious Secondary School
RINA	Royal Institute of Naval Architects
SEAMOLEC	Southeast Asian Minister of Education Organisation Regional Open Learning Centre
SD	<i>Sekolah Dasar</i> (Primary School)
SMA	<i>Sekolah Menengah Atas</i> (Senior High School)

SMP	<i>Sekolah Menengah Pertama</i> (Junior Secondary School)
SMK	<i>Sekolah Menengah Kejuruan</i> (Vocational Secondary School)
SSS	Service Secondary School
S1	<i>Sarjana</i> (Bachelor Degree)
S2	<i>Magister</i> (Master Degree)
S3	<i>Doktor</i> (Doctorate Degree)
TESDA	Technical Education and Skills Development Authority in the Philippines
ToT	Training of Trainers
TVET	Technical and Vocational Education and Training
TNA	Training Needs Assessment
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNTL	The National University of Timor Leste
VET	Vocational Education and Training
VET P1	Vocational Education and Training Provider 1
VSS	Vocational Secondary School

Table of Contents

ABSTRACT.....	II
STUDENT DECLARATIO.....	IV
ACKNOWLEDGEMENTS	V
GLOSSARY OF ACRONYMS	VII
TABLE OF CONTENTS.....	IX
LIST OF TABLES	XIII
LIST OF FIGURES	XV
CHAPTER 1 INTRODUCTION	1
1.1 Overview.....	1
1.2 Definition of terms.....	9
1.3 Research focus	10
1.4 Research questions.....	12
1.5 Research aims	14
1.6 Conceptual framework and methodology.....	15
1.7 Significance of the research.....	16
1.8 Limitations to the study	18
1.9 Organisation of the study	18
1.10 Conclusions.....	21
CHAPTER 2 VOCATIONAL EDUCATION AND TRAINING IN INDONESIA.....	22
2.1 Overview.....	22
2.2 Indonesia in brief	22
2.3 Educational context for understanding VET in Indonesia.....	25
2.3.1 Overview of the Indonesian education system	25
2.3.2 Vocational education at the school level in Indonesia.....	29
2.3.3 The broader VET system in Indonesia.....	32
2.4 Issues impacting VET	34
2.4.1 Globalisation, aid agencies and their impact on vocational education and training.....	36
2.4.2 VET in relation to human capital development	39
2.4.3 Role of the state versus private sector.....	42
2.4.4 Indonesia's policy on VET	43
2.5 Conclusions.....	47
CHAPTER 3 PARTNERSHIPS: WHAT THE LITERATURE SAYS..	49
3.1 Overview.....	49

3.2	Partnerships.....	50
3.2.1	Defining partnership	51
3.2.2	Types of partnership programs	58
3.2.3	Aims of partnerships	59
3.3	Impacting factors in training partnerships	61
3.3.1	Environmental factors influencing training partnerships.....	67
	<i>Size and location of partnerships</i>	68
	<i>Track record and reputation in partnerships</i>	69
	<i>Levels of formality in partnerships</i>	70
	<i>Cultural issues at work</i>	72
	<i>Impact of globalising pressures</i>	75
3.3.2	Training factors and partnerships.....	79
	<i>Key drivers for training</i>	80
	<i>Flexibility and customisation</i>	81
	<i>Administrative management</i>	85
	<i>Return on training investment</i>	88
	<i>Training needs assessment</i>	91
3.3.3	People factors in partnerships.....	96
	<i>Building trust</i>	97
	<i>Communication skills and relationship management</i>	99
3.4	Benefits and challenges in VET/industry partnerships.....	102
3.5	Conclusion	105

CHAPTER 4 METHODOLOGY.....108

4.1	Overview.....	108
4.2	Research methodology.....	109
4.3	Why a case study design?	112
4.4	Data sources	117
4.5	Sampling method	117
4.6	Target population	119
4.7	Data collection strategies and instruments.....	120
4.7.1	Survey tool and procedures.....	122
4.7.2	Interview methods.....	123
4.7.3	The interview questions.....	125
4.8	Data analysis	128
4.9	Trustworthiness.....	129
4.10	Ethical considerations	131
4.11	Limitations of the study	132
4.12	Conclusions.....	133

CHAPTER 5 THE PARTNERSHIPS.....135

5.1	Introduction.....	135
5.2	Background characteristics of respondents.....	137
5.3	Case Study One: Enrichment program in power generation	140
5.4	Case Study Two: Skills upgrading in electrical and instrumentation.....	151
5.5	Case Study Three: Training in teaching and learning methodology.....	159

5.6	Case Study Four: Human resource training at technician and management levels.....	168
5.7	Conclusions.....	175
CHAPTER 6 CROSS-CASE ANALYSIS		178
6.1	Introduction.....	178
6.2	Impacting factors on partnerships.....	180
6.2.1	Environmental factors.....	180
	<i>Types of partnership.....</i>	181
	<i>Size and location of partnerships.....</i>	187
	<i>Gross income.....</i>	189
	<i>Track record and reputation.....</i>	190
	<i>Partnership development.....</i>	193
	<i>Levels of formality.....</i>	197
	<i>Cultural issues at work.....</i>	199
	<i>Impact of globalising pressures.....</i>	204
6.2.2	Training factors.....	205
	<i>Key drivers for training.....</i>	205
	<i>Flexibility and customisation.....</i>	209
	<i>Administrative management.....</i>	214
	<i>Return on training investment.....</i>	220
6.2.3	People issues.....	225
	<i>Building trust and sustained relationships.....</i>	225
	<i>Communication skills and relationship management.....</i>	229
6.2.4	Partnership performance.....	235
6.3	Influence of business series and adjustments on partnerships.....	241
6.4	Conclusions.....	244
CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS		247
7.1	Overview.....	247
7.2	Key findings.....	249
7.3	Implications.....	259
7.3.1	Implications for policy.....	260
7.3.2	Implications for practice.....	262
	<i>Implications for vocational education and training institutions.....</i>	262
	<i>Implications for business corporations.....</i>	264
	<i>Implication for partnership management.....</i>	266
7.4	Conclusions and recommendations.....	268
7.4.1	Conclusions.....	268
7.4.2	Recommendations.....	275
	<i>Recommendations for further research.....</i>	278
7.5	Closing remarks.....	281
REFERENCES.....		ERROR! BOOKMARK NOT DEFINED.
APPENDICES.....		317
Appendix A: Information to Participants Involved in Research.....		318

Appendix B: Consent Form for Participants Involved in Research.....	319
Appendix C: Interview Questions.....	320
Appendix D: Survey Questions	322
Appendix E: Ethics Approval	331

List of Tables

Table 2.1: Labour force in Indonesia	24
Table 2.2: Indonesian educational system	27
Table 2.3: Number of Indonesian higher education institutions.....	29
Table 2.4: Modification of strategic policy in vocational education and training	45
Table 3.1: Benefits and challenges for VET institutions in partnerships with industry	106
Table 4.1: The process of case study construction	113
Table 4.2: Respondent distribution by function (N=22).....	122
Table 5.1: Partnership coordinators	137
Table 5.2: Level of involvement in partnerships	138
Table 5.3: Type of providers.....	138
Table 5.4: Classification of provider	139
Table 5.5: Training sites	139
Table 5.6: Percentage of training partnership interest	140
Table 5.7: VET P1 and IP1 partnership chronology (2008–2011).....	140
Table 5.8: VET P2 and IP2 partnership chronology (2009–2011).....	151
Table 5.9: VET P3 and IP3 partnership chronology (2001–2010).....	160
Table 5.10: VET P4 and IP4 Partnership Chronology (2000 – 2012).....	168
Table 5.11: Partnership’s benefits and challenges	176

Table 6.1: Partnership benefits	186
Table 6.2: Partnerships' annual gross income	189
Table 6.3: VET providers' track records	192
Table 6.4: Cultural and attitudinal issues.....	202
Table 6.5: Main drivers for industry partnerships	205
Table 6.6: VET provider staff effectiveness in partnering	233
Table 6.7: VET providers' performance in collaborating with industry (perceived levels of satisfaction)	237
Table 6.8: Industry partners' performance (perceived levels of satisfaction)	239
Table 6.9: Partnership benefits and challenges that emerged	242

List of Figures

Figure 2.1. Map of Indonesia	23
Figure 3.1: Strategic partnering: the effective bringing together of environment, process and people	65
Figure 3.2: Partnerships – the optimum environment, training and people mix	66
Figure 3.3: Partnerships – the optimum environment, training and people mix	67
Figure 3.4: Partnerships – the optimum environment, training and people mix	79
Figure 3.5: Partnerships – the optimum environment, training and people mix	96
Figure 4.1 Multiple case study method.....	115
Figure 6.1: Partnership impacting factors framework applied to analysis...	179
Figure 7.1: The Strategic Partnerships: An Approach to Institutional and Industry Partnerships.	280

Chapter 1

Introduction

1.1 Overview

In order to establish this research in the context of a vocational education and training (VET) institution in the 21st century, this chapter begins by providing background to the research through an overview of VET institutions in Indonesia today. This provides the foundation upon which the rest of the study is built. The research focus and research aims will be outlined and various terms utilised in VET will be defined. In particular, the terms ‘partnership’, ‘Technical and Vocational Education and Training (TVET)’, ‘VET industry partnership’, ‘customisation’ and ‘customised training’ will be defined in order to support the framework for the study. The chapter then moves on to introduce the research focus, questions and aims, followed by the conceptual framework and methodology. The significance of the research is discussed, followed by limitations and organisation of the study and conclusions.

Background of the research

In an increasingly globalised world with multinational economic domination, education and training is one of the few areas in which governments are still able to exert a relatively strong influence. ‘As governments lose control over various levers on their national economies ... they frequently turn to education and training as two areas where they do still maintain control’ (Green, A 1999, p. 56). Anderson (2006) argues that as globalisation slowly infiltrates the traditional powers of a nation-state, authorities have gradually relied more upon education and training to leverage and strengthen national comparative economic benefit.

Indonesia and its workforce are facing a serious dilemma. Although there is an increasing demand for highly skilled jobs due to globalisation, there is

also a large pool of unskilled labour that cannot support highly skilled jobs. This affects Indonesia's capacity to compete regionally and globally. The solution to closing this gap is to provide appropriate education and training to unskilled labour in the Indonesian workforce: 'A key challenge for the public and private sectors will be developing an education and training system that responds to the needs of the twenty-first century labour market' (Karoly & Panis 2004, p. 200).

This strong emphasis on education and training is taking place at the same time as a shift in the administration of education. In Indonesia there has been a shift of responsibilities for education and labour affairs from the central government to regional and local administrative levels. This followed the fall of the Suharto government in 1999 (Indonesia 1999). The main purpose of this shift was in 'overcoming the indifference of government bureaucrats to satisfying the needs of the public; improving the responsiveness of governments to public concerns; and increasing the quality of services provided' (Hope 2000, p. 520). The establishment of regional autonomy in government has become a worldwide trend.

In Indonesia, under regional autonomy, the responsibility for administering the vocational secondary school sector has passed to local governments. These schools have also been affected, as a result of changes in administration, management and bureaucracy, at central and local government levels. However, the regulation and supervision of higher education, including VET, is still integrated with the Ministry of Education and Culture (MoEC) at a central level.

The Indonesian national education system aims to help the Indonesian people to improve many aspects of their personal qualities including discipline, intelligence, responsibility and their enthusiasm for hard work (Priowirjanto 2000). Therefore, the national education system is charged with helping to raise and strengthen the national spirit of the country. In addition to these principles, Priowirjanto (2000) notes that an approach to teaching and

learning has been developed to support an innovative and inventive attitude and to augment individual self-confidence.

Internationally, the importance of VET development and its relationship with industry is recognised. The President of the United States, in a graduation speech at Northern Virginia Community College in 2011, emphasised the need to develop the relationship between educational institutions and industries. President Barack Obama said, ‘if we could match up schools and businesses we could create pipelines right from the classroom to the office or the factory floor. This would help workers find better jobs, and it would help companies find the highly educated and highly trained people that they need in order to prosper and to remain competitive’ (Obama 2011). President Obama’s words resonate with what has occurred in many countries, including Indonesia, and represent a *raison d’être* for Technical Vocational Education and Training (TVET) programs worldwide. Without a doubt, VET institutions and their training partnerships programs with industry will play their part in creating the policies of which President Obama has forecast.

However, Majumdar (2011) warns that VET systems in the Asia-Pacific region are encountering considerable challenges caused by the global economic crisis and its aftermath. Moreover, VET institutions in the region have generally not achieved market applicability, resulting in a mismatch between demand and supply as well as a decreased level of funding from government. Government is the main investor in VET provision.

Majumdar (2011) states that the sustainability of vocational education and training institutions relies heavily on their ability to adapt to market needs, both quantitatively and qualitatively. In reality many VET systems and their provider institutions are not sufficiently responsive and flexible in Indonesia or more generally.

Indonesia, in common with many other countries, has put in place major education and training developments and improvements to meet swiftly

shifting sets of economic and social needs over the past twenty to thirty years (Robinson 1999). The development and provision of quality vocational education and training is essential to support Indonesia in meeting increased regional and global competition (Suwarna 1997). It is also mentioned by Paryono (2013, p. 126) that ‘most countries in Southeast Asia are positioning Technical and Vocational Education and Training (TVET) in the mainstream of education systems and setting it as a priority in their education agenda in view of the fact that this type of education plays an important role in the socio-economic development of a nation’.

The Vocational Education and Training (VET) system, which is part of the Indonesian national education system, has two major foci: education and employment. Thus, the government authority for VET is shared by the Ministry of Education and Culture and the Ministry of Manpower of Indonesia, while the planning council, BAPPENAS (National Development Planning Agency Board), is responsible for the co-ordination of development planning (Alto et al. 2000).

Because of this the vocational education system is a part of the national education system administered by the Education Act (Indonesia 1999), and the national system for employment controlled by the Manpower Act (Indonesia 2003).

Vocational education in Indonesia aims both to prepare students to continue their study at a higher institute of formal learning, such as a polytechnic institution, and to prepare them (upon graduation) to directly enter the workforce. The Ministry of Education and Culture in 1993 introduced the “Link and Match” policy which intended to ‘link the education system to the “world of work”, and match the quantity and quality requirements of competent workforce in productive sectors’ (Djojonegoro 1994).

There is also a need to build an Indonesian VET system to meet the requirements of industry. The system needs to provide both quality support

and to be responsive to community and industry needs to best meet these economic objectives. Therefore, in the report of International Bureau of Education (2011, p. 8) regarding one of the regulatory framework in Indonesia stated that, ‘the national frameworks of competencies by its nature, enables standards to be developed at key points in the students’ progress through the various elements of the curriculum’ which meets with the industry needs.

Training should be integrated with initiatives designed to advance management skills and quality processes within industry. There has already been significant development in the amount and diversity of training partnerships between industry and training providers in the VET sector in Indonesia (Robinson 1999).

The Indonesian government is attracted to the Australian approach to vocational education and training, which is industry led, based on competency standards and integrated within the Australian national qualification framework (Cox 2007). Australia moved away from the VET system, dominated by educators and VET providers, to create an industry-led system: ‘the emerging vocational education and training system aims to be “business led” and “enterprise focused”, with local workplaces being able to determine “what training they obtain, from who and when, where and how”’ (Mawer 1999). Currently, the national training system in Australia is dedicated to stability in results measured against industry and business benchmarks rather than consistency in curricula.

This agenda for the development of VET in Indonesia was reinforced by the Australian Embassy’s Counsellor for Education, Science and Training speaking in Indonesia: ‘vocational education and training symbolized a crucial element of the current workplace and was essential in underlying potential economic development. Furthermore, all countries are reaching a new stage in the improvement of their vocational education and training institutions and systems’ (Shannon 2007).

In view of the technological advances in today's workplaces, there is an increasing requirement for a well-trained entry level workforce. An increasing number of companies are establishing partnership training agreements with VET institutions, as external providers, in order to ensure their continued success in the business world, to be competitive, and to improve productivity. The reasons for many education and training institutions moving towards these kinds of partnership arrangements include addressing the cost of equipment upgrades, enhancing instructor skills and offsetting enrolment decreases in programs that are viewed as out-dated. In other words, they want to improve and both grow and diversify their market.

The phenomenon of slashed funds from government, whether modest or substantial, serves to challenge higher education institutions, including VET institutions, to fulfil the needs of their stakeholders (Roueche & Roueche 1999). As financial support from governmental sources declines, universities, polytechnics and vocational education schools need to find different sources of financial support, to increase existing income, and handle growing and changing needs which are very complex (Ulrich & Barney 1984).

Many institutions will only survive this situation through promoting innovative and collaborative partnerships that allow them to change in this fast moving era. A partnership can occur in various forms, including public or private, formal and informal, large or small, individual or organisational. Developments over the past decade 'highlight the reality that we are living in a time of truly historic transformation—one that is planted in the rise of a knowledge society based largely on the collaborative generation and use of information' (Business-Higher Education Forum 2001, p. 3).

For many years universities and vocational education institutions, including polytechnics in Indonesia, have depended on government funding. The days when those institutions assume they are "ivory towers" that do not require contact with the outside world are past. The "ivory towers" require assistance from the private sector. Thus, the fostering of partnerships to meet their fiscal

needs will become more and more common in academe (Rogers et al. 1999). Accordingly, VET institutions are increasingly opting to form interdependent relationships with business corporations. As Glover (1999) argues, the decision to work together with industry is one of necessity since, in many cases, organisations like VET institutions should gain resources from a variety of sources in order to survive.

Since then, the pairing of companies and higher education institutions, particularly VET institutions, to address new but mutual needs is rising. Companies are seeing collaborations with universities and vocational education institutions as a means for employee training in addition to enabling recruitment and fostering retention. However, higher education, including VET institutions, recognises an increasing market segment of working adult students as a possible source of increased enrolments and related income streams. A mixture of both internal and external forces has established a significant opportunity to explore the dynamics of partnerships in employment development involving traditional academic institutions (Bok 2003; Meisler 2004; Meister 2003; Watkins 2004).

Partnerships have been defined by many writers from diverse bodies of literature as, essentially, the voluntary combining of resources between two or more groups to accomplish collaborative targets (Yoder & Ham 1999). Partnerships normally receive positive evaluations since they ‘represent an important mechanism for bringing government departments, local authorities and professional groups between agencies, the private and voluntary sector, those who deliver services and those who receive them to work together towards a common goal’ (McLaughlin 2004, p. 104).

The term ‘partnership’ is a broad label that describes various types of relational, interpersonal and organisational transactions (Mowen & Kerstetter 2006). Collaboration, partnership, joint ventures and strategic alliances are often applied interchangeably. These disparities in partnership terminology cause misconceptions in defining collaborative relationships and

systematically evaluating the impact of partnership activities (Cousens et al. 2006).

Regardless of issues to do with the terminology, partnerships are becoming progressively more essential in the management of public and private sectors, and especially for VET providers and industry. However, whilst some partnerships between VET institutions and industry have been valuable, others have not. The growing issue is not whether partnerships are good or bad, but how to make them work (McLaughlin 2004).

The four VET providers (industry training partnerships cases making up this study) are identified as:

- Partnership between VET P1 and IP1 in “enrichment program in power generation” for VET P1’s students.
- Partnership in “skill upgrading in electrical and instrumentation” between VET P2 and IP2 for IP2’s employees.
- Partnership between VET P3 and IP3 in providing “training in teaching and learning methodology” for cohorts of vocational schoolteachers.
- Partnership between VET P4 and IP4¹ in “human resource training for technician and management levels” to provide employee based training for IP4’s staff.

All four VET providers are located in East Java, Indonesia and their respective industry partners are also located on the same island, Java. The cases reflect a cross section of VET providers and industries facing varying degrees of impacting factors in their training partnerships.

¹ The actual names of VET providers and industry partners have been changed for anonymity.

1.2 Definition of terms

A number of terms must be defined in order to understand the context of the study. For the purposes of this study, the following definitions are employed.

In this thesis a VET provider is an organisation which delivers vocational education and training (VET) programs. VET programs are offered by some universities, polytechnics, vocational schools, private providers, industry skill centres, and commercial and enterprise training providers (Naidu 2011). The VET system in Indonesia is discussed in greater detail in chapter two.

A partnership is defined as a mutually beneficial and well-defined relationship entered into by one or more organisations to achieve common goals (Buettner, Morrison & Wasicek 2002, p. 5).

The acronym 'TVET' is used interchangeably with VET: 'Technical and vocational education and training, used as an equivalent term for vocational education and training (VET), especially in the Asia-Pacific region. This is the term used by UNESCO' (Naidu 2011, p. 113).

Industry in this thesis is a national or international corporation or business/industry which requires vocational/technological training to support its activities.

Higher education industry partnership is defined as a relationship including close collaboration and joint rights and responsibilities between a higher education institution (including VET institutions) and an industry corporation that creates mutually beneficial results. It is identified as a 'strategic joint relationship between two or more organisational entities' (Orr 2001, p. 41).

The definition of customisation in training, or customised training in this thesis, is a course of instruction and/or training adapted to meet the needs of clients and a specific group of learners (i.e. company employees). Course modifications may include changes in class scheduling, location and duration (Knight & Nestor 2000).

On-the-job training is training undertaken in the workplace as part of the productive work of the learner (Naidu 2011). It is also defined as ‘training provided to an employee in occupational or other skills essential to performing a specific job or group of jobs. Such training is generally used for entry-level employment and skill upgrades’ (General Accounting Office & Human Services 1994, p. 24).

The workforce in this study is the available workers engaged in a specific activity or enterprise for a single company or industry. In this study, the workforce is perceived by the primary organisations involved.

1.3 Research focus

This study focuses on VET and industry partnerships, an initiative which the Indonesian government embarked upon in 1997 (Ministry of Education and Culture of The Republic of Indonesia 1997). As part of the agenda of modernisation of the VET to achieve economic competitiveness and meet industry requirements, Indonesia has set about developing partnerships between industry and the training sector. Increasing the number and success of training partnerships requires that critical aspects of partnerships in practice are well understood, including how partnerships deal with both VET providers and company management challenges, and what strategies help maximise success.

One way some corporations are overcoming their employee development problems is by forming partnerships with VET providers and higher education institutions. Creating a partnership between such institutions with different aims can be a very challenging process, since VET institutions and industry are not natural partners, and their mission and cultures are frequently different (Business-Higher Education Forum 2001).

There are many reasons for establishing partnerships. The reasons for VET providers include access to industry skills and facilities, generating additional

income, research applicability, and increasing the job opportunities for teachers, trainers and graduating students (D'Este & Patel 2007). The reason for industry to create partnerships with VET institutions is obtaining and supporting knowledgeable workers so they will be able to solve emerging technical and management problems in the company. This is seen as critical to business success (Duderstadt & Womack 2004; Hall, Link & Scott 2003).

Therefore, vocational educational institutions and companies both need to work together in defining the nature of the relationship, determining collaboration methods and establishing shared goals. In this way both organisations can obtain advantages from the partnership.

Mitchell and Young (2001) argue that successful partnering is related to the capability to respond to the necessity of transformation, innovation and continuous learning by both VET providers and industry partners. They describe the formation and nature of partnerships as a mixture of inter-organisational and interpersonal. Inter-organisational includes the environment, responsive administrative arrangement, change management and competition level; and interpersonal aspects of trust, friendships and senior executive support at work. Similarly, Callan and Ashworth (2004) and Lendrum (2003) note successful training partnerships between VET providers and industry include the productive administration of an extensive body of environmental, training and people issues.

Various issues shape an improved partnering result. Lendrum (2003) states that training partnerships are formed by a scope of environmental factors, and readiness to adjust the approach to training. He also argues that key to the success of all collaborations are the attitudes of people and the quality of interaction amongst them. As a result, these are researched in three domains: environmental factors and their impact on partnerships; modification of the training model (or process) to meet the particular training needs (training factors); and the tasks and interactions of people needed to ensure partnerships work effectively (people factors). These three factors and

Lendrum's model are addressed more fully in chapter three. They provide an organisational framework for this thesis which is built upon and enhanced in chapters five, six and seven.

There are case studies on partnership creation, operations, accomplishments, expansions and evaluation that have been pursued. However, as partnerships continue to grow, roles are formalised, responsibilities occur, written policies, organised and empirical documents of partnership events, stakeholders, and results should be more pursued systematically (Mowen & Kerstetter 2006).

This research investigates the role of vocational education and training in training partnerships and the range of impacting factors in the development and implementation of training partnerships between four VET institutions and their industry partners in East Java, Indonesia. The work has both a national and international significance. The result of the investigation of these factors could help provide clarity about how best industry and VET providers can work together as equal partners, and provide options for VET providers and industries to meet the challenges of a 21st century knowledge-driven global economy.

1.4 Research questions

The research questions that arose from these three key aspects of partnership structure draw upon Lendrum's (2003) model.

Environmental issues:

1. What are the common environmental factors that strongly affect the establishment of the partnership and the participants' readiness to associate; what kind of partnerships have appeared in Indonesia; how do these factors adjust in line with the size and site of the VET and industry partner; how are reputation impacts operational; what are the institutional

and relational cultural issues at the workplace; what has been the impact of globalising pressures, e.g. through adoption of Western (Australia) models on training partnership experience?

Training issues:

2. Can successful training models be identified in these partnerships; what are the main training drivers; to what degree does training design adjust in their flexibility levels, customisation, arrangements in administrative and the formal procedure of the training liaison; what is the apparent return on investment in training partnerships for the industry partner?

People issues:

3. What abilities are required by VET providers to develop and maintain partnerships?

1.5 Research aims

The aims of this study was to provide a snapshot of training partnerships program between VET providers and industry through a series of case studies. The study examined impacting factors upon training partnerships including environment, training and people factors (Lendrum 2003) between VET providers and industry, and the outcomes of the partnerships. It may be speculated, for example, that such partnerships may be instrumental in creating new streams of revenue for providers. For both VET providers and industry they offer the prospect of enhancing the knowledge and abilities of staff, students and employees, taking the competitive positioning to another level for both VET providers and their industry partners. Stake (1995) suggests that the main function of case study research is to observe a certain occurrence with the expectation that the case analysis may provide significant information that might be applicable to other cases. The case study approach was suitable for this study because it provided for a comprehensive analysis of partnership between VET providers and industry.

1.6 Conceptual framework and methodology

The theoretical framework for this research is informed by a constructivist paradigm, employing a qualitative research methodology to gain knowledge of the perceptions of case study participants implementing VET partnerships in Indonesia (Mertens 2010).

This study takes into account our knowledge of the concept of “partnering” and how alliances between stakeholders can generate outcomes, both positive and negative. The existing literature about partnerships and how they have evolved over previous decades helps in comprehending how VET providers and industry in Indonesia today might meet the needs of an increasingly complex and global work environment.

This study is focused on the theoretical framework of building strategic partnerships developed by Lendrum in 2003. Based on the Lendrum (2003) framework, Callan and Ashworth (2004) suggest that the first element of the framework (the environment) sets limits on how VET providers and industry partnerships operate. Mechanisms operating in this element involve the characteristics of the training environment (i.e. size, location, reputation, cultural issues, and levels of formality of partnerships). The second element of the framework concerns the training model used in the partnership and how well this model serves customer needs for flexibility, targeted training and value for money, as well as providing the necessary administrative support. Finally, success will not be achieved unless the right people with appropriate skills are involved. This is the people element of the framework. The grouping of these elements helps to define the success factors for training partnership performance between VET providers and their industry partners.

The methodology governing this study takes a case study approach which draws upon a survey questionnaire and interviews with four VET providers (VET1–4) and four matched industry partners (IP1–4). A case study used

these informants to obtain information regarding partnership characteristics and relationships, and primary beneficiaries as perceived by VET practitioners and corporate training managers participating in partnership training agreements. This study also utilised relevant literature and policy documents. The theory of building strategic partnerships is discussed in detail in chapter three. The implementation of this theoretical perspective enables the construction of a more complete picture of growth and sustainability of partnerships between a VET provider and industry partner, where ‘adaptation, metamorphosis, evolution and revolution all play a role’ (Smith, AC, Evans & Westerbeek 2005, p. 100).

1.7 Significance of the research

The vocational education and training sector has a significant social and economic role in the development of emerging nations. From a social service viewpoint, demand for VET stems from a need by individuals to attain their full potential and contribute to their own social and cultural improvement. This demand is motivated by economic goals stemming from accrued income with regard to individuals, communities, enterprises and nations that possess superior skills and knowledge (Ferrier & Anderson 1998). For Indonesia, training partnerships between VET providers and industries are an historical characteristic of Indonesian’s VET system, allowing for development of useful research findings in the areas of partnerships and community and national development. Underscoring the importance accorded to the sector, VET has been given priority in *REPELITA VI* (Indonesia's sixth five-year development plan, 1994/1995–1998/1999). Until now, however, no uniform VET system has been adopted in Indonesia (Alto et al. 2000).

The study has significance for VET and the wider education agenda in Indonesia and makes a contribution to international understandings and knowledge of VET providers and industry partnerships.

This study provides four significant contributions. Firstly, it is significant for current and future planning of training partnerships between vocational education and training institutions and industry in Indonesia. Secondly, the outcomes of this study contribute to the development of important understandings for campus officials, educators in higher education, education staff who are responsible for securing additional income for their institution, education policymakers and industry. The descriptive and qualitative methodology used shows how different institutions collaborate, thus producing an understanding of partnerships between VET providers and industry.

Thirdly, by making use of, and enhancing, a scaffold that conceptualises a partnership structure that draws on the Lendrum (2003) model for the examination of VET partnerships with industry, the four cases in this study demonstrate the unique creation and development of each relationship. At the same time, these cases demonstrate that certain impacting factors are common across all partnerships. Thus there is no monolithic or one-size-fits-all model for the creation of successful partnerships between a vocational education training provider and its industry partner.

The impacting factors of institutional culture, interpersonal skill and leadership contribute to fostering the unique organisational context that frames the approach to partnering. At an operational level, an understanding of these factors (i.e. provision of adequate resources, customised training materials, and the involvement of flexible and willing VET provider staff) is vital for the necessary building blocks for partnerships.

This study highlights in-depth qualitative data from key partnership stakeholders (i.e. partnership managers, academic leaders, and corporate decision makers) for creating and managing training partnerships. As such, this work illustrates the extent to which each partnership performed effectively. Moreover, this research also provides insights into common

mistakes that occurred in partnerships and offers valuable insights into the lessons learned.

Finally, the study lends additional insight for VET provider administrators and their corporation managers, as counterparts, seeking to make sense of the opportunities that partnering promises.

1.8 Limitations to the study

The limitations include sample size and population. This study was restricted to population. No attempt has been made to generalise the findings for other institutions or corporations. Thus generalisations from the results of this study are limited to the population of VET providers and their industry partners.

All respondents were sourced from four vocational education and training institutions in East Java. These institutions are numbered and named as follows: VET P1-4 and for industry, IP1-4. VET P1 and VET P4 are located in Malang city, which is considered a medium size provincial city. VET P2 and VET P3 are located in Surabaya, which is considered a large provincial city. In fact, these four VET providers are all higher education institutions – polytechnics. Although these polytechnics are higher education institutions, they also deliver vocational education and training (VET) programs. Four specific corporations or targeted business/industry representatives that had established partnerships over the last three years were selected.

1.9 Organisation of the study

This chapter began with an overview of the current situation of the sector at institutional, national and global levels. This provides the foundation upon which the rest of the study is built. The aims are outlined and various terms prevalent in higher education have been defined including vocational education and training (VET). For example, VET provider, partnership,

corporation, industry-higher education partnership, customised training, on-the-job training, and workforce are defined in order to establish the framework for the study. Limitations were then reviewed.

Chapter two provides an educational context for understanding VET in Indonesia and includes an overview of the Indonesian education system, vocational education and vocational education and training in Indonesia. This chapter also discusses issues impacting VET, including the role of globalisation, aid agencies and their impact on vocational education and training, VET in relation to human capital development, the state versus private sector and VET policy.

Chapter three presents a review of the literature associated with the framework for this study; just as blueprints delineate the parameters of a building, so this chapter will look at the parameters that inform this study. The chapter then moves onto the theory of partnerships and includes higher educational institutions-industry partnerships, the types of partnership programs and aims of partnerships and the theory of training partnership. It also discusses in detail the three factors impacting VET/industry partnerships: environmental, training and people factors based on the work of Lendrum (2003) and Callan and Ashworth (2004).

Chapter four, the methodology chapter, outlines how the study was conducted. The chapter builds on the foundation of chapter two which outlines the context and environment of the VET/industry partnership and the sources of literature presented in chapter three, which serve as a blueprint to inform the study of VET/industry partnership. This chapter also includes details of the research and case study design presenting the construction process of the multiple case study method used in this study, the interview questions, data sources, sampling method, target population, data collection strategies and instruments, and finally explains how the data was analysed. The chapter concludes with discussions of trustworthiness, ethical considerations associated with the study.

Chapter five presents a narrative of training partnerships for four VET providers and their industry partners using four case studies based on a survey, interviews and document review. Individual case descriptions are presented first, followed by a chapter (chapter six) on cross-case analysis. For each case, details of the organisational context, the background and its genesis are presented for each of the VET providers and their corporate partners. Subsequently, the chapter addresses the partnering process, including the benefits (financial and non-financial) and challenges, partnership characteristics and considers how each of Lendrum's three factors have contributed to the sustainability of partnerships. Thus, chapter five explores the evolution of partnerships from initial creation to their current state.

In chapter six, all four cases are cross analysed in order to identify similarities and differences with VET–industry partnerships. The four cases provide a rich opportunity to explore common themes and emerging patterns regarding Lendrum's factors: environmental, training models and people factors. By identifying similarities and differences, it provides further insight into issues concerning environmental issues. These include the types of partnerships, size and location of partnerships, track record and reputation, levels of formality, cultural issues at work and the impact of globalising pressures. Training issues include key drivers for training, flexibility and customisation and return of investment. The people issues include building trust communication skills and relationship management.

Finally, chapter seven presents the summary, discussion of key findings, implications, conclusions and recommendations based on the review of existing literature and the evaluation of data. The purpose of this evaluative case study research is to explore existing partnerships between VET providers and industry. More specifically, this chapter presents the implications for policy and practice. Policy formulation and implementation

are often data driven. Data enrich the goals and objectives of policies, the targets to be achieved and strategies for achieving such targets.

Significantly, this chapter also provides recommendations with regard to VET provider and industry partnerships, which can be a useful strategy in providing workforce training and reforming and developing knowledgeable employees.

1.10 Conclusions

Partnerships between vocational education and training institutions and industry seem to be the solution to a comprehensive set of global challenges. Partnerships appear in many structures and for different purposes. A partnership could exist between VET institutions and industry to provide appropriate training and improvement activities for workers, enabling the company to remain competitive.

Underpinning factors influencing this study are the effects of globalisation and a range of other factors to do with the Indonesian economy and its need to develop a better qualified and more skilled workforce to meet these challenges. In addition, decreasing levels of government funding mean that Indonesian VET providers (e.g. polytechnics) need to find alternative sources of funding. However, the abiding reason for this study is the shift in focus by vocational and education training providers to be better connected to industry needs. One of the key ways by which this responsiveness can best be served is by better partnership arrangements between VET providers and industry. This thesis aims to shed some light on how such partnerships are best developed and sustained.

Chapter 2

Vocational Education and Training in Indonesia

2.1 Overview

In an effort to fully understand the education system and vocational education and training (VET) in Indonesia, this chapter reviews the current literature. First, the literature related to understanding Indonesia geographically and demographically is reviewed, followed by that which focuses on its education system, vocational education in schools and the VET system more broadly. Second, it considers literature that examines perspectives impacting VET. This includes globalisation, VET in relation to human capital development, the role of the state versus private sector in relation to VET institutions and Indonesia's national VET policy. As such, it builds on material introduced in chapter one.

2.2 Indonesia in brief

Geographically, Indonesia is located on the equator and situated between Asia and Australia, and between the Pacific and Indian Oceans. The country shares land borders with Timor Leste, Papua New Guinea and Malaysia. With a total of 237.6 million inhabitants it is presently the fourth largest country in the world (as of May 2010) and the world's largest archipelago. It is made up of 17,500 islands, and 58% of the population inhabit the island of Java (BPS 2010). The population of East Java is 37.5 million, while West Java's is 43.1 million.

Indonesia includes numerous ethnic, cultural and linguistic groups, some of which are interrelated. Some 900 languages are spoken in total, with Indonesian (Bahasa Indonesia) being the official language. Since

independence, Bahasa Indonesia is the language of most written communication, and education, government and business (BPS 2010).

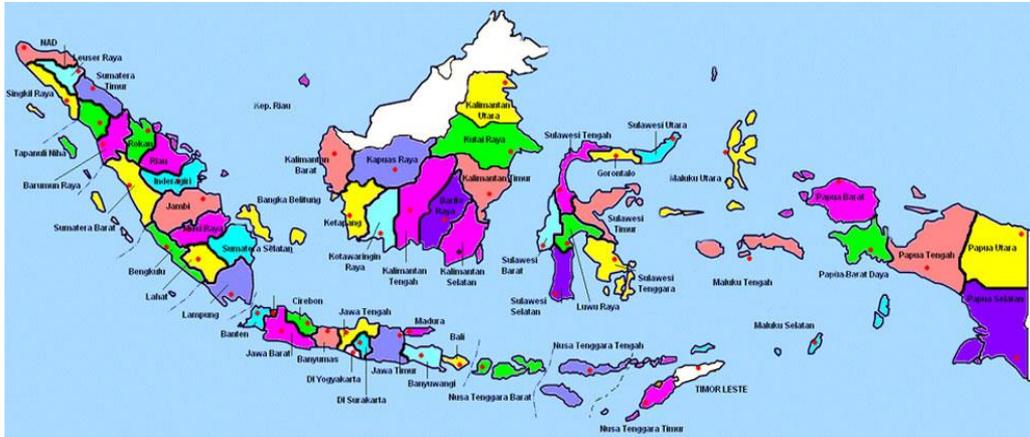


Figure 2.1. Map of Indonesia

Source: <https://www.google.com.au/search?q=peta+indonesia>

Indonesia consists of 33 provinces and about 500 regencies. According to the Central Statistics Agency, approximately 54% of the population live in urban areas while the remaining 46% live in rural areas (BPS 2010).

The central government in Indonesia is led by the President. The provinces form the second level of government and the districts and cities, which constitute local governments, form the third. Presently, the Indonesian government system is in transition from centralism to regional autonomy or decentralisation (Turner et al. 2003). With the law on decentralisation passed in 1999 (Law No.22/1999), a decentralisation process began after the fall of the Suharto regime. This moved much of the responsibility for education and labour affairs to regional and local administrative levels. However, in education, the Ministry of Education and Culture maintained supervision and regulatory control over higher education (UNEVOC 2011).

Indonesia has a young population. Around half of the total population is below the age of 30 years. Combined, these two features (i.e. the population size and age profile) indicate that Indonesia at present contains a large labour

force. It is also one that will grow larger in the foreseeable future, as shown in Table 2.1 below.

Table 2.1: Labour force in Indonesia

	2010	2011	2012	2013
Labour Force	116,527,546	119,399,375	118,040,000	121,190,000
• Working	108,207,767,	111,281,744	110,800,000	114,020,000
• Unemployed	8,319,779	8,117,631	7,240,000	7,170,000

Source: (BPS 2010; VDSI 2011)

According to Van der Schaar Investments (VDSI 2011), the unemployment rate in Indonesia is highest for people between the ages of 15 and 24, well above the country's national average. Graduates from universities, vocational schools and secondary schools have difficulty finding their place in the national workforce. Almost half of Indonesia's total workers possess a primary school qualification only. In recent years, however, a changing trend is evident: the share of higher education degree holders has increased, while the share of those that went to primary school only has decreased.

In conclusion, the labour market is affected by economic growth and national development. The manpower problems that Indonesia faces at present include limited employment for industry, low quality of labour force and high unemployment rate (Dhanani, Islam & Chowdhury 2009). These issues are being addressed by strategies and programs that aim to contribute to Indonesia's economic development. Major programs that address these issues are the expansion and development of employment creation schemes, as well as programs that aim to enhance the quality and productivity of the labour force.

2.3 Educational context for understanding VET in Indonesia

This section presents an overview of the Indonesian education system to put vocational education and training (VET) in Indonesia in context. In addition to this general overview, it also includes an overview of both vocational education in schools and VET more broadly.

2.3.1 Overview of the Indonesian education system

The national education system aims to enhance the qualities of Indonesian people, with a focus on the development of discipline, responsibility, cleverness, readiness to work hard, and be physically and mentally healthy (Priowirjanto 2000). In accordance with these principles, Priowirjanto (2000) added that teaching and learning approaches have been developed to raise a person's self-confidence as well as encourage an innovative and creative attitude.

The Indonesian education system consists of four stages: pre-school, basic education, secondary education and higher education. As shown in Table 2.2 below, basic education provides a general education over nine years, consisting of six years of primary school education (*Sekolah Dasar*) and three years of junior secondary education (*Sekolah Menengah Pertama*). Secondary education consists of four types of schools: the GSS or general secondary schools (*Sekolah Menengah Atas*), the VSS or vocational secondary schools (*Sekolah Menengah Kejuruan*), the RSS or religious secondary schools (*Madrasah Aliyah*), and finally the SSS or service secondary schools (*Sekolah Menengah Kedinasan*).

For the general secondary school (GSS) sector, the main concern is to expand knowledge and build students' skills in order to successfully access and negotiate higher levels of education. Vocational secondary schools (VSS) aim to develop certain occupational skills and place emphasis on preparing their students for employment. Religious secondary schools (RSS), however,

prioritise religious knowledge and service secondary schools (SSS) with an emphasis on preparation of candidates for the civil service.

In Indonesia there are two types of senior high school: “SMA” (Sekolah Menengah Atas) and SMK (Sekolah Menengah Kejuruan). SMAs differ from SMKs in the nature of their studies: the students at SMAs are generally destined to continue their study at university whereas students of SMKs are prepared to be work ready after finishing school without going to university or college. In short, an SMA is the university-preparatory school while an SMK is a vocational school (Ministry of National Education Indonesia 2010a).

Table 2.2: Indonesian educational system

Age	Year	Stages	Level	In-School				Out of School
27	21	Doctorate	Higher Education	I N S T I T U T E	S3		Open University	
26	20							
25	19	Post Graduate			S2			
24	18							
23	17	Under Graduate			S1	Polytechnic Academy D3, D2, D1		
22	16							
21	15							
20	14							
19	13							
18	12	3	Secondary Education	GSS	VSS	RSS	SSS	Package C Programme
17	11	2						
16	10	1						
15	9	3	Basic Education	Junior Secondary School				Package B Programme
14	8	2						
13	7	1						
12	6	6		Primary School				Package A Programme
11	5	5						
10	4	4						
9	3	3						
8	2	2						
7	1	1						
6			Kindergarten	Pre-School				
5								

Source: (SEAMEO 2006)

Higher education consists of awards at diploma, bachelor, masters and doctorate levels. In Indonesia, higher education can operate academic, vocational and technical programmes (Ministry of National Education Indonesia 2010b).

Higher education has a long history in Indonesia. Buchori and Malik (2004) state it was initiated by *pesantren* that provided Islamic education before the colonial period. However, they suggest that the non-formal and less structured Islamic higher education system in that era is unsuited to comparison with standards in the rest of the world. In the colonial period

higher education development was affected by the implementation of the Ethical Policy on 17 September 1901.

Queen Wilhelmina stated that it was a moral duty of the Netherlands to reduce poverty and increase welfare for people in colonial Indonesia (Ooi 2004). The long-term strategy of higher education from 1975 to 1985 was introduced by the Directorate General of Higher Education (DGHE) in 1975. It emphasised the need for a strong connection between higher education and regional and national development. Thus dual systems, (academic and professional streams of higher education) were introduced (Fahmi 2007). He added that the strategy also introduced three levels of programs in higher education: diploma, *sarjana* (bachelor) and graduate programs.

Dual system in Indonesia which consist of academic and vocational, 'according to the framework, academic programs consist of four-year undergraduate degree programs (strata 1-S1), two-year masters level (strata 2, S2) and three-year doctorate program (Strata 3-S3) while profession or vocational programs offer one-to-four year non degree trainings (Wicaksono & Friawan 2011, p. 5).

The program level in higher education progressively changed, based on the latest law governing the National Education System, introduced in 2003 (*Undang-undang No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional*). This recognised five forms of the Indonesian higher education system: academies, polytechnics, advanced schools, institutes and universities (Ministry of National Education Indonesia 2003). The figures for each type of institution are shown in Table 2.3.

The Indonesian skill report produced by the World Bank (2010, p. 131) stated:

Academies are legally defined as higher education institutions that provide instruction in only one field; most offer either applied science, engineering, or art and offer Diplomas and Certificates for technician-level courses at both public and private levels. Advanced schools provide academic and

professional university level education in one particular discipline. Polytechnics are attached to universities and provide sub degree junior technician training. Institutes are those higher education institutions which offer several fields of study by qualified faculty and are ranked as universities with full degree-granting status. Universities are larger than institutes and offer training and higher education in various disciplines. Polytechnics are independent institutions at present, in other word; they are not attached to universities anymore based on Presidential Decree 12/2012.

Table 2.3: Number of Indonesian higher education institutions

	Public	Private
Academies	-	1034
Polytechnics	32	140
Advanced schools	-	1043
Institutes	10	43
Universities	46	345
Total	88	2605

Source: (EPSBED 2010; World Bank 2010)

As shown in Table 2.3, higher education institutions in Indonesia are mostly private. While more numerous than public institutions, Buchori and Malik (2004) noted that some are poorly resourced and this affects their ability to provide good quality education. Private institutions are seen as a second option for potential students in Indonesia. In short, public institutions have higher status.

2.3.2 Vocational education at the school level in Indonesia

Vocational education at secondary level in Indonesia, ‘has gained in the last decade, especially since the Ministry of Education created a long term plan to improve access to TVET with one policy is the government plan to increase the ratio between students enrolled in TVET secondary level to those in general secondary schools to 70:30 in 2015’ (Paryono 2011, p. 124).

Policymakers in developing countries believe vocational education is a promising option which should be expanded in order to develop workforce market outcomes (Newhouse & Suryadarma 2009). Both vocational education and skills development have been recognised as ways to improve the productivity of individuals and enterprises, and contribute to national development. An individual who is highly skilled in a specific profession and also demonstrates flexibility is a so-called 'knowledge worker' and seen to be human capital required for the development of a country (Berlia 2009).

The oldest and largest part of Indonesia's system of technical and vocational education and training are the specialised vocational education schools (Robinson 1999). In 2008, there were 6,499 state and private vocational senior secondary schools in Indonesia (Khalik 2008). The Indonesian Ministry of Education is enthusiastically embracing vocational education and aims to decrease high unemployment rates amongst intellectual young people. This also includes changing the current share of high school students from 70% in general secondary schools (GSS) to 70% in vocational secondary schools (VSS) by 2015 (Ministry of National Education 2006).

Vocational education is one of the subsystems in the Indonesian education system (Djojonegoro 1994). Vocational education in Indonesia falls under the Directorate of Technical and Vocational Education (DTVE). The DTVE is the central decision-making body for policy and other matters for all vocational schools in Indonesia. It has the specific aim of improving the quality and relevance of technical and vocational education at school level by developing the capacity of the system to plan, manage, monitor and evaluate activities (Priowirjanto 2000).

The Ministry of Education and Culture (1990) notes the following goals for vocational education in the context of its standard for national education:

1. Preparing students for higher education levels or to expand their primary education.

2. Improving a student's ability, as a member of society, and to maintain a mutually beneficial relationship with their social and cultural environment.
3. Improving student capability for self-development in sciences, technology and art.
4. Preparing students for employment and to develop professionalism by providing skills to students as an initial preparation for the world of work in accordance with identified requirements.

The curriculum of vocational secondary education is set out by the Minister of Education and Culture in Decree No. 080/U/1993, which is updated into National Education Law No. 20/2003 (Nasional 2003). Its objective is to prepare students to enter employment, to build up their professional skills and to prepare them for making decisions about a career, to encourage their capability to compete and develop independently, and to foster a national workforce to meet the manpower requirements of business and industry (StateUniversity.com 2010).

While general high schools offer three major streams: natural science, social science and language, vocational schools offer a more diverse range of specialisations. The offered majors are: business management; technical, which includes machinery and information technology; agriculture and forestry; community welfare; tourism; arts and handicraft; health; and marine studies (Newhouse & Suryadarma 2009).

In 2006, the Ministry of National Education began increasing the number of vocational schools in order to increase the size of the workforce. These efforts were mainly directed at those students who do not aim to continue on to tertiary education (Ministry of National Education 2006). The Ministry also argued that since the unemployment rate of vocational graduates is lower than for general education graduates, increasing the share of vocational

graduates in the mix would result in higher productivity and a lower overall unemployment rate.

The most recent development for technical and vocational schools is the result of the implementation of the program called the “dual system” of vocational education in Indonesia. This is ‘a form of vocational skills training and education by combining an educational program in school with a skills acquisition program through employment in a monitored, sustainable, systematic manner in order to achieve a certain level of professional skill’ (Priowirjanto 2000, p. 3).

In an era of continuous technological transformation, ‘a dual VET system is expected to be less prone to problems of educational mismatch early in the career, with firms expected to timely adapt their training curricula to changes in the skills demanded’ (Eichhorst et al. 2012, p. 14). In this case, components of the curriculum of technical and vocational education are carried out in industry through a day or block release system. This training is expected to improve the professionalism of the student and their work readiness (Bakri 1996).

2.3.3 The broader VET system in Indonesia

In adapting societies to changing economic and environmental conditions, skills development is seen as an increasingly important factor that can bring about innovation, enhance productivity, stimulate economic competitiveness and underpin inclusive approaches to development. Thus, the vocational and professional training system would have a major impact on national competitiveness (Berlia 2009).

Over the last 25 years, the Indonesian government has established a large number of technical and vocational schools, polytechnics and other forms of VET. These institutions offer a wide range of study choices nationally. They are achieving success comparable to that achieved through compulsory general education (Alto et al. 2000). As a result, those vocational institutions

have made a significant contribution in supporting Indonesia's efforts to produce skilled manpower.

There are 32 state polytechnics and 140 private polytechnics (EPSBED 2010), 10,640 public and private vocational secondary schools (Directorate of Vocational School 2010) and 204 other public vocational education and training (Balai Latihan Kerja) outlets, which belong to the Ministry of Manpower all over Indonesia (Directorate of Productivity and Training Development 2010).

Within secondary education and higher education, a variety of public and private universities, polytechnics and schools exist in a system that is broadly defined as vocational education and training (VET). Thus, VET permeates both secondary and higher education systems, and public and private provider domains (Ministry of National Education Indonesia 2010b).

Byrne (2005, p. 1) notes that a large and comprehensive VET system needs very close connections with industry and business at all levels: 'it requires industry to be able to organise itself so that it can work with government at the level of VET strategy and policy and the level of national VET framework development and operation'.

In the South East Asian countries such as Indonesia, Malaysia, Papua New Guinea, Philippines which have 'relatively grown' VET systems, the policy on vocational education and training carried out by the governments have played a major role, especially in this era of globalisation (Agrawal 2013). They have utilised Australian VET initiatives which already developed, especially for closed neighbour like Indonesia which VET in this country has a big role in setting up the recent and future workforces that have significant implication in social and economic development (Paryono 2013).

Indonesia has only recently developed a national VET policy. However, the Taskforce Report on the Development of Vocational Education and Training in Indonesia in *Skills Toward 2020* is a major step towards the development

of a clear national policy (Ministry of Education and Culture of The Republic of Indonesia 1997). For example TESDA, the Technical Education and Skills Development Authority in the Philippines and similar agencies in other countries like Singapore and Malaysia, are responsible for determining and implementing national strategies for VET in those countries (Alto et al. 2000).

A more detailed explanation of the issues impacting on vocational education and training in Indonesia will be presented in the next section.

2.4 Issues impacting VET

There are a number of issues impacting VET in Indonesia. These include:

- the role of globalisation, international funding and aid agencies (e.g. the World Bank, UNESCO and AusAID) and how they affect vocational education and training;
- VET and its relationship to human capital development;
- the role of the state versus that of the private sector; and
- government policy on VET.

In developing countries, such as Indonesia, bilateral aid agencies (e.g. the World Bank, UNESCO, AusAID, GTZ and many others) encourage vocational education to decrease poverty, stimulate economic development and boost competitiveness (Comyn & Barnaart 2010). The Australian aid agency (AusAID) notes that ‘improving vocational and technical training for young people is essential to improve employment and productivity outcomes’ (AusAID 2008, p. 16).

Wallenborn (2010) states that in the international debate on education, VET is considered by development specialists and donors to be a specific human capital growth instrument that can be useful to enhance socioeconomic

progress. Furthermore, in human capital development theory, the definitive contribution of VET is considered to be its ability to improve the productivity of individuals and companies for economic strengthening and social wellbeing (Wallenborn 2004).

In most countries VET is concentrated outside the schools sector. Knight and Nestor (2000, p. 42) defined VET as ‘post compulsory education and training, excluding degree and higher level programs delivered by higher education institutions, which provides people with occupational or with related knowledge and skills’.

Furthermore, they define a ‘vocational education and training provider as an organisation which delivers vocational education training programs’. VET operates across universities, schools, private providers, community organisations, industry skill centres, and commercial and enterprise training providers (Knight & Nestor 2000, p. 42). Links to social, human and economic capital development are strong. According to Doeringer (1981), education and training can enhance economic performance at many points in the system. Kilpatrick (2003) states that VET was effective in structuring social capital and learning societies, particularly where there was interest in customising education and training provision to local needs. In Kilpatrick’s view, the key to matching provision with local needs, particularly in the more rural and remote areas within the study sites, was collaboration and partnership.

Most developing countries in Asia have placed varying stress on general and vocational education, depending upon a range of historical, social, economic and political considerations. Whereas general secondary education is of a somewhat more homogenous nature, there are different models of provision of vocational and technical education and training in many countries (Tilak 2002, p. 1). Furthermore, not all countries in the Asian region have accorded an equal degree of awareness and importance to VET (Tilak 2002). As a

result, there are various levels in the development of vocational education throughout the region.

Bennel and Segerstorm (1998) argue that development in VET in these countries is influenced by the role of the state versus that of the private sector. Governments have a dominant role in provision of school-based VET in most Asian economies, even in Korea, and most enterprises rely on government for trained manpower (Bennel & Segerstorm 1998).

2.4.1 Globalisation, aid agencies and their impact on vocational education and training

Globalisation is ‘an inevitable and irreversible process’ (Sevrani & Gorica 2012, p. 277). Therefore, Sevrani and Gorica (2012) recommend that its positive aspects need to be enhanced and the negative ones diminished in dealing with globalisation in the 21st century. Marques, Dhiman and King (2011, p. 21) indicate that ‘globalisation is focused on more efficiency, less costs, better opportunity and economic integration’.

Anderson (2006) stated that globalisation has a tendency to encourage borderless market incorporation and product diversification. This is manifested through the emergence of global export markets and the growing diversification of market segments, customers, products and services. As a consequence of globalisation, the reformation of industry is happening across the world.

Vocational education and training is also experiencing a major reorientation, mainly concerning curriculum revision. This revision is focused on becoming progressively more industry and market driven, emphasising new technology, the removal of outdated subjects and the replacement and modernisation of equipment and teaching/learning materials (Maclean, Wilson & Chinien 2009). Vocational education and training has stimulated extraordinary economic expansion in some countries (Maclean & Lai 2011). Globalisation has allowed countries, including Indonesia, to expand relationships and

partnerships between industry and vocational education institutions all over the world, which has become important for success in recent times (Junarsin 2009).

Marginson (1999) notes that in a period when economic supremacy and financial control have been progressively more assumed by global capital interests; education and training is one of the few areas in which national governments are still capable of wielding relatively strong power.

Volkoff and Perry (2001) note that globalisation and technological reforms have created an urgent need for a new structure of skills development to meet economic and social needs in many developing countries. Globalisation reflects the lessening of economic borders and increases in international trade resulting in a greater inter-dependence, or interconnectedness, between nations and individuals (Boehrer & Linsky 1990).

Anderson (2006) argues that globalisation erodes the traditional controls of nations. In addition governments have increasingly relied on education and training to strengthen national comparative economic advantage. This means that no country can remain isolated from the rest of the world. Workforce competitiveness, in an international context, has thus become a major issue for governments.

International organisations, such as UNESCO, the World Bank and country specific funding agencies (e.g. AusAID, and GTZ from Germany), all play a part in researching, funding and supporting the establishment and improvement of VET in developing countries (Volkoff & Perry 2001). At a common level, econometric data for developing countries illustrates that educational attainment (or human capital) is related to direct foreign investment (te Velde 2009).

Since the fiscal resources of countries in the Asia Pacific region are limited, it is expected that donor agencies would continue to support them in their improvement of VET. This enables them to update their existing facilities to

serve the growing requirements of regionalisation and internationalisation (Maclean, Wilson & Chinien 2009).

A major dilemma regarding technical vocational education and training is that it is mostly three to four times more expensive than general education. Since developing countries' funds are limited, they are required to look for support from international agencies, such as the World Bank and Asian Development Bank (ADB) and many other international aid agencies. In turn, these agencies often radically influence their policies and strategies (UNESCO-UNEVOC 2005).

Agencies such as the Organisation for Economic Cooperation and Development (OECD), the Asian Development Bank (ADB) and the World Bank have been helpful in transplanting the VET policy applying in first world countries and using these to 'colonise' the VET systems of developing nations. As a result of their pervasive effect, competitive offers, performance-based financing and voucher schemes are now attributes in a wide range of national VET systems.

Maclean, Wilson and Chinien (2009) note that countries in the Asia Pacific region are going through a serious development process with regard to TVET² (technical and vocational education and training). Moreover, national models continue to appear to deal with present and future requirements. In addition, their structures are becoming increasingly relevant to national economic and social requirements, with the result that several countries in Asia have introduced national bodies to manage their TVET systems.

A major policy change for TVET, which is impacted by globalising pressure in some countries, is the decentralisation of authority and operational autonomy (Siriwardene & Qureshi 2009). Countries with many provinces, such as Indonesia, Bangladesh, China, India and Pakistan, have decentralised

² TVET is used as an equivalent term for VET, especially in the Asia-Pacific region. This is the term now used by UNESCO.

government functions in recent years and other countries may find the concept of decentralised planning and implementation a positive strategy. The new decentralised paradigm for higher education in Indonesia has substituted a firmly centralist system that had prohibited creativity, innovativeness and risk-taking at and by the institutions. However, as Idrus (1999, p. 135) stated, this new decentralised paradigm in managing education in Indonesia has, as in many other countries, encouraged academic institutions to greater levels of ‘autonomy, accountability, accreditation, self-evaluation and continuous quality improvement’.

2.4.2 VET in relation to human capital development

According to Hagen (2002), the growing competitive demands of globalisation has focused policy on allowing a mix of quality and expertise in ‘human capital’ to create, spread and manage knowledge. Human capital theory has had an impact on the economic theory of education and the framework setting for government education policies since the 1960s (Marginson 1993). Powles and Anderson (1996) add that from the perspective of human capital, education becomes more focused on skills development, with the objective of boosting industry productivity and competitiveness rather than contributing to social and personal development. From this perspective, a lifelong learner is seen as a person who is prepared to invest time, money and effort in education and training on a continuous basis (Watson, L et al. 2000).

The ongoing escalation of global economic competition and unpredictability in labour markets require a constant rearrangement and readjustment of national economic structures and work models. These movements have major consequences for VET, especially when they weaken the ability of national governments to forecast demand for skills and to plan labour force development over the longer term (Brown, P, Green & Lauder 2001). National economies, mainly in developed countries with comparatively high wages, are left with few options other than to improve their human capital:

the knowledge and skills of their workforce. Thus, skills formation becomes central to economic policy. Marginson (1993) discusses the subordination of VET to human capital theory and the redefinition of VET learners as human assets or components of production to which VET adds value which has, in turn, largely replaced the social and educational roles of VET.

Additionally, Lewis and Tanner (2000) note that industrially developed countries, such as Australia, saw major developments in VET programs for new and increasingly significant industries such as retail, hospitality, tourism, childcare services, and information and communication technologies. Provision of VET has purposefully supported shifts in workforce market requirements and this has helped promote labour market modification and economic reformation.

As a subsystem in Indonesia's national education system, technical and vocational education has always played a crucial role in creating skilled human resources. In recent years, the Ministry of National Education has committed itself to the expressly stated goal of increasing the proportion of vocational school students to '70% vocational school and 30% senior high school students' at senior secondary level (Chen 2009). The Ministry of National Education began extending vocational schools in 2006.

In accordance with this strategic plan (Ministry of National Education 2006), the major reason for this policy is to increase the size of the workforce that is ready to work, especially amongst those who do not continue to tertiary education. Additionally, the Ministry claims that because the unemployment rate of vocational graduates is lower than general graduates, increasing the share of the former in the mix would result in a lower overall unemployment rate.

Saidin Yusuf SP, chairman of National Education Care, an NGO monitoring basic and middle education, pleaded with the Indonesian government to reform education to connect it with the labour market, which needs more

skilled workers and professionals. He also called for the establishment of certified vocational schools and training centres to produce ready-for-jobs graduates and trainees to fill job opportunities available both domestically and overseas (Khalik 2008). Moreover, Khalik (2008) added that the President of the Indonesian Republic, Susilo Bambang Yudhoyono, has requested that education and industry work together with government to decrease rising unemployment rates.

Foley (2004) states that VET is aligned directly to learning for work and includes training for specific job roles. VET also provides education with both content and programs that are appropriate for a range of people with different needs and motivations. Different to academic schooling, VET offers an education that facilitates different groups of learners to experience success by attaining new skills and certification for work as well as for other purposes. VET qualifications, for example, could be specific to job roles in a particular corporation, or could be awarded as an official recognition in an occupation or industry (Anderson, Brown & Rushbrook 2004).

Foster et al. (2007, p. 8) argue that, 'Higher skills are required to meet the challenges of globalisation and internationalisation of markets, technological and demographic change, as well as changes to the nature and operation of work'. Due to globalisation, Anderson, Brown and Rushbrook (2004) note that educational credentials and qualifications are starting to be exported globally. For example, there is a mutual recognition arrangement between Australia and New Zealand. In Australia, the Commonwealth Government has articulated a strong human capital agenda, part of which is threshold levels of certificate level III or its equivalent for the national workforce (Keating 2008, p. 1).

Freel (2005) identifies training as a key learning and development activity for improving human capital, and notes that most innovative enterprises train more. Furthermore, Griffin and Curtin (2007) state that the VET sector could be ideally placed to facilitate local growth, because of its regionalised

presence and its business of developing human capital through education and training.

The recent argument regarding vocational education and training suggests that, in reality, the progress, employability and productivity of individuals and corporations all require skills aligned to current competencies instead of more general educational attainments. McCoshan et al. (2005) comments that VET, determined by human capital improvement concentrated upon employability and productivity, is encouraged by the fact that VET systems are dependent on specific social and economic contexts. Wallenborn (2010) adds that VET is an extensive and institutionalised formal education system. Moreover, it can also exist in more non-formal learning structures on farms and in companies. A well-established vocational education system is a serious issue; however, the issue for vocational education and institutions is to raise human capital and pursue rapid economic and social growth by investing in training.

2.4.3 Role of the state versus private sector

From an economic perspective, vocational education and training is one path through which to encourage economic growth. The basis for this is that the economy drives enrolments, decides their social distribution and influences the nature of student demand. In this way, government can reduce lower priority expenditure through the management of education and training more as a 'business' than a process of social and cultural formation (Powles & Anderson 1996).

Tilak (2002) argues that all Asian countries have, nevertheless, not accorded enough attention to vocational education and training. Therefore they vary in the level to which their vocational education systems have developed. For example, Korea stands as a leading example of how government can promote an extensive school-based VET program. Singapore has developed a comprehensive vocational training infrastructure, forging strong linkages

between education institutions and training agencies. Indonesia, Malaysia, the Philippines, Thailand and Sri Lanka have well-developed vocational and technical education systems both in public and private schools (Asian Development Bank 2008).

Bennel and Segerstorm (1998) discuss VET development in Asian countries. They note it is affected by the role of state versus the role of private sector. Governments have a major role in provision of school-based VET in most Asian economies. Even though in Korea, most companies count on government for trained manpower. The role of the state in the provision of vocational education and training has been similar in Korea and Taiwan. In the South Asian countries, government is the main provider of VET both at school level and outside the school system. Despite the fact that the private sector performs some roles in VET in the East Asian countries and also to a small degree in South Asian countries, the quality of private institutions in providing VET has usually been found to be poor when contrasted to public institutions in many of these countries, but excluding Japan (Tilak 2002).

2.4.4 Indonesia's policy on VET

There has been a considerable and renewed interest among the international policy community in vocational education and training (McGrath, S. 2012). Plane (2007, p. 1) argues that a number of policy platforms have been developed globally. Their objective is to include 'Education for Sustainable Development' (ESD) as a concept within relevant societies and economies through social collaboration and capacity building with VET at regional, rural and community levels.

Particularly in Indonesia, the requirement of manpower at the middle level of the workforce structure will constantly grow during future developmental phases. Therefore, serious attention should be directed to VET institutions (Bakri 1996).

Indonesian government has a policy initiatives at national level in underpinning multilateral partnership which, ‘refers to a three-way interaction among government, employer organisations and worker representatives in formulating labour, social, or economic policy’ including partnerships between VET institutions and industry (Paryono 2011, p. 128).

There is pressure in developing, transitional and developed market economies to come to grips with the notion of policy convergence in VET practice, allowing social partnerships in education for sustainable development with industry (Plane 2007). In fact, four emergent movements affecting increasing convergence between general and vocational education have been acknowledged (Sheed 1999). These movements include: the obvious escalation and establishment of a variety of senior secondary school groups; corporations that have become more insistent that school graduates have basic skills and a wide range of competencies, including qualities, which are relevant to industry; the merging of education and work that blends the work concept with lifelong learning; and the convergence of the individual’s requirement with those of industry in particular areas or competencies.

The changing conditions referred to above mean that the VET system needs to adopt an integrated approach addressing the education and training needs of both individuals and industry. Nevertheless, the VET system is perceived as a ‘national education sector whose task it is to increase individuals’ skills in order to increase their capacity for action and so enhance national levels of work skills’ (Seddon 1994, p. 70).

Continuous disintegration and low levels of relevant stakeholder involvement in VET in several countries occur because of the inflexibility of central government, uncoordinated provision, and an inadequate capacity to gather and analyse the data required to identify relevant priorities (UNESCO 2012). As a result, UNESCO (2012, p. 15) reviewed a number of policy approaches intended to improve governance. These include: making TVET part of a

strategy for national education development; engaging stakeholders in active partnerships; deciding whether or not to decentralise, and how; reviewing and reforming qualifications; developing quality assurance processes and a national skills qualification framework; achieving an improved evidence base for policy development; and linking policy frameworks and implementation strategies in order to realise reform.

In response to this review by UNESCO, and along with the global rapid movement of the VET system, the strategic plan 2020 in VET in Indonesia has been modified into new, key policy, summarised in Table 2.4.

Table 2.4: Modification of strategic policy in vocational education and training

	The Past		The Future
1	A supply-driven system based on a large social demand		A demand-driven system guided by labour market signals
2	A school-based system delivering ‘diplomas’ upon examination		An education and training system delivering competencies in accord with nationally recognized standards
3	A school-based system with minimum flexibility in delivery		An education and training system with multiple entry/exit points and flexible delivery
4	No official recognition of prior learning		A system which explicitly recognizes skills and competencies wherever and however they are obtained
5	A school-based system with a study program orientation		An education and training system oriented towards officially recognized professions and trades
6	Education and training focused on the formal sector		Education and training both for the formal and informal sector
7	Separation between education and training		Full integration of education and training from a cognitive science perspective
8	Centralised system of management		Decentralised system of management
9	Institution/organisations fully supported and run by the central government		Self-supporting and self-managing institutions or organisations with partial support from the central government

Source: (Priowirjanto 2000, p. 3)

The strategic plan 2020 shown in Table 2.4 indicates there is a guaranteed commitment from the National Council of Vocational Education and Training for industry to have a major voice on the development of competency standards in vocational education. The proposed competency based approach, coupled with the provision of modular courses, will facilitate increased flexibility with multiple entry and exit points. The strategic plan also enhances the ‘dual system’ program from government and makes the program more relevant to industry through the use of competency standards determined by industry.

Bakri (1996) states that to support this strategic plan 2020 and in order to improve the quality for staff and graduates of VET institutions in the competencies they hold (i.e. skill levels and professionalism), ‘alliances’ need to be forged. Bakri (1996) suggests five points of consolidation. First, by controlling the establishment of the new program through a comprehensive study of its efficacy in VET institutions so they can concentrate more on the success of the existing program. Second, continuous upgrading and refreshing should always be performed for teachers and staff as well as the leaders of VET institutions, which include new innovation in science and technology based on new knowledge and skills demands. Third, provide certification for both staff and students. In order to guarantee that the individual performance of teachers, staff and students are relevant to industry’s needs, the professionalism of each individual should conform to performance standards determined by industry. Certificates awarded to technical and vocational school graduates should be accredited nationally by government, internationally by an international certification board with industry as the users.

Fourth, VET institutions need to improve their facilities and levels of equipment to those required by the curriculum and industry. Majumdar (2011, p. 32) argues that ‘the restructuring of various TVET systems as a

result of major policy reforms has led to practical innovations in curriculum development and delivery’.

The final point made by Bakri (1996) is improvements in management practices. The complexity of vocational education and training will demand a different form of institution management. Thus, improvements should be focused on improving the efficacy of education in order to promote the autonomy of the institutions, cooperation with industry, and improve and diversify their operational budgets and revenue sources: ‘The strategy of improving the quality of technical and vocational education will be based, among other things on integrated school development, production unit, and institutional partnerships’ (Bakri 1996, p. 10).

In general, there is an expectation of increased efficiency in the provision of VET, guided through management and institutional structural reforms along with increased focus on private provider competition (Burke 2000).

In conclusion, building a better understanding of the skills, knowledge and attitudes that are required by industry currently and in the future, and guaranteeing that suitable programs are being taught effectively will affect long-term industrial involvement in VET (UNESCO 2012).

2.5 Conclusions

This chapter has canvassed an overview of Indonesia demographically and geographically, followed by discussion of the educational context and issues impacting VET in Indonesia. Taking all these issues into consideration; this thesis aims to provide insight into the impact of globalisation, human capital development and national policy on vocational education and training in Indonesia.

The key conclusion is that globalisation has a big influence in the development of VET in Indonesia, which has made the government face big

issues in order to provide sustainable funding for VET institutional development. Burke (2000, p. 1) offers the following warning,

Globalisation, technological and demographic changes have been major factors in highlighting the need for increased education and training throughout life ... Given the likelihood that governments will be unwilling to provide additional resources required, there is a need to examine the most efficient and equitable ways of providing education and training and incentives to encourage the financing of education and training by employers and individuals.

Chapter 3

Partnerships: What the Literature says

3.1 Overview

One of the main points of a literature review is to ground the research in context. Furthermore, as EPSBED (2010) notes, it is also a continuing process that cannot be finalised until the data collection and analysis phase has been concluded. Flick (2009) suggests that, in qualitative research, there are several types of literature that play a part in the development of a qualitative study; namely, the theoretical literature; the literature from empirical studies; and the methodological literature on how the study is to be conducted, such as that referred to in chapter four. Thus, it has been an ongoing process which has grown and developed as this research has unfolded.

To establish the context for this study, this chapter presents a review of literature related to partnerships in vocational education and training. This review will define partnerships, vocational education institutions, industry partnerships, types of partnership program, their aims and the factors which impact on their value and effectiveness.

The theoretical framework that will be presented and discussed in this literature review is strategic partnering theory. This framework will show applicability to the present study through the literature. The conceptual framework that will be discussed cover three key impacting factors in training partnerships. These include **environmental factors** influencing training partnerships, **training factors** in partnerships and **people factors** impacting partnerships. In addition, the study considers the benefits and challenges in vocational education institutions/industry partnerships from the perspective both of the institution and their industry partner. The researcher limited the study to providers of this type, and particularly those focused on

vocational education in one region of Indonesia. However, the researcher will draw on a range of literature across all types of relationships and providers.

3.2 Partnerships

This section of the literature review is divided into parts. The first part reviews the definition of partnerships by a range of researchers. It also discusses partnerships between industry and higher educational institutions, particularly those that are public providers of vocational education and training. The second part considers the types of partnership programs. The third part reviews the aims of partnerships between educational institutions and industry.

Gray (1989) argues for a variety of interpretations of the partnership concept. These depend on key partners, the purpose of the partnership and its character. The terms partnership, collaboration, strategic alliance and joint venture are often used interchangeably. The gaps in the consistency of partnership terminology lead to confusion in defining collaborative relationships and systematically evaluating the impact of partnership activities (Cousens et al. 2006).

Uhlik (2005) argues that the procedure of collaboration has been applied and researched over the last few years, and persists as a popular topic among researchers, practitioners, and even the public at large. However, despite the reality that case studies and “how to” guides have been circulated in various fields, the obstacle has been in connecting the literature. Gray, B (1989, p. 55) argues that:

While there is not a clearly prescribed pattern that characterizes every collaboration, there appear to be some common issues that crop up repeatedly and conform to a general sequence independent of specific circumstances and content of the negotiations.

There are eight characteristics that form a foundation for successful partnerships, alliances and collaborations. These were described by Rosabeth Moss Kanter in Giesecke (2012, p. 40):

First is individual excellence. Both partners bring value and strength to the alliance. They are not trying to mask weaknesses. Second, the partnership must be important to each person or entity and meet long term goals. There must be a solid business reason for the partnership. Third, partners recognize the interdependence of the relationship. If partners try to maintain their independence the partnership will not succeed. Fourth, everyone has to invest in the partnership by providing resources, expertise, or other tangible signs of commitment to the partnership. Fifth, the partners must be willing to share information to make the alliance work. Sixth, partners develop linkages so that they can operate smoothly together. Seventh, the alliance becomes a part of the formal structure of two organizations and extends beyond the people who put the partnership together. And eight, partners maintain their integrity and work in honourable ways to maintain trust.

In spite of issues with partnership terminology, “partnerships,” “alliances,” and “collaborations” are used alternately in the literature and in this review to express the continuous sequence of formal relationships between institutions. James (1999) also emphasises that no agreement has been achieved, either by researchers or practitioners, in defining these terms and they all too often used alternately. As van Tulder (2011) notes, every piece of research on partnerships will therefore need to resolve a number of terminological issues in order to be relevant. This thesis is no exception.

3.2.1 Defining partnership

The term ‘partnership’ is presented in the literature in various forms which may be confusing to organisations. When professionally and intelligently comprehended and executed, a partnership can bring great success to those parties involved (Wollenburg et al. 2013).

Partnership has a variety of meanings and connotations for different people (Uhlik 2005). Moreover, as Uhlik (2005, p. 27) affirmed, ‘a partnership is a dynamic arrangement between two or more parties, based on satisfying mutually recognized needs’. In addition, a partnership is ‘an ongoing

arrangement between two or more parties, based upon satisfying specifically identified, mutual needs' (Uhlik 1995, p. 14). Foskett (2005, p. 252) suggests that a partnership, in its simplest form, 'is about working jointly together with at least one other person/group'.

James (1999) states that 'partnership' has become a comprehensive term that often involves collaboration, civic engagement, resource sharing, coalitions, alliances and agreements.

The variance in partnership definitions and in its dimensions provides a degree of uncertainty in explaining collaborative relationships and systematically assessing the influence of partnership activities (Cousens et al. 2006). For example, Gray, B (1989, p. 5) describes partnering as 'a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited visions of what is possible'. According to Cousens et al. (2006), leaders and managers in government often use partnership to describe virtually all interactions with the organisation with which they are involved, regardless of the relationship type or success. Although partnership and collaboration are used interchangeably, collaboration often refers to the process of partnering. As Wood and Gray (1991, p. 5) suggest, 'collaboration occurs when a group of autonomous stakeholders from a particular problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain'.

Johnston (1997, p. 1) describes partnership or collaboration as 'an untidy business, full of uncharted territories, ambiguities and institutional complexities'. The complexity occurs in making an effort, not simply to define 'partnership', but to analyse what it actually is. Therefore, Johnston (1997, p. 1) states that 'we understand collaboration as commonality of purpose and equality power relations, but we are hard pressed to define exactly what this might look like in practice'. Trubowitz and Longo (1997, p. 27) concur, noting 'there is not a uniform agreement about precisely what

constitutes true collaborations'. Finally, Giesecke (2012) explains that partnerships are complex relationships shaped around challenging but solvable problems which need shared expertise and creative thinking, and when both partners have adequate capacity to bring resources to the endeavour.

Wilson (1995, p. 267) splits the process of partnership or collaboration on two levels: ad hoc alliances and coalitions and further defined coalitions as:

An enduring arrangement requiring that choices over some common set of interest, for example, resources, goals, strategies, or the like, be made by the explicit mutual agreement among the members. A coalition thus, is an ongoing mechanism for explicitly coordinating some or all of the actions of the members; it is an organization of organizations.

On the other hand, Wilson (1995, p. 278) defines ad hoc partnerships or alliances and maintains they 'typically take the form of loose, cooperative relationships between two or more associations with the respect to the attainment of a particular end'.

Gray (1989) notes that many versions of the partnership concept rely on key partners, the intention of the partnership and character of partnership relations. Nevertheless, despite issues with partnership terms or duration and clear partnership organisation and evaluation processes, partnerships are becoming more and more essential in the management of public agencies and in the business world.

Wilson (1995) suggests that institutions do not consider establishing coalitions, except when seriously threatened in some manner, or if the institution can be augmented. This is the case in this present study as for public VET providers, or polytechnics, the researcher considered establishing short-term ad hoc partnerships when faced with shrinking internal resources, or when facing a potential crisis. This also leads them to consider more long-term partnerships with other organisations and corporations that share similar objectives. Longevity of association is often considered as a desired

characteristic of academic institution/industry partnerships. Nevertheless, these issues need closer scrutiny because enduring collaborations may be neither healthy nor unhealthy (Bringle & Hatcher 2002). The nature of these partnerships and their critical features will be considered in the following sections.

Vocational education institution/industry partnerships are considered as an instrument that has been utilised by a range of companies to address the learning needs of their employees. Indonesia's *Higher Education Act 2012* stipulates that the main roles a higher educational institution currently plays can be generally grouped around the triad of teaching, research and service (Santoro 2000). It is this "service" component that is most relevant in institutional/ industry partnerships.

However, higher educational institutions, including VET providers such as polytechnics and industry, have considered such partnerships to be valuable to both in a range of areas. That is why vocational education institution/industry partnerships have arisen in a wide range of communities, and why business involvement in such partnership programs has escalated. Seitani and Crane (2009) add that partnerships between industry and academic institutions are an increasingly important way by which corporations accomplish their corporate social responsibility (CSR)³ obligations. From the industry's perspective: 'It has been argued that the decision on how to govern the implementation of CSR becomes a strategy-led decision' (Walters & Anagnostopoulos 2012, p. 418).

Batorski and Hughes (2002) state that partnerships use cooperation to enable the distribution of a service or product, and in partnerships there is a distribution of resources to add value to the service or product for customers.

³ Corporate social responsibility (CSR) is a form of corporate self-regulation integrated into a business model. CSR policy functions as a built-in, self-regulating mechanism, whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards and international norms.

Today, partnerships are emerging as an important construct in almost all sectors of business and education. There are various categories of partnerships between workplaces and educational systems such as apprenticeship and “trainee” programs (Doeringer 1981).

Elmuti, Abebe and Nicolosi (2005) argue that partnerships between higher education and industry allow each of the organisations involved to preserve their own core competencies, managing structure and mission, whilst growing the knowledge and abilities of each organisation.

Bray and Scalzo (2005, p. 97) highlight the increasing significance of partnerships for higher education institutions, including VET providers, noting: ‘The ability to build and sustain effective partnerships will be a key competitive advantage for universities in an age of the global educational village’. Even though VET providers need significant support and funding from the government, they have to overcome a range of obstacles to attract and develop partnerships and, in turn, improve their capabilities and capacity for entrepreneurial interactions (de Medeiros Rocha et al. 2012). For the academic partner, there are benefits in addition to increased enrolments and revenue. From the business world’s perspective, in addition to competitive advantage, there are also tangible employee benefits.

Collaborations with academic institutions are built on the recognition of mutual need and perceived value. Bowie (1994) explains that the industry partner can obtain an advantage through: access to skilled scholarly researchers connected to research facilities; tailored training and collegiate programs for their workforces; and improved vision and reputation based upon collaboration with higher educational institutions. Such partnerships may also contribute to better employee retention and employee recruitment. In addition to the acquisition of new employee competencies, these partnerships may impact the industry base line and enhance competitive benefits (Bowie 1994; Meister 2003).

For the VET institution, an alliance or partnership with industry can offer a new source of income including access to finance for research endeavours in a vocational area and a body of non-conventional students drawn from the industry partner (Meisler 2004; Meister 2003; Newman, Couturier & Scurry 2004).

In order to continue to operate, VET providers require financial resources. Therefore, vocational education institutions seek to establish more networks with their stakeholders, especially industry. Funds come from within the institutions themselves; from outside entities, especially as government subsidies; from students in the form of tuition fees; and through partnerships with industry (Losco & Fife 2000). The reliance of higher education institutions on financial resources is described by Pfeffer and Salancik (2003, p. 258), and this reliance can be problematic:

To survive organizations require resources. Typically, acquiring resources means the organization must interact with others who control those resources. In that sense, organizations depend on their environment. Because the organization does not control the resources it needs, resource acquisition may be problematic and uncertain. Others who control resources may be undependable, particularly when are scarce.

However, the mutual result is ultimately defined by the partners. Foskett (2005, p. 253) claims that successful collaborations between higher educational institutions and industry show a synergistic connection, whose 'total effect is greater than the sum of the parts'. The mutual benefits for both partners may occur through modification and adjustment which is presented in process and product of the partnerships (Foskett 2005).

Foskett (2005) makes two recommendations for successful partnerships. First, the partners have to comprehend and reach agreement on the common benefits of the partnership and agree that the partnership has a real value, whose outcomes will be greater than the costs of the partnership. Second, that one of the partnership types used extensively in workforce training is between a higher education institution and an individual enterprise in order to

improve the skill and knowledge levels of that enterprise's workforce. VET institutions, such as polytechnics, are involved in these types of partnerships more often than any other type of higher education institution.

In connection with VET, Kilpatrick (2003) stated that there are relationships of VET providers in a variety of partnerships that exist for a range of purposes. Vocational education and training partnerships consist of two or more organisations who work together in association over short or long period of time to attain commonly held goals around VET (Kilpatrick 2000).

The VET partnership models with industry from Kilpatrick's review of a wide range of the education and training literature, relate especially to training needs and demand, developing curriculum, and partnerships and collaboration around training. These models can be summarised as:

- industry/provider partnerships;
- client/provider partnerships;
- community/provider partnerships;
- broker/client/provider partnerships;
- researcher/industry/provider partnerships;
- government/industry/provider partnerships; and
- provider/provider partnerships, usually involving government (Kilpatrick, Bell & Kilpatrick 2001).

Since the expansion of VET participation in industry partnerships is taking place in direct response to industry's needs, the considerable complexity and continuous change experienced by industry is reflected in a widening and changing role for VET (Smith & Comyn 2007). Schienstock (2004) argues that many of the methodologies now widely used in the VET sector, such as communities of practice, self-directed learning, action learning, work-based

learning and problem-based learning, for example, all reflect changes in the nature of work across all industries where an emphasis is placed on individual responsibility for work and learning alongside a rise in the importance of teamwork and networking.

3.2.2 Types of partnership programs

Relationships between industry and higher education occur in several ways. Austin and Peter (2000) note that partnerships between industry and higher education have three major foci: philanthropic, research related and training related.

Philanthropy through collaborations is possibly the most common structure of partnership between industry and higher education, engaging industry as the corporate donor and the institution as recipient (Austin & Peter 2000).

Furthermore, philanthropic partnerships generally demand the minimum strategic arrangement and relationship management, once established, can lead to opportunities for research or training partnerships.

Research-based partnerships include a wide range of partnering activities ranging from individual faculty engagements to complex research contracts forged at the institutional level (Bok 2003; Kirp 2004; Washburn 2005).

Training-based partnerships have become better known in the last few decades, existing in many forms since the growth of vocational education, to address issues such as the acquisition and development of employee skills, specifically in the areas of technology and science. Newman, Couturier and Scurry (2004) state that training-based partnerships are considered as an “add-on,” and tangentially linked to the main academic mission. Although they are considered as commercial and create new streams of income and students, they are not viewed as endangering traditional academic programs or staff roles (Meisler 2004; Meister 2003; Newman, Couturier & Scurry 2004).

Fairweather (1988) states that training-based partnerships include continuing education and collegiate programs leading to the award of a degree. Moreover, transfer of knowledge is accomplished through a teaching and learning environment where the curriculum is related at least to some extent to business partner needs. These partnerships can be complex in their own right, contingent both on the degree of program customisation and faculty involvement.

3.2.3 Aims of partnerships

The efforts of establishing partnerships between a higher education institution and industry can take many forms. From a methodological viewpoint, a partnership is a way to approach problems, while from a managerial viewpoint it is a tool utilised to solve problems (Nicolae & Mihai 2011). As Nicolae and Mihai (2011, p. 324) explain:

Partnership is the way, formal or informal, through which two or more parties act together in order to achieve a joint goal or joint objectives, based on a joint plan of action and joint dedicated resources and under a joint resources and activities management.

There are many reasons for higher education institutions to find partners in order to create partnerships. These reasons include:

- opportunities to obtain additional sources of revenue including government funding;
- to help meet the needs of industry and business;
- the maintenance and possible development of academic curricula and programs;
- the provision of scholarships for students; and
- the expansion of teacher improvement programs (Brouillette 2001; Maurrasse 2001).

The greatest motivation for higher education institutions to establish partnerships on a short- or long-term basis with business and industry corporations is financial (Johnston 1997). Johnston (1997) notes that such resources improved facilities, increased cash flow and provided access to different areas of learning, training programs, and research programs that integrated academic and industrial work.

Some of the most frequent academic/industry partnership interactions are research, consulting, patenting or licensing, strategic associations and training (Orr 2001). Elmuti, Abebe and Nicolosi (2005) discuss that partnerships may also have a focus on research assistance, joint research, knowledge transfer and technology transfer.

Partnerships can also focus on professional development, academic and vocational technical skill assessment, college and career consulting, and retraining employees (Orr 2001) as well as ‘...research and knowledge exchange, consulting, project planning, involvement in curriculum development, training, workshops or seminars, and executive education’ (Elmuti, Abebe & Nicolosi 2005, p. 96). They ‘...provide a knowledge base, expertise, information exchange, and technology transfer...’ (Suri, Veeramani & Church 1995, p. 9).

Lee (2000) states that the purpose of partnerships from the institution’s perspective also included accessing research funds, promoting the university’s outreach mission, gaining knowledge about practical problems useful for teaching, looking for business prospects, and developing new products and services. From a company’s perspective it is about enhancing product quality, gaining access to new research and finding future employees.

Savan (2004) states that partnerships might be of varying duration and include different types of participants. Partnerships in research can have a consultative, contractual or collaborative purpose. Consultative alliances

usually last for an academic period or year. Contractual partnerships typically last from one to three years, while collaborative partnerships can last for more than three years.

Savan (2004) points out that collaborative partnerships involve a series of projects. These not only include training partnerships, particularly between industry and a VET provider, but also the active participation of both industry and VET provider staff. Overall, the ultimate goal of the higher education institution and industry partnership is to improve practice whether it is through research, training or services (Starbuck 2001).

3.3 Impacting factors in training partnerships

This section is divided into three parts and discusses the factors that impact partnerships between VET institutions and industry partners. These are environmental, training and people factors.

Partnerships, as with other commercial activities, 'have to be carefully planned, managed, evaluated, and nurtured over time' (Bray & Scalzo 2005, p. 98). Paying attention to factors that have significant impact on their success is recommended.

Wollenburg et al. (2013) argue that it is essential to comprehend the challenges and benefits, communication channels and consequences, management styles, involvement of staff, allocated funding and resources, power and equality, adjacency of organisations involved, trust and other issues that impact relationships in a partnership and their quality.

Establishing effective partnerships between two different organisations is very demanding, takes time and is sometimes hard. Partnerships can be very beneficial with an effective leadership which facilitates 'productive interactions among partners by bridging diverse cultures, sharing power, facilitating open dialogue, and revealing and challenging assumptions that

limit thinking and action' (Weiss, Anderson & Lasker 2002, p. 693). However, there are also many obstacles to creating partnerships between two different organisations as Wilkinson, Browne and Dwyer (2002) report. These include limited time, monetary constraints, lack of experience, work schedules and cultural differences.

Furthermore, Wondolleck and Yaffee (2000, p. 51) depict the complexities of partnering in the following ways:

Problems result from the institutional structure within which collaboration takes place, the ways that individuals and groups think about collaboration and each other, and the manner in which collaborative processes have been managed.

Bray and Scalzo (2005) explain that a partnership has its own life which transcends the business objectives it seeks to achieve. Therefore good intentions are not enough, but the partnership has to be managed strategically and mindfully. 'Partnerships work best when the interests and needs of all partners are aligned' (Perkmann, Neely & Walsh 2011, p. 213).

Training partnerships (including outsourced training or outside training) are a form of training provided by professional training organisations. These include private companies, educational institutions such as colleges and universities, vocational schools, and publically supported training centres for organisations both in the private and public sector (Allen 2002).

Stewart (1999) indicates that industries with a conventional employment system developed complex labour markets that supported a higher quality labour force using their own internal training programs. Yet, as investment in in-house training has become increasingly costly, only larger enterprises can keep comprehensive training centres to assess, train and evaluate their labour force. Increasingly, more enterprises face decisions about whether to 'make or buy' training. Even though moving training activities outside the corporation's boundaries may lead to a number of disadvantages, one of the

foremost trends that occurred in the 1990s was to outsource training functions.

Three types of training approaches have been described by Knoke and Janowiec-Kurle (1999) through which companies and their employees can derive benefits from an external training provider:

1. The company requires employees to obtain training, every employee selects and joins the training programs provided by external training providers, and the company covers all expenses.
2. The company employees arrange training objectives/goals, select external training providers, and invite them to run the whole training program.
3. The external training providers and company employees work together to create, design, conduct and evaluate the whole training program.

Hardingham (1996) argues there are benefits in using internal staff as internal trainers. They are: (1) seen as colleagues by the trainees, (2) familiar with the corporation's culture and organisational attributes, and (3) seen to have more impact by company management. In contrast, the benefits of using external training providers are that they:

- provide new knowledge drawn from other organisations or corporations; and
- are viewed as more costly, so their method is seen to be more valuable and objective.

External training providers offer a variety of training across the spectrum from developing basic skills to developing particular skills to very high levels.

In many countries, policies are being adopted and incentives offered to encourage take-up of public/private partnerships in areas of strategic importance. The substantive goal of public/private training partnerships is to integrate training efforts to improve the significance, effectiveness, efficiency, equity and sustainability of training. They also aim to forge better responses to deal with the skill needs of individuals, industries, the community and address the objectives of national development (Mitchell, A 1998).

Lendrum (2003) argues that the following three key elements are needed in building strategic partnerships: environment, process and people.

The environment provides the borders within which partnerships work. This will be clarified by the ‘culture, strategy and structure of the partnering organisations’ (Lendrum 2003, p. 12). The environment performance ‘provides the balance between structure and flexibility and in turn enables reproducibility’ (Lendrum 2003, p. 13). Finally, Lendrum (2003) concludes that partnership success will not happen without the involvement of the right people from managerial level and individuals inside the organisation. These factors presented by Lendrum, Callan and Ashworth are similar to the current impacting factors on partnerships between VET institutions in Indonesia such as Polytechnics and their industry partners. Therefore, this model is selected as a theoretical framework in this study.

These factors and their individual elements, need to be comprehended and effectively incorporated to ensure partnership success (see Figure 3.1).

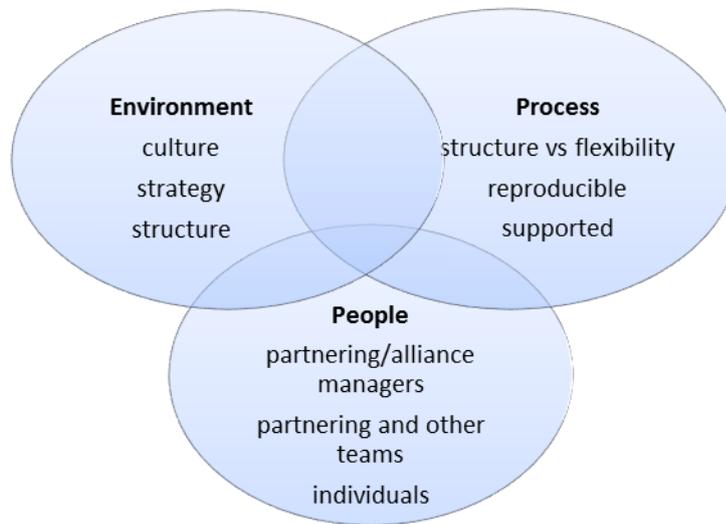


Figure 3.1: Strategic partnering: the effective bringing together of environment, process and people

Source: (Lendrum 2003)

Based on Lendrum's theory of building strategic partnerships, a training partnership model for VET was proposed, involving three sets of intersecting factors operating to determine the success of training partnerships. This is shown in Figure 3.2 below (Callan & Ashworth 2004).

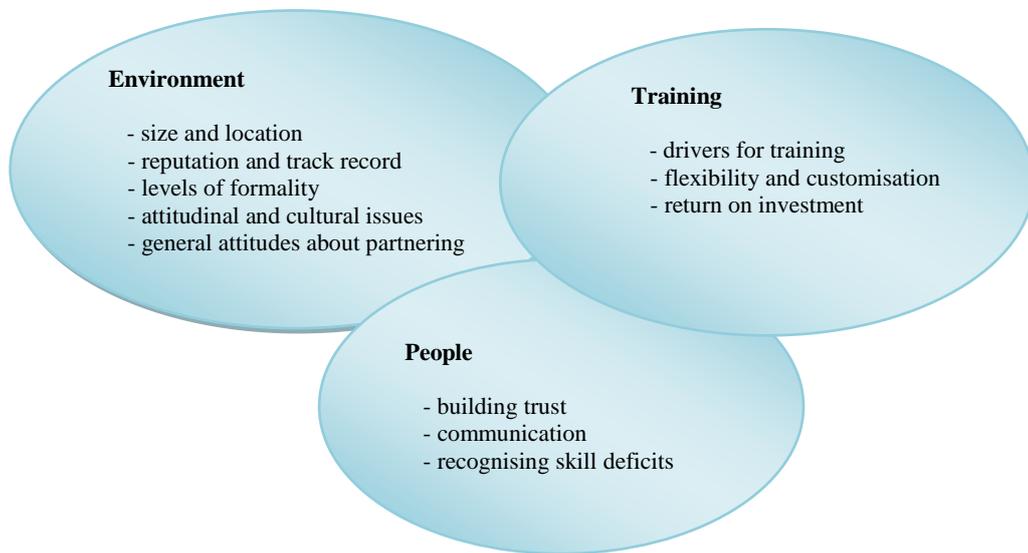


Figure 3.2: Partnerships – the optimum environment, training and people mix

Source: (Callan & Ashworth 2004, p. 23)

Thus, Callan and Ashworth (2004) have adapted Lendrum's model (see Figure 3.1) and modified one of the three elements from 'process to training' (see Figure 3.2). Each of these elements and their respective components are considered in detail in sections 3.3.1 (environment), 3.3.2 (training) and 3.3.3 (people).

3.3.1 *Environmental factors influencing training partnerships*

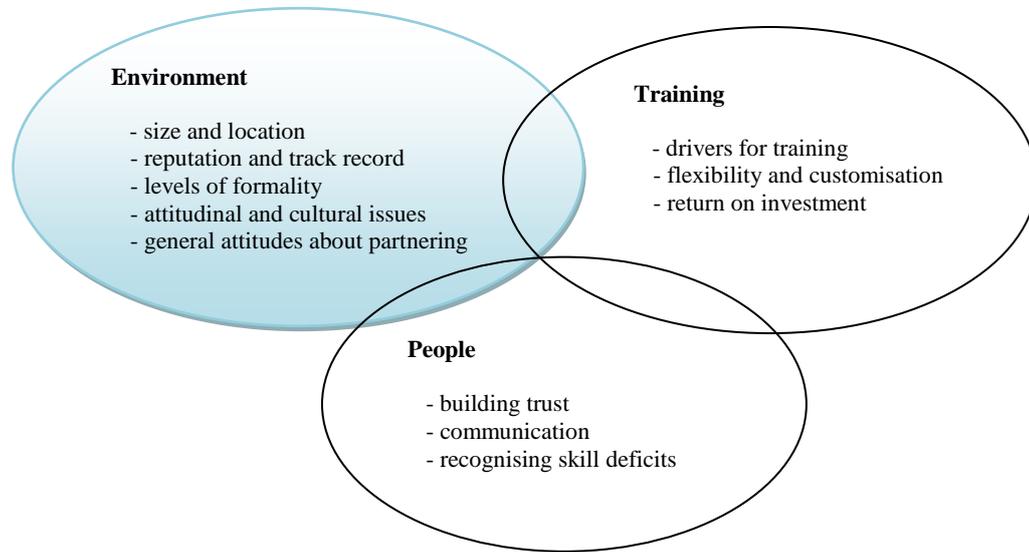


Figure 3.3: Partnerships – the optimum environment, training and people mix

Source: (Callan & Ashworth 2004, p. 23)

The environment defines the borders within which partnerships function, ‘as this will be determined in large part by the culture, strategy and structure of the partnering organisations and the marketplace in which they operate’ (Lendrum 2003, pp. 12-3). Environmental factors relate to the diverse aspects of the work environment and workplace which either facilitate or impede effective training partnerships. Despite a recognition of the importance of environmental factors, research examining their impact is very limited (Elangovan & Karakowsky 1999).

Several environmental factors affect the appearance and development of partnerships. These include: the size and location of both partners; the track record and reputation of VET providers and industry partners; the levels of formality within the partnership arrangement; and the cultural issues in their respective organisations that influence the capability of partners to run and grow partnerships (Callan & Ashworth 2004). A final factor is the impact of globalising pressures.

Size and location of partnerships

At present VET providers encounter many challenges in developing successful training partnerships. Mitchell, J and Young (2001), for example, argue that vocational education and training partnerships are being endorsed as one way of meeting industry's requirements for more customised training to fit their context, site and employee requirements. Trainers from VET providers are required to be able to adjust to and understand the industry's characteristics, including its area of specialisation, skill shortages or deficits, and geographical location.

Employers' training practices and their attitudes toward training vary according to enterprise size. Moreover, variations in orientations to training provision were linked to enterprise size, industry sector, level of market competition, sources of competitive advantage, employment and real sales turnover, growth and projected employment and sales growth (Kitching & Blackburn 2002). Moy (2000) notes that Australian research concluded that training requirements and priorities of small corporations are not well provided for through VET reforms in that country. Specifically, the training and assessment models being employed are more suited to larger employers.

In relation to enterprise size, both the demand for training by small employers and supply are lower than for larger employers (Storey & Westhead 1997). They add that empirical data showed that larger industries are seeking a single provider and larger training partnerships to meet all their training needs. On the supply side, training providers might be less willing to offer training to small business owners due to higher costs of organising and tailoring training to comply with customer needs (Kitching & Blackburn 1999; Storey & Westhead 1997).

In relation to location as one of the key environmental factors, it has been noted that collaboration often works best when relationships are neither too close nor too distant (Mintzberg et al. 1996). Mindruta (2013) argues that

geographical location might be an essential consideration in partner choice and should be taken into account for a more comprehensive approach to partnership formation.

The most successful partnerships in many institutions happen because of a certain degree of physical (related to distance) or psychological (related to culture) gaps among the partners. Laursen, Reichstein and Salter (2011, p. 509) explain that ‘geographical proximity is important for knowledge exchange, especially when knowledge is person-embodied, concept-dependent, spatially sticky and socially accessible only through direct physical interaction’. Finn and McCamey (2002) argue there are data regarding the co-location of people from both partners in the same region and this considerably enhances the quality of the partnership.

Track record and reputation in partnerships

Size and location factors in partnerships, track record and reputation of VET providers appear important as ‘triggers’ in instituting partnerships (Callan & Ashworth 2004). An important driver is a positive company track record and reputation of successful organisational associations with customers. In turn, this affects the business performance of a company (Ewing, Caruana & Loy 1999). VET institutions that have good track records and reputations over time are getting much larger in size. They have the opportunity to undertake partnerships with industries, while new organisations frequently try hard to obtain responsiveness in their respective marketplace.

Parise and Henderson (2001) note that reputation and trademark are important attractors in many companies. A key capability is a capacity to connect with a perceived market leader with a record of success, the level of administrative arrangement by both partners and the level of the key persons who will be engaged.

Howard (1998) states that the reputation of the institution and company’s management procedure that acts as a guide in undertaking business are used

to build client relationships at the organisational level through reliable communication and experience.

Companies that look for collaborations frequently have undertaken successful collaborations in the past and are more likely to establish new collaborations than less experienced companies (Callan & Ashworth 2004). As a result, a well-respected organisation can be readily distinguished from others operating within the same geographic region, particularly its competitors (Ewing, Caruana & Loy 1999).

A strong and respected reputation is also an indicator of a potentially reliable partner. As Zhang, Jia and Wan (2012, p. 550) explain:

A partner with a strong reputation is likely to refrain from opportunism in order to protect this reputation from damage, as this reputation serves as an intangible, hard-earned, and valuable asset. Therefore, the importance of a positive reputation lies in the fact that, when a partner has a strong reputation, this partner can be monitored and evaluated more easily, which generally enhances cooperation effects. According to resource-based theory, reputation is a key asset base that is rare, hard to duplicate, and non-sustainable.

The reputation of an institution will grow steadily depending upon how openly and honestly it deals with the public, distributors, media, employees, shareholders and everyone else (Ewing, Caruana & Loy 1999; Howard 1998). Moreover, once the company's reputation is damaged, it becomes extremely hard to repair because it is a very fragile thing. Most of all, reputation is a significant factor in partnership success (Zhang, Jia & Wan 2012).

Levels of formality in partnerships

There is a diversity of levels in formality of partnerships. Possibilities include joint ventures, long-term licensing agreements, supply contracts, brokering arrangements and co-promotion (Callan & Ashworth 2004). Callan and Ashworth (2004) argue that a partnership can exist in many forms: formal and informal, public or private, large or small, individual or organisational.

A corporation might have a formal contractually based affiliation with external partners, or it might have just an informal relationship with no contract. However, formal partnership contracts usually involve a contract to provide training between training providers and a business organisation (Kenis & Knoke 2002). Many researchers assert that a formal contract is essential for such training programs in order to achieve good quality training results (Hawley, Sommers & Melendez 2003).

In order to refrain from and avoid ‘opportunistic behaviour’ in a partnership Zhang, Jia and Wan (2012) suggest that one method to advocate for a long-term relationship between partners is to always make full use of a contract or written agreement, because it encourages the organisations involved to make a significant commitment to their cooperation.

Three types of partnerships and levels of formality are recommended by Kanter (1994). The first involves joint service agreements in which organisations join assets to get access to benefits too costly to obtain alone. The second are collaborations which allow the partners to exploit opportunities that involve their mutual capacities. Finally, Kanter (1994) listed value-chain partnerships, one of which is classic in the VET sector: on-the-job and off-the-job training arrangements for trainees and apprentices (Marginson 2000).

In initiating partnerships between organisations, Bringle and Hatcher (2002) suggest that higher education institutions (including VET providers) and industry should each build the necessary infrastructure and establish or develop appropriate policies and protocols. They also need to employ or develop personnel with the ability to appraise and react to unanticipated opportunities for forming partnerships of varying timeframes and levels of formality, and for multiple purposes.

By having formal contracts, a number of key aspects of training arrangements can be made more explicit. These include the nature of training

programs, training materials, expected results, and skills prerequisites for trainers and trainees. In addition, a formal collaboration represents a stronger level of management involvement and commitment by both parties in the partnership. Many studies have shown that management's support is one of the most significant success factors in training partnerships. A formal relationship helps to cement this support and ensure its success.

In other words, with the existence of formal contract, VET providers are enabled to provide the organisational support needed to stimulate, negotiate and undertake successful training partnerships. The elements include training design and evaluation to ensure that all parts of their administrative structures work together smoothly. And excessive bureaucracy must be avoided (Business-Higher Education Forum 2001).

Cultural issues at work

Culture can be described as shared assumptions or attitudes. Florentina and Raluca (2012, p. 373) define organisational culture as 'all the values, beliefs, aspirations, expectations, and behaviours shaped over time in each organization, which prevail there, conditioning its functionality and performance'. Organisational culture is significant in partnerships, particularly where there are cultural differences that may affect partnership viability and success. Indeed, as the President of Massachusetts University, Jack M. Wilson, cited in Bray and Scalzo (2005, p. 98) says:

The most significant factor in successful partnerships is for the various partners to recognize that each brings different strengths and **cultures** to the partnership—and that this is a good thing. Failure to respect those differences often leads to a breakdown of the partnership, as each expects the other to conform to their own expectations. Disappointment is the inevitable result. Respect for the different **cultures** will often bring new insights and opportunities that could not have been possible without partnership.

A review of the literature has revealed that industry and academia each has its own different and distinct cultural practice (Duderstadt 2005; Yost 2003). According to Cui and Hu (2012) organisational culture is a model of shared

principal assumptions that the group absorbed as it addressed its problems of internal integration and external adaptation. If this culture has functioned well enough to be deemed valid, it can be communicated to new staff members and new employees as the correct way to identify, think and feel in relation to emerging problems. In a training partnership, if problems are successfully addressed by the partners, the assumptions will be considered defensible and will be imparted to new members of both institutions (i.e. the educational institution and industry), and this is seen as a valid approach, to think and feel, when confronted with a similar situation (Schein 2010).

Hatakenaka (2003) affirms that institutional limitations, whether internal or external, affect both progress and substance of new partnerships: ‘Academics and industrialists have different values, interests and goals, and it is not easy for them to reach a shared understanding about why it makes sense for them to work together’ (Hatakenaka 2003, p. 173).

VET provider/industry partnerships are complex since the VET institution and the corporation are quite distinct culturally, particularly in relation to how each generates knowledge and solves problems (Bringle & Hatcher 2002). Ewing, Caruana and Loy (1999, p. 127) argue that ‘some clients had even gone to a greater length to consider the firm’s culture, their personal preferences, the time they and their staff could make available, the cost of the project, and their own mind-sets before they finally settled down with the most desired firm’.

In partnerships, the partners’ cultures can determine the kind of knowledge sought and obtained, and the kinds of knowledge building activities that are tolerated and encouraged. Hence, cultures serve as a knowledge control mechanism and in knowledge screening (Leonard-Barton 1995). Weiss, Anderson and Lasker (2002) argue that attaining high levels of synergy between a vocational education institution and an enterprise in a partnership is related to management and leadership approaches that effectively enable constructive communication among partners. This is achieved through power

sharing, enabling open dialogue, connecting different cultures, and disclosing and challenging assumptions that confine thinking and action.

Melville and Hawke (2002) note that many educational institutions/ industry partnerships have been improved in the long term with goodwill, and once successful outcomes have begun to be achieved. Nevertheless, there was an indication that some company managers were unwilling to drive the expansion of many educational institutions/industry partnerships. This was because of the load on their administrative, assets and time systems that was not seen as specifically productive. Melville and Hawke (2002) conclude that training partnerships in such cases were neither intensive nor focused on making actual cultural shifts.

Chappell (2001, p. 6) emphasises the need for vocational education and training providers to ‘work across organisational boundaries and be able to work productively in the different organisational cultures that characterise the newly diversified VET sector’. VET providers should extend across diverse cultures.

VET now encompasses public, private and not-for-profit providers and the competitive market has brought with it the need for all providers to insert commercial business practices into their operations. In a real sense all providers are now in the ‘businesses of VET’. VET providers also increasingly work under a common regulated framework....These changes among other things; disturb the different norms, values and modes of conduct that have provided public and private sector organisations with organisational cultures that have been constructed by these differences’. (Chappell 2001, p. 7)

Therefore, in anticipating cultural issues at work, the ‘VET system requires managers at senior, middle and supervisory levels, to have skills in a range of areas, including skills in creating an innovative culture and in leading, coaching, facilitating and empowering others’ Mitchell, J and Young (2001, p. 33).

Mitchell, J and Young (2001) conclude that to attain an incorporated national VET system requires a change in management program which concentrates

on a range of cultural issues, for example, the growth of an industry and a demand-driven, results-focused approach to training provision, and by meeting student needs. The different cultural issues at the respective workplaces of the two institutions (the VET provider and industry) include such cultural components as their incentives structures. These cultural ‘differences can manifest themselves in divergences in goals, languages, time orientations, and assumptions’ (Cyert & Goodman 1997, p. 47).

Florentina and Raluca (2012) state that all managers and administrators from both educational institutions and industry must be aware that an effective organisational culture is useful for the organisation, both in the short and longer term. In short, ‘Management leads culture and culture leads behaviour’ (Dygert & Jacobs 2006, p. 21).

Impact of globalising pressures

The impact of globalisation has already touched academic institutions. In the 21st century, globalisation has profoundly influenced higher education including VET institutions (Altbach, Reisberg & Rumbley 2009). Altbach, Reisberg and Rumbley (2009, p. iv) define globalisation, ‘as the reality shaped by an increasingly integrated world economy, new information and communications technology (ICT), the emergence of an international knowledge network, the role of the English language, and other forces beyond the control of academic institutions’.

Green (1999, p. 56) notes: ‘The argument in relation to educational convergence is, however, more complex, for whilst education systems remain essentially national they may nevertheless be experiencing a degree of convergence under the impact of international forces’. As the global economy experiences turbulence from monetary recession, partnerships are gradually viewed as a feasible pedal for monetary recovery and economic development (Eddy 2010).

The impact of globalising pressures has resulted in a competitive environment among higher education institutions, including VET institutions, at an international level. However, it has also opened up an entire world of possibilities for them (Chan 2004; Denman 2004). Partnerships are progressively viewed as a feasible device for economic improvement and development as the global economy emerges from economic depression (Eddy 2010).

The world is connected together through a series of networks and by interactions that are more extensive and intensive. Furthermore, while the nation remains an important feature globally, companies, governments and VET have to connect globally or be left behind (Marginson 2000).

As the economy changes and becomes increasingly global, companies need to be more innovative and look for labour force knowledge that can be obtained quickly. The external environment is challenging for vocational education and training too as globalisation and information and communication technologies impact on businesses, companies and individuals, contributing to a need for current skills in the labour force (Mitchell & Young 2001).

Nowadays, the workplace is increasingly affected by global competition, advanced technology, increased workforce diversity, and the transition of two generations into retirement. Accordingly, 'different models, different delivery systems, different outcomes, and different visions' are needed (Gunderson 2005, p. 55). Furthermore, Gunderson (2005) argues that providing continuous training and development for employees in industry is a challenge, as the workforce demographic continues to evolve and the financial impact of keeping skilled employees grows.

Hollander and Mar (2009, p. 49), emphasising the impact of globalising pressure on VET institutions, note that:

The changing nature of the world of work, especially due to globalization and technological change, demands that TVET develop a skilled, committed and motivated workforce that understands how global changes impact upon local opportunities for business and industry and how these changes impact upon the quality of local social, economic and environmental conditions.

Anticipating these global changes, Marginson (2000, p. vi) suggests that if VET is to help a company to improve its quality and competitiveness, ‘VET and its practitioners will need to become more global, better networked and closer to the technological edge in every industry’. Dellow (2007) further suggests three strategies for VET practitioners to train the labour force during changing economies:

1. develop global awareness
2. survey local business, industry, and service organisations to determine their needs
3. internationalise the curriculum.

Likewise, Aktaruzzaman and Clement (2011, p. 266) argue that the ‘VET system must respond to rapidly changing technological needs of the world of work by continuously evaluating and modifying curricula, introducing new courses, vocational teacher education, modernising laboratories and workshops through close partnership between the VET institution and the world of work’.

International recognition of qualifications is one of the impacts of globalisation. As Maclean and Lai (2011, p. 9) point out: ‘while national systems of testing remain necessary and continue to require improvement, one salient impact of globalization has been the international recognition of qualifications’.

Education stakeholders, companies, students and parents are requiring some kind of certification and qualifications from credible international institutions, although the system for such international comparability is

relatively new and generally unconfirmed (Altbach, Reisberg & Rumbley 2009). However, although this is the case, quality assurance and certifications are very important for trainers and staff at VET institutions to anticipate globalising pressure as parameters of their skills recognition. As Bateman, Keating and Vickers (2009, p. 6) note:

Quality assurance parameters include those for teachers and trainers, both individually and collectively. They include qualifications, experience and capacities such as expertise and ability. Qualifications and capacities include those related to assessment and in some cases to instruction or teacher training.

In this atmosphere of globalisation, Robinson (2000, p. v) emphasises the need not merely for form of skill, but also for rapid skills growth:

The skills base of a nation, and the speed with which skilling can adjust to meet new requirements will be as important, if not more important, in determining economic success as a nation's natural resources and financial capital base.

Burke (2000, p. 1) concurs and provides a warning:

Globalisation, technological and demographic changes have been major factors in highlighting the need for increased education and training throughout life ... Given the likelihood that governments will be unwilling to provide additional resources required, there is a need to examine the most efficient and equitable ways of providing education and training and incentives to encourage the financing of education and training by employers and individuals.

In order to face the globalising pressure, De Witt (2009, p. 205) suggests 'Strategic partnerships in research, teaching, and transfer of knowledge, between universities and of universities with business and beyond national borders, will be the future for higher education in order to manage the challenges that globalization will place on it'.

Harris et al. (2001) and Robinson (2000) explain that as a consequence of globalisation, vocational education and training institutions are in an era of

substantial change and transition that require the use of change management strategies which include changing demands for VET training programs, policy changes within VET, and the changing nature of their work.

3.3.2 *Training factors and partnerships*

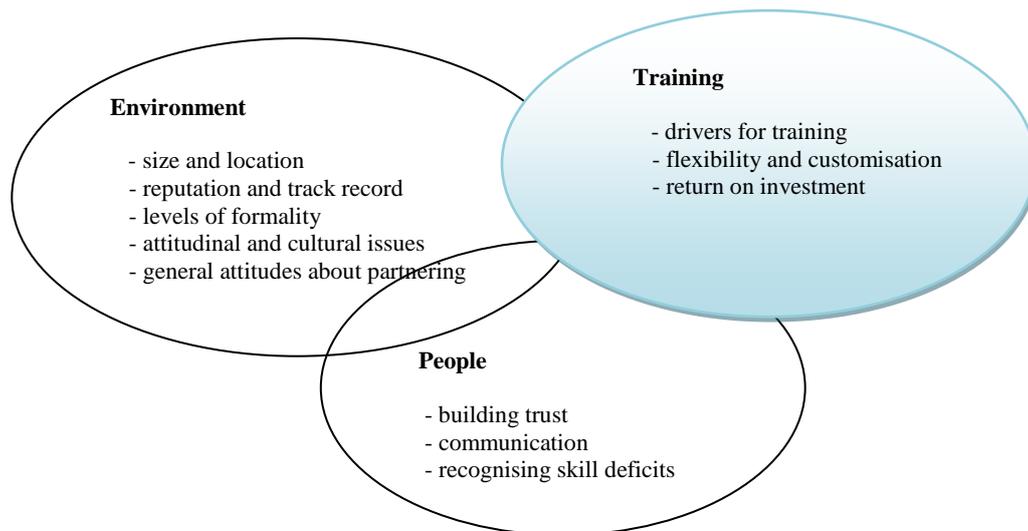


Figure 3.4: Partnerships – the optimum environment, training and people mix

Source: (Callan & Ashworth 2004, p. 23)

Businesses and corporations may not have the resources to provide professional development activities, which they may have to outsource to external training providers (Hodgson & Lai Kuen 2010). Furthermore, Hodgson and Lai Kuen (2010) note that, in some cases, there are partnership formats between higher education institutions (including VET providers) and industry to provide employee development activities which could be customised to meet the company's expectations.

Every partnership needs to include pertinent business stakeholders as partners in the improvement and delivery of training (Frazier 2013). As Frazier (2013, p. 350) suggests, 'The involvement of industry partners is

essential to ensure that the partnerships are delivering training and research opportunities that address appropriate needs and skills gaps.’

In developing training partnerships, the training model consists of a diversity of profit and non-profit drivers for training provision. These include considerations regarding the flexibility and customisation of training partnerships, administrative arrangements prior to and during training activities and insight about the expected return on investment in training (Callan & Ashworth 2004).

Key drivers for training

Education and training is one of key drivers of partnerships between industry and educational institutions, whether in higher education or VET. There are a range of other drivers for training partnerships between these partners. These include internships, apprenticeships, certification programs, work-based learning, higher education curriculum development partnerships, consortium programs, sponsoring and facilitating applied research programs in management development and teaching company schemes (Roever 2000; Thacker 2002).

The training drivers have become broader than just money making (Callan & Ashworth 2004). Callan and Ashworth (2004, p. 19) argue ‘there is a re-conceptualisation in adult learning beyond the narrow definition of training which focuses primarily on the skills which individuals need for employment, to a broader perspective involving organisational and individual development as a “single process of relationships”’.

Mitchell and Young (2001) suggest that this change of concentration is demonstrating that:

- a. Companies’ requirements for formal training differ very much in content, location and levels

- b. Companies usually want formal training to be tailored to fit their context
- c. Companies frequently want training presented on the job, using an assortment of methodologies as well as facilitating, mentoring and problem solving
- d. Big companies occasionally try to find a single provider to meet all their requirements.

Marginson (2000) argues that two key trends emerged for industry through globalisation. First, the requirement is for industries to be high-performing and described by their creativity, innovation, flexibility and competitiveness. Second, they require very skilled staff to meet the requirements laid out in the first trend.

At the same time, VET institutions are striving in this progressively competitive marketplace (Mitchell and Young 2001). Mitchell and Young (2001) further comment that this market competition demands customised training focused on the needs of particular industries or companies, niche training markets and the development of non-award vocational courses. Moreover, in building more flexible and customised training, VET providers require personnel who are focused on customer service, good marketing and entrepreneurial skills, and also have staff skilled in developing business partnerships and project management (Callan 2001; Mitchell & Young 2001).

The next subsection will discuss flexibility and customisation as one of the key success factors in training partnerships between VET providers and industry partners.

Flexibility and customisation

‘Customisation and operational flexibility in working with a corporate partner are critical to success’ (Meister 2003, p. 57) of VET

provider/industry partnerships. The concept of flexibility has attracted considerable attention in several fields including management, education and training (Cruz & Marques 2012). Cruz and Marques (2012) note that recent studies have underscored the importance of a certain level of freedom within systems, providing the necessary flexibility and adaptability to deal with change.

Training is clearly an important contribution to development and ‘development is fashionable’ (Bryans & Smith 2000, p. 229). Training is also essential in sustaining innovation and continuous improvement. Globally, the prominent characteristics in training are its common flexibility, accessibility for experimentation, and flexibility in staffing (Meister 1998). Bryans and Smith (2000, p. 230) emphasise that ‘development is too open, training not open enough’. ‘Training cannot cope with a world of uncertainty, while development may accept it to the point of giving no guidance in how to shape the world’ (Bryans & Smith 2000, p. 230).

Within the training model and partnerships, flexibility (i.e. capability to modify delivery style) is regarded as the most significant factor for success (Meister 1998). A lot of customers of vocational training have varying requirements that should be addressed with a flexible and varied approach to training supply. Thus, there is no space for one view of training requirement or delivery set up by a government, a political party’s election platform or industry board (Karmel et al. 2009). Karmel et al. (2009, p. 43) add that ‘in this world clients are trusted to signal and act upon their needs and preferences (provided that they are given the tools), and providers (subject to the right regulation) are trusted to work flexibly to meet these needs and preferences’.

‘In the development of partnerships a one-size-fits-all approach is inappropriate for the emergent nature of new technologies’ (Trood 2002, p. 8). Trood (2002) states that flexibility in partnerships, such as the approach to the time and resources allocated, awareness of possible risk in early

engagement, careful and good preparation, a comprehensive planning and a return on training investment, are all essential and need to be considered. Tafti, Mithas and Krishnan (2013) warn that proprietary standards in training partnerships can lead to inflexibility causing disconnected partnerships, switching to new partners or changing the scope of the relationship.

In addition to flexibility, the level of customisation is one of the important determining factors of the character of the training program and training partnership. In its simplest form, Varma and Garga (2011, p. 19) define customisation as ‘making to order or modifying according to individual requirements’.

The level of customisation in training programs varies. And, even though in-house training program developers may customise some standard instructional programs to fit their company’s needs, the customisation process begins with outside training providers, particularly in the context of VET providers and their training partnerships (Bragg & Jacobs 1993). In addition, there is no definitive definition of customisation or customised training among scholars. By definition, customised training constitutes the lessons for workforces offered by education and training organisations working closely with enterprise managers, and where the training curriculum is built or modified to meet the education and training requirements of each particular company (Long 2009).

Training individuals from different backgrounds and in changing environments needs customised training approaches that align with the individual learning required and reflect continually changing organisational needs (Blake & Butcher-Green 2009). Grubb and Stern (1989, p. 31) define customised training as ‘relatively firm-specific skill training for individual firms, and therefore, a form of training which is more specifically responsive to a firm’s requirements than are general vocational programs’, but it still does not give clear idea of the boundaries of customisation.

Customisation is evident not only in content, but also covers delivery methods and modification of training courses (Bragg & Jacobs 1993). Furthermore, Bragg and Jacobs (1993, p. 18) mention that customised training is ‘used to retrain or upgrade the skills of employees of an existing firm or designed to rapidly enable new employees to play a role in an expanding enterprise’. Moore (2003) depicts three customisation components in his training evaluation review. These components included modifying the training pace and contents to the level of trainees and utilising samples, tools, and/or resources drawn from the business context. Finally, customising training to align with the corporation’s culture can be seen as another form of customisation.

In the United Kingdom, researchers described three stages of customisation. The first is a standard training program, or so-called generic training program, with a very small scale of customisation. The second is a customised training program showing a ‘middle level’, in which programs adapt some of their contents, examples, arrangements, or framework based on a standard program. The final stage is a tailored training program that is recently developed, and distinctively prepared and continually modified to meet the customer’s particular training objectives (Prince 2002).

Callan and Ashworth (2004) explain that in successful training collaborations between industry and VET providers, the partners had carefully managed the locations, scheduling and the nature of the training. Furthermore, industry benefitted by obtaining tailored training at the right cost, while VET providers benefitted by having a greater degree of certainty in their training marketplace and for their future development.

VET providers need highly trained staff in order to offer customised training to a highly proficient labour force (Mitchell and Young 2001). Accordingly, Hobart (1999, p. 3) suggests that VET teachers and training staff should take on primary and recurring professional development to allow them ‘to perform successfully within the global context in which they now operate’.

Descy and Tessaring (2001, p. 16) describe several approaches used in VET in Europe to attain greater levels of flexibility and customisation. They include:

- increased *cohesion* between initial and continuing education and training;
- increased *modularity* of training pathways (facilitating a more flexible approach to attaining competencies);
- the creation of programmes *combining* vocational and general qualifications (in particular, dual qualifications); and
- the *expansion* of choices and options offered through the training curriculum (facilitating the development of customised courses for personal and vocational development).

Administrative management

Palmer and Mullaney (2001) underscore the importance of the administrative management process during the early stages of partnerships between VET providers and industry. Effort should be dedicated to the development and implementation of management strategies that increase and encourage continuous growth and maintenance of the collaboration (Mohr & Spekman 2006). Elmuti, Abebe and Nicolosi (2005) add that this effort needs to be supported by appropriate partner selection, the commitment of senior management, and clearly understood roles and communication strategies between partners. These are seen as important components of strategic partnering which need to be considered prior the commencement of the partnership.

Closely connected to the commitment to effective administrative management is the role of leadership. Researchers have investigated the connections between concepts, such as leadership, communication, visioning, and managerial ability, in order to improve the understanding of the

combination of aspects that leads to effective training partnership outcomes (Ivery 2010). Bolman and Terrence (2003) argue that effective managers of an institution or organisation should constantly adapt their approaches to fit the situation and organisational contexts. This is particularly so for VET providers in partnered situations.

In relation to administrative management arrangements between VET providers and industry in training partnerships, Mohr and Spekman (2006) suggest that management in both partners should develop and foster processes and behaviours that help them to achieve mutually beneficial objectives. Kezar (2005) highlights the importance of developing collaborative behaviours in senior leaders and managers within organisations.

Senior managers and organisational leaders need to know how to play a critical role in the establishment and development of partnerships within and between their respective contacts and networks (Bray & Scalzo 2005). In relation to the involvement of top level management in VET provider/industry partnerships, Austin (2010, p. 53) states that:

Every successful alliance studied had significant and direct involvement from the top leaders in the partnering organisations. Absence of this leadership engagement is evidence that a relationship has not reached the level of strategic importance.

Annette Foley (2011) provides impressions of managers based on an investigation of their roles. Some were described as being “more professional” in their involvement in partnerships, while others were identified as being “less professional” and “more administrative”. Additionally, Foley (2011) notes that some of the managers illustrated their responsibilities as much more stressful, although other managers considered them to be challenging.

In the Australian VET context, and based on one manager’s testimony, Mulcahy (2003) identifies that corporate skills, operational abilities, and

skills in administration are key components of successful management and leadership. Mulcahy (2003, p. 88) adds that VET managers have two foci in their role: ‘one part strategic and the other part operational’.

In order to show the importance of the managers’ involvement in such roles as members of steering committees in partnerships, Tishuk (2012) argues that some organisations face pressure to show the value of their partnerships. They overcame this and other difficulties by creating task forces or committees, for example, when existing groups or informal connections were no longer adequate.

Another key feature in a partnership is the role of ‘champion’. Partnerships significantly benefited when an individual took on the role of a partnership leader or ‘champion’ who manages the collaboration for the respective VET provider with the industry partner (Zakocs et al. 2008). The champion may have been involved with the creation of the partnership or was brought in at implementation and maintenance stages. Whatever their entry point in the partnership process, Santoro and Chakrabarti (1999) emphasise that the champion serves as a critical communication and management connection with the respective partner.

Eddy (2010) emphasises that the role and responsibility of partnership champion is essential to partnership success. Champions that undertake the initial work in establishing a partnership are not always positioned at the top of the management chain, but they often bring a high level of intrinsic motivation to their endeavour (Watson, JS 2007). Eddy (2010, p. 27) concludes that ‘leaders play a key role in supporting partnerships, but initial champions for the partnership may be located throughout the organization.’

It is therefore not only organisational leaders but individuals, such as regular staff or employees, who are often the initial champions for collaborations in a VET institution or industry. Some of these champions operate at the grassroots level using their personal relations and involvement in particular

areas of interest (Eddy 2010). Amey, Eddy and Ozaki (2007, p. 11) point out that ‘the champion needs to have the support of the positional leader but does not have to be in a particular position of traditional power within the organisation’. Indeed, their role as champion is considered as significant to the success of the partnership (Zakocs et al. 2008).

Santoro and Chakrabarti (1999, pp. 233-4) suggest that a partnership champion has an important role to play, as follows:

As the key contact and liaison, successful champions serve these important roles while being sensitive to each organization’s needs, mission and objectives. Successful I/U (industry/university) champions know the importance of skilful boundary management... They are also technologically knowledgeable, spontaneous to dynamic market conditions, aggressive, have a strong sense of drive, and are politically astute.

A shortage of administrative assistance for partnership arrangements makes it more challenging for a partnership champion to emerge. An academic institution needs an administrator who persistently supports the VET provider/industry partnership. The institution also needs to support those appointed to assist the partnership to carry out the work (Zakocs et al. 2008).

Successful partnerships also require the VET provider to be able to work collaboratively, not only with the industry partner, but also to ensure that its internal organisation is effectively and constructively engaged in the partnership.

The next subsection will discuss the return on training investment for both VET providers and industry partners.

Return on training investment

One of the main difficulties in managing technological transformation and sustaining competition in education and business is developing the competencies of employees through investment in human capital using a number of training practices (Percival, Cozzarin & Formaneck 2013). Investment in human capital improvement through training aligned with the

development of competencies, knowledge and qualifications in the workforce, are believed more significant nowadays for the effective performance of public and private institutions (Chochard & Davoine 2011).

‘Training is considered an investment and, as with any other investment, entails costs and benefits which can be evaluated by economic criteria such as the present-value method and the internal rate of return method’ (Barcala, Pérez & Gutiérrez 1999, p. 336). Consistent with this statement, Coget (2011) argues that many studies have shown that training investment for industry shows results in better worker productivity which, in turn, improves the market and financial return.

Conversely, Percival, Cozzarin and Formaneck (2013) argue that training investment in the business world is still relatively low, due in part to the fact that few senior executives and managers evaluate the impact of training, which means they lack knowledge.

Training is only one way in which an employee can learn or become skilled. Therefore Percival, Cozzarin and Formaneck (2013, p. 21) suggest that ‘the investments made in training require analysis in order to determine if there is sufficient evidence to support a significant return on investment (ROI) for the firm’s investment.’

Return on investment in training potentially comes in many forms:

Returns may come in the form of higher levels of value-added activities as a result of greater levels of employee skills, increased flexibility amongst employees who can perform a range of tasks, reduced overhead costs to the firm and greater ability to innovate in terms of adopting new technology and introducing better forms of work organisation (NCVER 2001, p. 2).

Training expenses are an exclusive form of company expense, contrasting with other expenses. Training expenditure stands for investment by the company in their workers. Similar to some other investments, obligations to training are directly related to expected returns from money invested (Blandy et al. 2000).

Numerous studies on measuring performance of training partnership have used a range of financial measures, such as growth, earnings, return of investments and unit costs, while few studies have applied financial measures to assessing organisational performance as a result of training (Eccles 1991).

The mission of most companies is to provide a profit to shareholders, sustain the workforce, and compete successfully in their given markets. This can be achieved through training, and by obtaining a strong return on training investment. By forming a partnership with higher educational institutions, companies can both take advantage of those institutions' core competencies and contribute to the economic development of the community at the same time. Partnerships enable universities and vocational education institutions to integrate real-world experience into their curriculum (Witten 1990).

In most cases, research on business returns on investment overwhelmingly show that companies earn their investments in training several times over through increased productivity and company performance (Smith 2001). Callan and Ashworth (2004) state that such returns and the implementation of training alliances have appeared as major issues in the VET sector. Smith (2001) observes that considerable and significant contribution to enterprise are realised through training. Such training develops an improved capability to adopt the latest technology and the workforce can utilise new competencies across diverse roles.

Business and economic scholars have frequently used financial measures to assess the impact of training (Jacobs & Washington 2003). As Blandy et al. (2000) state, the profitability of industries is mostly associated with the quality and quantity of training. Dawe (2003) notes that through training investment industries may achieve considerable returns in the form of better output, enhanced workplace performance and/or increased profitability.

Blandy et al. (2000) note that the rates of return depend on the nature of the training program and its relevance to the business needs of the company.

Callan and Ashworth (2004, p. 20) add that it is important to recognise ‘not only the financial returns to be gained from training, but also those returns which more broadly represent benefits to customers and the wider community’.

On the other hand, if training is not maintained, proficiency declines sooner or later. When this occurs, the expertise acquired through training can rapidly become outdated (Callan & Ashworth 2004). Maglen and Hopkins (2001) state that the returns on training cannot be completely realised unless training assists other programs within the organisation. Senior leadership for training, and an organisational culture which promotes learning, change and staff development are needed (Maglen & Hopkins 2001).

Doucouliafos and Sgro (2000) note that the selection of an appropriate training program and quantifying the advantages from such programs are both essential to decision-making processes of successful corporations. Moreover, the returns on investment in training are maximised if there is integration between training programs and the overall business plan.

Subramanian, Sinha and Gupta (2012, p. 40) note how important it is to invest training and gain returns:

Training can no more be a mundane task which exists because it always has. It is now strategically imperative that training be conducted with the clear understanding that if people are truly the organization’s asset, then training is beyond doubt, the greatest investment and must hence be utilized wisely.

Subramanian, Sinha and Gupta (2012) conclude that training is actually an investment and not a cost, because by assessing training programs in terms of the return on investment they provide, the purposes of training can be seen in a more a credible light.

Training needs assessment

It is commonly considered that training needs assessment (or training needs analysis) is one of the key phases in designing training to ensure its

effectiveness. Ferreira and Abbad (2013) argue that the process of training needs assessment (TNA) has a strategic role because of the clear parameters these analyses provide about the professional skill deficits that have to be addressed. They also provide information about skill profiles of potential trainees.

Firdousi (2011, p. 113) asserts that ‘before any kind of training is delivered they are required to identify the training needs within their organizations in order to succeed and attain the desired outcomes of the training program’, and that analysis can be carried out either by VET providers or industry partners.

Training needs assessment assists in identifying a discrepancy between an ideal and current level of performance, and prioritises current resources in order to reduce performance gaps (Altschuld & Kumar 2009). This such assessment or analysis is used to comprehend what training personnel really need (Cekada 2010). Moreover, Cekada (2010, pp. 28-9) noted that ‘training needs assessment can help determine current performance or knowledge levels related to a specific activity, as well as the optimal performance or knowledge level needed.’

Such assessment can be defined as ‘a study to design and develop instructional and informational programs and materials, after the performance analysis has determined that training or informational materials are indeed appropriate’ (Rossett 2009, p. 31). Leatherman (2007, p. 3) argues that ‘training needs assessment identifies specific problems within an organisation by using appropriate methods of gathering information (such as surveys, interviews, observations, etc.), determines which of the problems requires a training solution, and then uses the information to design training interventions that solve the original problem.’

This can also be considered as an ongoing process to gather information to identify needs so training can be developed to assist organisations and

companies to meet their objectives (Brown, 2002). Consequently, this benefits both employers and individuals by building needs-based training programs that meet respective needs.

Therefore, training needs assessment is essential to the success of training programs and ‘it can play an important part in assessing the organisational context regarding resources, management support, and other organisational environment that either hinder or facilitate the successful transfer of a training initiative’ (Brown, 2002; Firdousi 2011, p. 115).

The above discussion highlights that this assessment should be defined as “training requirements analysis” because this term responds to learner’s needs (Iqbal & Khan 2011). Thus Dingle (1995) states that the abbreviation TNA can be used to cover both training needs assessment and training needs analysis. This underscores its role both in identification or assessment and analysis. It also shows that the role of the VET provider is not only dealing with training, but also as a business consultant, which in the end may involve no training at all, but may involve them in a process of assisting in management changes in the partner organisation.

A number of studies found there are many aspects of TNA that are beneficial. In relation to VET institutions and industry training partnerships, Firdousi (2011) points out that TNA can be applied as an instrument to identify educational programs or activities that could be provided to both management and the workforce to develop management skills and improve productivity.

Ferreira and Abbad (2013) caution that it is also essential that research on and implementation of TNA not only focuses on current skills related to professional roles, but also on emergent competencies of future importance to the organisation and institution.

Six main TNA targets are described by Rossett (1987) to:

- seek optimal and actual status to determine detailed differences;
- understand perceptions of real people in the real world;
- look for causes of a problem;
- identify priorities;
- ensure significant parties are involved; and
- train management in ways of looking at problems.

In addition to these targets, four key roles are outlined by Brown (2002). The first role is to detect certain organisational barriers to training. The second role is to gain management support for the training program. Even though it is not simple for managers to see the positive impact of training programs on their organisation's performance, TNA can still help managers to see the potential outcome of such programs.

The third role is to produce data for evaluation. Since TNA establishes certain targets, those targets can set the standards when the outcomes of training programs are evaluated. Hence, training needs assessment can be used as a foundation for evaluating the effectiveness of the training program.

The final role of TNA, according to Brown (2002), is to weigh up or measure expenditure vs benefits of training, since TNA can identify the potential benefits.

According to Chang, Chiang and Kun yi (2012), a good training needs assessment provides the following benefits including:

- expanding the responsibility of management level to support participants' involvement in training and development constantly;
- expanding the visibility of training roles;
- elaborating crucial organisational matters;

- making the best use of restricted organisational resources;
- offering training design ideas and training courses;
- giving employees the skills and knowledge needed to perform their jobs;
- assisting an organisation discover the aim of performance; and
- enhancing the relationships between workers as well as building self-esteem.

Chang, Chiang and Kun yi (2012) emphasise that if TNAs are not implemented, inadequate training, partial training, or even too much training could occur. Thus it would not be wise to implement training in the company or institution without focusing on the training required for employees and what is needed most (Firdousi 2011).

Firdousi (2011) adds that training needs assessment can be used as part of an internal audit inside the company to identify the fields that may benefit from training. However, Haslinda (2009) cautions that if TNA is applied incorrectly or is inadequate, it can have terrible results. Therefore, both VET providers and industry should carefully consider whether or not the proposed training will be compatible with the institution or company's mission, strategy, goals and culture (Sunita & Ajeya 2011).

Sunita and Ajeya (2011) believe that training needs assessment and program evaluation are integral components in providing an effective training program, from start to finish. Without needs assessment, VET providers and their business partners can only make an educated guess.

Bashir, Memon and Rizvi (2011) conclude that all organisations, including VET institutions and industry, have to be aware of the external context, which is constantly evolving and changing, to ensure they explore and take up new approaches to increase their effectiveness and productivity. In short,

in order to remain competitive and sustainable, the solution is to invest in training. However, to avoid unproductive and wasteful training, it is essential to set up a new performance-based model of training with emphasis on training needs, to develop relevant training programs for employees and ensure training benefits (Chang, Chiang & Kun yi 2012).

3.3.3 *People factors in partnerships*

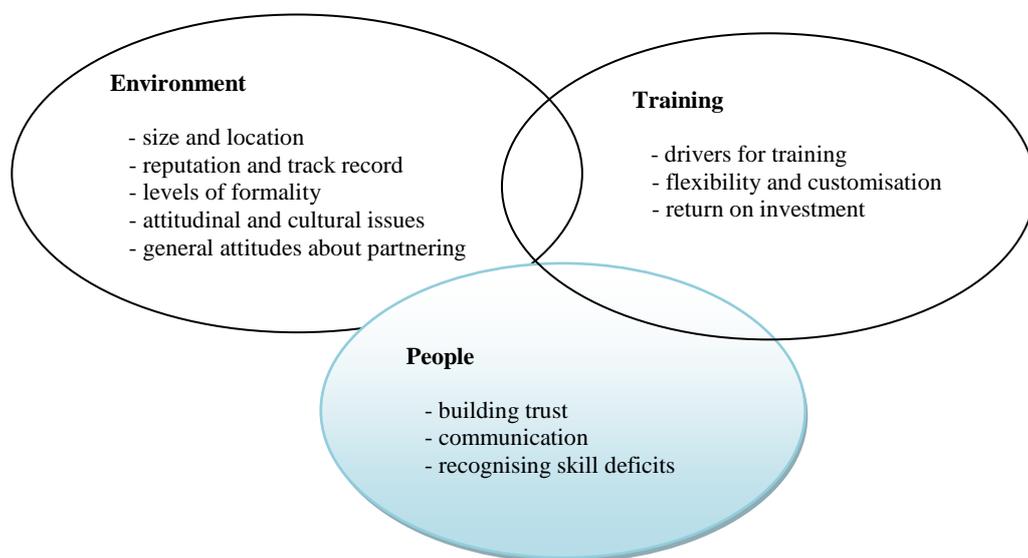


Figure 3.5: Partnerships – the optimum environment, training and people mix

Source: (Callan & Ashworth 2004, p. 23)

‘Building competitive innovating enterprises requires a great deal of sustained effort by people at all levels in enterprises’ (Lendrum 2003, p. 42). Callan and Ashworth (2004) add that the key to effective partnerships is the capability to manage and mobilise people, to allocate the right financial resources, and to bring ideas and projects to completion. In response to globalisation and the training needs of industries, vocational education and training institutions are required to be highly skilled and perform well (Mitchell & Young 2001).

A number of partnerships between institutions occur informally and frequently arise because middle management seeks resolutions to problems or needs to access new opportunities (Mintzberg et al. 1996). In developing partnerships, people issues play a significant role, in which both parties use a variety of mechanisms to maximise the level of communication and quality of relations within the partnership, as well as ensuring a high level of trust (Callan & Ashworth 2004).

Building trust

Many researchers emphasise that ‘trust’ is the most significant requirement for effective dialogue in partnerships (van Tulder 2011). Nevertheless, as van Tulder (2011, p. 22) argues, ‘Trust is neither a necessary nor a sufficient condition for an effective stakeholder dialogue, just as conflict is neither an effective nor a sufficient condition for a company to acknowledge and meet its responsibilities’.

‘Building the trust and relationships that are needed for productive work to take place involves time and work’ (Malm 2010, p. 100). In addition, mutual relations amongst partners fosters a climate of trust, openness, and to some extent, reciprocity (Zhang, Jia & Wan 2012). Further, Zhang, Jia and Wan (2012, p. 552) argue that ‘trust or reciprocity among partners facilitates knowledge sharing, thus allowing the partnership to achieve a positive outcome’.

Trust and commitment are important forms in both conceptual and empirical models of inter-organisational exchange relationships (Moore, KR 1998). Additionally, trust involves one party having confidence in, or relying on, another party to fulfil its obligations. The co-existence of trust reduces the perception of risk associated with opportunistic behaviour. It also allows each party to believe that its needs will be fulfilled in future by actions taken by the other party.

Some literature describes the importance of building trust in partnerships. As Foskett (2005) notes, trust among institutions rarely exists. It is, in fact, the trust between individuals that is the 'glue' in the relationship that will guarantee sustainability. Additionally, Foskett (2005) suggests that this sustainability clearly depends on the stability of staff, who work through to the completion of the partnership project. And if that stability is not there, there has to be effective succession planning and management. It also requires that the staff involved possess excellent skills in networking and project management.

Trust is repeatedly found to be a factor which is fundamental to the success of any collaborative effort and this frequently takes time to build. This is why, in the growth of a consortium, it is of benefit to begin with informal networks of participants who know, respect and trust each other (Westera, Van den Herik & Van de Vrie 2004). These authors also note that trust is one of the key factors for a successful partnership plus positive personal relationships, support from senior management, equality and effective communication.

Partnership has been defined in a range of literatures and is usually described as the voluntary pooling of resources among two or more groups to achieve mutual goals (Yoder & Ham 1999). This definition, however, is broad and fails to emphasise key factors of partnerships. Nowadays, partnerships are characterised by their strength, flexibility, and working together on trust. They are long-term associations that require a level of closeness and interaction between parties that leads to trust and a commitment to common goals (Van der Smissen, Hartenburg & Moiseichik 2005).

Morgan and Hunt (1994) argue that successful partnerships may be explained by the capability of partners to build mutual trust and commitment. In addition, they require open lines of communication and a trustworthy corporate culture. Other contributing factors include clear goals, senior

management support, partner compatibility and the ability to meet performance expectations (Whipple & Frankel 2000).

The key components of successful collaboration include clearly defined implementation, open and frequent communication, strong leaders and trusting interpersonal relationships (Mowen & Kerstetter 2006; Yoder & Ham 1999). In regard to strong leaders, Falk (2000) claimed that one of the basic roles of partnership administration in VET providers is developing trust and maintaining the quality of networks between them. Also, building trust among people as they actively communicate is essential to successful results. This means that trust is apparent at both specific and generalised levels and must clearly be a goal of leaders, particularly ‘new age’ VET leaders. Finally, Falk (2000, p. 9) added that one of the effective features of VET partnerships is the ‘continuity of relationships over a period of time (or historicity) leads to more positive VET outcomes through the consistency of availability and the consequent building of trust’.

Communication skills and relationship management

Wollenburg et al. (2013, p. 138) state that ‘Communication is arguably the biggest aspect of any partnership and accentuates the importance of identifying problems as early as possible to solve them quickly and continue the partnership on a positive course’.

Key factors in establishing and sustaining successful partnerships between partnering organisations are the people involved and their individual skills: ‘This extensive list of skills includes communication skills, relationship management skills, and as well as a “mindset” among managers which sees the future success of their enterprises being linked to their ability to build solid and high-performing partnerships’ (Callan & Ashworth 2004, p. 20).

For VET practitioners, personal features that are considered important include enthusiasm for learning, teaching as a main skill, communication skills and pledge to self-evolvement and improvement (Dickie et al. 2004).

Groves (2000) argues that to build industrial partnerships and collaborative alliances, VET practitioners should upgrade their management skills.

Many authors are of the same view regarding the effectiveness of partnerships, which is concentrated on the capability to mobilise and administer people, to allot adequate financial resources, and to present ideas and projects capable of implementation (Kuratko & Hodgetts 2001).

McGrath, Simon and Palmer (2004) identify a range of methods for staff development that are used internationally. These include:

- a. Formal training (initial or re-skilling) which are commonly employed to sustain the current skills of VET practitioners using internal or external training consultants, drawn from inside the country or from international specialist agencies.
- b. Mentorship to new or relatively inexperienced practitioners, which involves senior staff members in work-shadowing to provide professional support.
- c. Exchange programs which expose practitioners such as senior managers to worthy practice examples or contribute to the knowledge of others through involvement with multi-lateral agencies such as CIDA, SEAMEO and others.
- d. Career pathways and by rotating practitioners through different postings to gain a range and balance of experience.
- e. Back-to-industry programs, using sabbaticals or professional leave in order to work in industry to ensure skills are updated and current.
- f. Information websites and databases, for sharing information and networking amongst VET practitioners.

Moss Kanter (1999, p. 21) notes a number of people skills needed for successful partnerships:

Collaboration requires interpersonal as well as organisational social sensitivity: skills in listening, self-awareness, ability to read others' signals, and a dose of humility. It requires sharing information with partners, networking between the companies at multiple organisational levels, keeping partner's interests in mind when crafting strategies, being willing to learn from those outside the firms' own walls, and respecting differences between companies and cultures

Additionally, Lendrum (2003) suggests that the best alliances take place when people are performing with a high degree of skill, and are both dedicated and empowered. He also explained that a high degree of skill includes ability in growing multi-level, cross functional relationships focusing on continuous improvement for clients and partners.

In both the Australian and Indonesian VET sectors (Chen 2009; Newhouse & Suryadarma 2009), considerable pressure has been placed on strategic and business skills of VET senior managers and their teams in establishing partnerships, and they required better skills in both entrepreneurship and partnering (Callan 2001). The required skills Callan mentions include a capacity to identify business prospects and properly manage risks to guarantee such initiatives reach their full potential.

Callan and Ashworth (2004) note that people skills are seen as more important than some environmental factors in developing successful partnerships. Even although the environmental factors mentioned earlier in this literature review (i.e. location, size and reputation) are important, Porter (2000) states that environmental drivers alone are inadequate in establishing successful training partnerships. Accordingly, Callan and Ashworth (2004, pp. 20-1) suggest that in order to achieve success, 'organisations need to develop personal relationships, have face-to-face contact, a shared interest, and develop long-term relationships with local institutions such as research groups and training providers'.

A statement by ANTA (2000) on Australian VET providers inferred that the level of professional development needed to be elevated. Furthermore, VET practitioners working in partnership with industry are expected to be skilled

in training needs analysis, marketing, employer liaison activities, conducting negotiations, and in legal and contractual matters. The same could be said for Indonesian VET providers.

3.4 Benefits and challenges in VET/industry partnerships

Lehman (2006, p. 2) observes: ‘A partnership culture is one of mutual benefit and creative collaboration—early trends indicate that public, private and non-profit sectors are dedicating greater focus to this area inside and outside of organizational functions.’ Successful business partnerships or collaborations commence through comprehension on ‘how to create effective and productive partnerships’ (Giesecke 2012, p. 39).

Industries and VET institutions shared many common views on both opportunities and challenges that a partnership or collaboration offers. For example, Borrell-Damian et al. (2010) conclude that partnership programmes cannot be viewed simplistically as a ‘one-way street’ favouring only the industrial or educational institution’s interest. Despite a partnership’s opportunities and benefits, as an education institution becomes involved in partnerships, and policymakers consider authorisations to foster joint ventures with the business world, ‘it is important to know what best supports partnering, what contributes to challenges that emerge in collaborations, and how to obtain long-term success’ (Eddy 2010, p. 2).

The benefits of creating partnerships for both VET institutions and industry can involve increasing their impact within an industry or the community, finding new opportunities for generating revenue, offering opportunities for access, and establishing a way to preserve the organisation’s autonomy in the marketplace (Peter 2003).

The benefits of partnerships for higher education institutions, and especially for their teaching staff and students, are that as they study the requirements of an industry and gain real-life experience in practical problem solving, they

are also gaining skills, knowledge and experiences that cannot be obtained inside a classroom (Suri, Veeramani & Church 1995). Higher education institutions can also benefit from obtaining financial assistance, providing their teaching staff and students with working knowledge and experience, contributing to improved regional economic growth, and expanding the employment opportunities of their students (Business-Higher Education Forum 2001).

The benefits for companies described by Elmuti, Abebe and Nicolosi (2005) include the opportunities to gain access expertise which is not available inside the company, obtaining access to students as possible employees for recruitment, leveraging internal research capabilities, lowering research and development expenditures, increasing innovation in products and services, and shortening product lifecycles to compete better in the global marketplace.

Aronowitz (2000, p. 172) ambitiously claims that ‘the fundamental mission of higher education should be to play a leading role, perhaps the leading role, in the development of general culture’. Conversely, one might dispute this assertion by saying that if all higher education staff agree with that statement, opportunities for training and other partnerships are jeopardised. This creates a negative track record for a higher educational institution, including those that are VET institutions, because the focus needs to be on the needs of the partner and the “general good” secondary. Furthermore, an institution’s poor track record within its community could create difficulties in the initiation of new partnerships (Maurrasse 2001).

Notwithstanding the above benefits, collaborations between VET institutions and industry also create challenges. The Business-Higher Education Forum (2001) notes a range of challenges for higher education institutions. These include the institution’s lack of understanding of how companies function, the difficulties in negotiating and sustaining mutual effort, incompatible time perspectives between the two organisations, and a potential negative

influence on the higher education institution's mission, funds or reputation. A similar range of challenges might equally apply to VET institutions.

The challenges for corporations partnering with higher education institutions can be integrating university research training and research into product, poor communication, cultural differences, differing goals and objectives, inconsistency in strategy, and a lack of skilled people and processes to manage the partnership (Business-Higher Education Forum 2001; Elmuti, Abebe & Nicolosi 2005).

Nevertheless, Eddy (2010, p. 14) notes that higher education institutions, including VET providers, 'are being challenged to shift out of historical patterns of operation and to explore partnerships as efficient means of avoiding duplicate services, providing creative solutions for the problem facings colleges, and becoming more accountable'.

Based on these challenges, Wollenburg et al. (2013) recommend allowing enough time and adequate employee/staff training to enhance organisation capabilities in managing partnerships. Partnership management plans are suggested by Frisby, Thibault and Kikulis (2004, p. 124) as one approach to anticipate and manage these challenges. They note that:

Partnership management plans should map out communication and consultation strategies to enable managers and staff to adequately supervise and monitor partnerships so that problems can be detected and managed early on.

Despite these challenges, many VET/industry partnerships have been successful.

The study of training partnerships between a VET provider and industry cannot be simplified. Partnerships are difficult to conceptualise, define and research because of their diversity. Although more literature has been devoted to this phenomenon recently, findings remain elusive and ungeneralisable. The current research study addresses the issues in previous

research on partnerships as well as examining the factors impacting training partnerships between VET providers and their industry partners.

3.5 Conclusion

This literature review reveals that partnerships between VET institutions, such as polytechnics and industry, are an active part of today's learning environment. Some scholars agree that while there is potential for effective partnerships between VET providers and industry, all too frequently efforts do not come to fruition. From the previous discussion, it is obvious that there are factors to consider in exploring partnerships between such VET institutions. Environmental, training and people issues (Callan & Ashworth 2004; Lendrum 2003) as impacting factors contribute relevant perspectives from which to study VET provider/industry collaborations.

Table 3.1 shows the major benefits and challenges for VET institutions arising from partnerships with industry.

Table 3.1: Benefits and challenges for VET institutions in partnerships with industry

Benefits	Challenges
Generating new income as financial support	Communication quality
Increasing impact in industry and community	Lack of flexibility and customisation
Offering new opportunity for access in marketplace	Resource availability
Preserve institution's autonomy	Rigid bureaucracy
Gain real life experience in practical problem solving	Working culture
Gain new skills, knowledge and experience that cannot be obtained in the classroom	Rapid industrial technology development
Expanding employment opportunities for students	Key person

Different and complementary viewpoints emerge that observe training partnerships from many perspectives and point to several attributes influencing training partnership development. However, the failure of partnerships can be associated with a number of challenges as mentioned in Table 3.1 above.

From the above explanations in the literature, the question arises: are all elements considered by Lendrum (2003) and Callan and Ashworth (2004) which impact partnerships between VET institutions and industry adequate? As raised in the literature, with the world changing as quickly as it is, it is essential to involve new elements (e.g. the impact of globalisation pressure and the implementation of TNA). It is important to consider these two elements when partnerships apply within a global framework. Therefore, it is obvious there are many factors to consider in exploring how to make business collaborations with VET providers and industry most effective.

A detailed discussion of the methodology for this study follows in chapter four.

Chapter 4

Methodology

4.1 Overview

This chapter describes the methodology that was used to address the research questions. Commonly, the main objective of any research study is, as Yin (2009, p. 9) states, to answer ‘who, what, where, how, and why’ things happened. In addition to these questions, in complex situations, or when the how or why questions are being asked about ‘a contemporary set of events over which the investigator has little or no control’, a ‘case study’ approach is believed the most suitable one to apply (Yin 1994, p. 9).

The purpose of this study was to seek a greater understanding of the factors impacting training partnerships between VET providers and industry. This study investigated partnerships between four VET providers and four industry partners located in East Java, Indonesia. The study identified the reasons for success or failure in these partnerships.

In this chapter, the methodology and research methods used to address the research questions are presented, discussed and justified. The chapter builds on chapter one, which outlines the context and environment of the partnership plus the literature presented in chapters two and three, which serve as background to both inform and underpin the study of partnerships. This chapter includes a justification of the case study design, data sources, sampling method, target population, data collection strategies and instruments, and finally explains how the data were analysed. The ethical issues involved in the case study are also considered.

4.2 Research methodology

A qualitative research methodology using a case study approach was employed in this study. In particular, this research explores the process and development of training partnerships with VET providers through four individual case studies. A combination of data collection methods, including a literature review, survey, in-depth interviews, archival research and document reviews, were used to examine the factors and issues involved in the development and maintenance of VET provider/ industry training partnerships.

Qualitative research, as Creswell (2009) notes, investigates a social or human problem in a natural setting which the researcher describes and reports upon. Creswell (2009) points out that four of the most frequently used methods in qualitative research are ethnography, phenomenology, biography and case study. These paradigms all play their part in the present study.

Burns (2000) argues that qualitative research is commonly undertaken by practitioners inside their field of work. This enables a closer connection with participants and activities and enhances the capacity of the researcher to obtain greater insight into the insider's view of the field. However, in qualitative research, there can be a perceived lack of standardisation, with some authors arguing that a risk for such research is a shortage of clear criteria for research steps and possibilities for ambiguity in research analysis (Burns 2000).

Qualitative researchers also need to be aware that this closeness of participant–observer relationships can influence both the research participants and the researcher (Parlett 1975). On the other hand, proponents of qualitative research state that ‘the genuinely and distinctively human dimension of education cannot be captured by statistical generalisations and causal laws’ (Walker & Evers 1988, p. 30).

Arsenault and Anderson (1998, p. 119) note that ‘qualitative research is a form of inquiry that explores phenomena in their natural settings and uses multi-methods to interpret, understand, explain, and bring meaning to them’. They further add that ‘a fundamental assumption of the qualitative research paradigm is that profound understanding of the world can be gained through conversation and observation in natural settings rather than through experimental manipulation under artificial conditions’ (1998, p. 119).

This thesis represents applied research. As Gray (2009) argues, it is researching real world topics and issues. The theoretical perspectives drawn upon for this research are from phenomenology with an emphasis ‘on human experience of the life world’ (Gray 2009, p. 23).

The qualitative method, in particular, is especially suitable for a researcher seeking an understanding of how different entities collaborate. If such a study bases its research on field interviews and site observations of strategies and techniques in their “natural settings,” participants may become cooperative and pleased to provide expert insights into the depth and breadth of their respective organisation’s operations.

One of the methodological approaches in qualitative research in terms of data collection is ethnography, employed for the research in all four case studies. Hammersley and Atkinson (2007, p. 3) identify the following features as common to ethnographic research:

1. People’s action and accounts are studied in everyday contexts rather than under conditions created by the researcher – such as in experimental setups or in highly structured interview situations. In other words, research takes place ‘in the field’.
2. Data are gathered from a range of sources, including documentary evidence of various kinds, but participant observation and/or relatively informal conversations are usually the main ones.

3. Data collection is, for the most part, relatively ‘unstructured’, in two senses. First, it does not involve following through a fixed and detailed research design specified at the start. Second, the categories that are used for interpreting what people say or do are not built into the data collection process through the use of observation schedules or a survey. Instead, they are generated out of data analysis.
4. The focus is usually on a few cases, generally fairly small scale, or even perhaps a single setting or group of people. This is to facilitate in-depth study.
5. The analysis of data involves interpretation of the meanings, functions and consequences of human actions and institutional practices, and how these are implicated in local and perhaps wider contexts. What are produced, for the most part, are verbal descriptions, explanations and theories; quantifications and statistical analysis play a subordinate role for the most part.

Thus, the methodology for this qualitative study employs case studies to answer what and how questions about environment, training and people, that is, how they impact training partnerships between VET providers and industry. Specifically this research explores training partnerships between VET providers and industry partners through four case studies in East Java, Indonesia. It consists of describing and analysing the multiple issues that reflect this holistic phenomenon in order to illustrate how training partnerships are likely to be applicable in all regions of Indonesia. In each case, the partnership focused on the development and implementation of training partnerships between VET providers and industry partners. Based on available methods, the principle of the case study is considered to be most suitable for this research.

4.3 Why a case study design?

These case studies draw upon survey and interviews with people who are involved in training partnerships: VET providers and industry partners. The four partnerships selected for this study are referred to as VET P1 and IP1, VET P2 and IP2, VET P3 and IP3, and VET P4 and IP4. These individual case studies are presented in greater detail in chapter five. And cross-case analysis is presented in chapter six.

Each VET provider represents a case and therefore a unit of analysis. A case study approach is also selected as there is no necessary control over behavioural events and as the focus is on the current situation (Yin 2003). A qualitative methodology was utilised since it afforded the opportunity to explore the research questions in the contextual setting of each partner.

The value of this approach exists in its inherent ability to uncover the richness of the processes and relationships involved in the development of partnerships in specific situations (Stake 1995; Yin 2003). Through the qualitative design of this research, the uniqueness and complexity of partnership development could be addressed in-depth, providing a greater understanding of how and why each relationship was created and sustained. As such, this research adds an increased understanding to the emerging body of literature on partnerships through its exposition and description of the specific cases and by drawing conclusions from the “collective wisdom” about partnerships gained through this study.

Patton argues: ‘The desire to evaluate individualised client outcomes is one major reason why case studies may be conducted...The need for case study data may be present whether the unit of analysis is an individual, program, organisation, or community’ (1990, p. 99). Stake (1995) argues that case studies can contribute both theoretically and pragmatically in educational research.

Patton (2002, p. 55) notes ‘Case studies are particularly valuable in program evaluations when the program is individualised, so the evaluation needs to be attentive to and capture individual differences among participants, diverse experiences of the program, or unique variations from one program setting to another.’

Gray, D (2009) explains that case studies can be used for a wide variety of issues, including the evaluation of training programmes, organisational performance, project design and implementation, policy analysis, and relationships between different sectors of an organisation or between organisations. This supports the approach used for this study.

Yin (2003) lists six sources of evidence for data collection in case study protocol: documentation, archival records, interviews, direct observation, participant observation and physical artefacts. Not all need be used in every case study. There are several construction processes for case study, as detailed below (see Table 4.1):

Table 4.1: The process of case study construction

STAGE	PROCESS
Step 1	<p><u>Assemble the raw case data.</u></p> <p>These data consists of all the information collected about the person, program, organization, or setting for which a case study is to be written.</p>
Step 2 (optional; depends on complexity of data case)	<p><u>Construct a case record.</u></p> <p>This is a condensation of the raw case study data organised, classified, and edited into a manageable and accessible file.</p>
Step 3	<p><u>Write a final case study narrative.</u></p> <p>The case study is readable, descriptive picture of or story about a person, program, organisation, and so forth, making accessible to the reader all the information necessary to understand the case in all its uniqueness. The case story can be told chronologically or presented thematically (sometimes both). The case study offers a holistic portrayal, presented with any context necessary for understanding the case.</p>

Source: Adapted from Patton (2002, p. 450)

A case study approach is used for in-depth exploration of a single program, event, person, or activity. Stake (1995) explains that case studies are bounded by a specific time period and activity, and can be accommodated by a variety of data collection procedures. The case study approach was chosen for this study as it supports the attributes described previously, and because it ‘consists of making a detailed description of the case and its setting’ (Creswell 2009, p. 153).

By employing a descriptive and analytical case study approach, this research provided rich data on the various voices and viewpoints about key elements involved at various stages of partnerships. This provided an opportunity to investigate both the contradictions and consistencies in these four partnerships. As Yin (2003, p. 5) sums up, ‘A descriptive case study presents a complete description of a phenomenon within context’.

De Vaus (2001) reinforces the point that the related factors of each case are analysed in greater detail by utilising descriptive analysis. In this study, each of the four cases is analysed to clarify cases as a holistic phenomenon. The explanation for each case will be established upon the realities and evidence, which characterises qualitative research. This will depend on interviewees’ responses to the issues introduced in interview and through gathering other factual data, acquired through secondary data sources.

This research relates to the current knowledge of partnership improvement through its ‘thick description,’ ‘experiential understanding,’ and recognition of the ‘multiple realities’ included in each case (Stake 1995, p. 43). In particular, the partnerships studied uncover shared and collective understanding regarding partnership selection, development and implementation processes, key stakeholders and their roles and partnership maintenance.

Multiple case study method is used in this research. The process is shown in Figure 4.2.

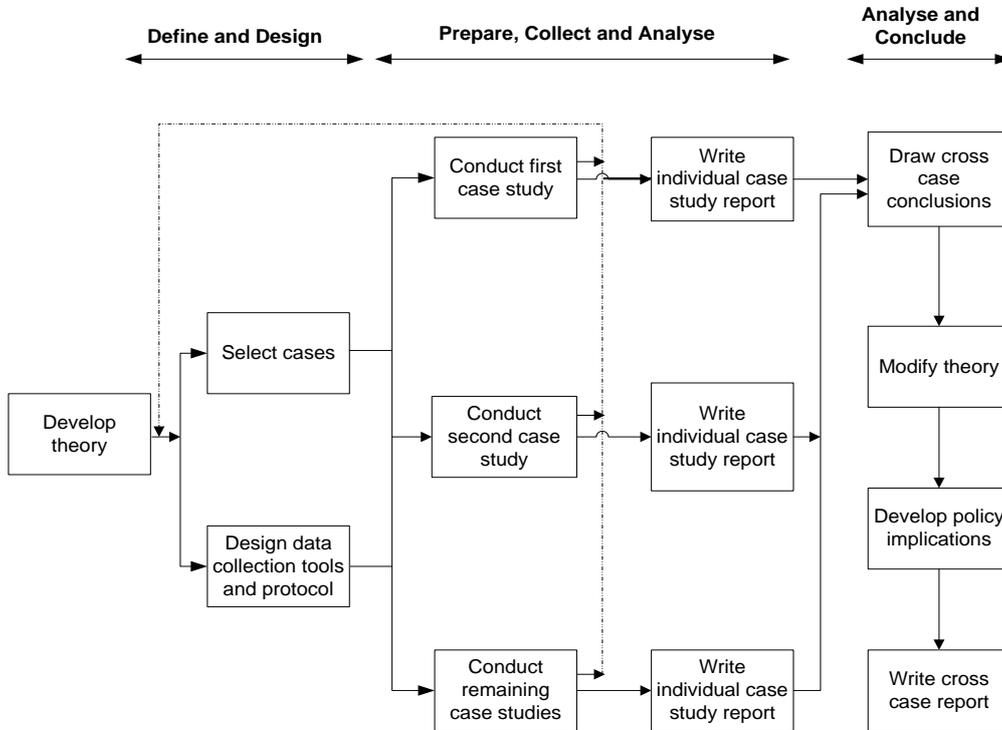


Figure 4.1 Multiple case study method

Source: Adapted from Yin (2003, p. 50)

A multiple case study enables the researcher to investigate differences inside and between cases with the aim of replicating findings across cases. Since comparisons will be made discussed, it is necessary that cases are selected cautiously so the researcher can foresee similar results across cases, or predict contrasting results based on theory (Yin 2003).

De Vaus (2001) addresses the advantages of case study design:

Case study designs are particularly suited to situations involving a small number of cases with a large number of variables. The approach is appropriate for the investigation of cases when it is necessary to understand parts of the cases within the context of the whole. (De Vaus 2001, p. 231)

This method is appropriate for this case study because it allowed the researcher to analyse the partnership formation, outcomes, benefits and challenges in sufficient detail to reach conclusions. Yin (2003) also suggests that, by using this method, the researcher is able to compare and contrast case study results with an accepted set of principles or theory, such as those discussed in chapter three and developed over subsequent chapters.

Moreover, if two or more cases are shown to support the theory, then it becomes possible to make a claim that the theory has been replicated. Yin (2003, p. 47) notes that multiple case studies can be used, as they either, ‘(a) predict similar results (a literal replication) or (b) predict contrasting results but for predictable reasons (a theoretical replication)’. In general, the data produced from this type of study are considered as robust and trustworthy.

In alignment with the purpose, the following research questions provided the focus of the study:

Environmental issues

1. What are the common environmental factors impacting upon the establishment of the partnership and the participants’ readiness to partner; what types of partnerships have appeared in Indonesia; how do these factors adjust according to the size and location of the VET and industry partner; how are reputational effects operating; what are the relational and organisational cultural issues at work; what has been the impact of globalising pressures, e.g. through the adoption of western (Australian) models on training partnership experience?

Process issues

2. Can successful training models be identified in these partnerships; what are the key drivers for training; to what degree do training models vary in their levels of flexibility, customisation, administrative arrangements and the formality of the training liaison; what is the perceived return on investment for the industry partner?

People issues

3. What skills are being required by VET providers to develop and maintain partnerships?

Using this case study design, the depicted cases and factors are explored in greater detail following the rules of qualitative case study (Denzin & Lincoln 2005). Through discussing, analysing and assessing the experiences of the respondents in interview and the survey, as the main sources of qualitative data, and other related documents as secondary sources, it is assumed that the cases from this study can collectively illustrate the issues.

4.4 Data sources

Three main sources of data were used in this case study, and these sources included, but were not limited to, the perceptions of partnership stakeholders through interview, survey and documents relating to partnerships. The stakeholders included both staff members of VET providers and personnel from individual industry corporations who were involved in partnership activities. Documents collected included the partnership MoU (memorandum of understanding), contracts, grant proposals and letters.

4.5 Sampling method

Purposive sampling was used to identify key stakeholders in each training partnership. Having established the theoretical basis for the case study, Patton (2002) addressed the sample selection:

Qualitative inquiry typically focuses in depth on relatively small samples, even single cases (n=1), selected *purposefully*...The logic and power of purposeful sampling lies in selecting *information-rich* cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term *purposeful* sampling. (p. 46)

David Gray (2009) argues that this sampling will enable a deliberate selection of the subjects against one or more traits to give what is believed to be a representative sample. In purposive sampling, researchers select the cases to be included in the sample on the basis of their judgement of their typicality, and they develop a sample that is acceptable to their specific requirements (Cohen, L, Manion & Morrison 2000).

The second method involved both training provider and industry partner interviews. Purposive sampling was used for these interviews to select those best placed to represent each of the partnerships. Cohen, L, Manion and Morrison (2000) state that, in purposive sampling, researchers select the cases to be incorporated in the sample on the basis of their judgement of their characteristics. Thus, they build up a sample that adequately meets their specific needs.

According to Patton (2002, p. 169), the ‘logic and power of purposeful sampling lies in selecting information-rich cases for study in depth, which one can learn a great deal about issues of central importance to the purpose of the research’.

Merriam (1998, p. 48) argues that ‘purposive sampling is based on the assumption that one wants to discover, understand, and gain insight; therefore one needs to select a sample from which one can learn the most’. In other words, in order for the interviewer to learn as much as possible about impacting factors in training partnerships under close examination, the subjects studied need to be directly involved in the partnership. Thus ‘purposive and directed sampling, scrutinized through the medium of human instrumentation, increases the range of data exposed and maximizes the researcher’s ability to identify emerging themes that take adequate account of contextual conditions and cultural norms’ (Erlandson et al. 1993, p. 82).

The adoption of a purposive sampling method enables flexibility in identifying samples and deciding on the final number in samples, including

whether it is possible to decrease the number. Patton (2002) recognises that sampling can be a combination of several criteria and not mutually exclusive.

Sample size depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources... In-depth information from a small number of people can be very valuable, especially if the cases are information-rich... What *should* happen is that purposeful samples be judged on the basis of the purpose and rationale of each study and the sampling strategy used to achieve the study's purpose... The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information-richness of the researcher than with sample size. (Patton 2002, pp. 244-5)

4.6 Target population

The population involved in this study were staff members of VET providers and selected industry partners. The four partnerships selected for the study were:

- VET P1 (Vocational Education and Training Provider1) and IP1 (Industry Partner1)
- VET P2 (Vocational Education and Training Provider2) and IP2 (Industry Partner2)
- VET P3 (Vocational Education and Training Provider3) and IP3 (Industry Partner3)
- VET P4 (Vocational Education and Training Provider4) and IP4 (Industry Partner4).

The interview participants numbered eight in total, comprising one person working and managing training partnerships in each of the four VET providers and one interviewee from each of the industry partners. These participants have been identified for this study due to their prominence and reputation in the provision of VET and the development of partnerships. This is a small sample in Indonesia, given the scale of its education and training

system and the population; however the case study provides a window into innovations in the VET sector.

The research participants at the preferred sites were approached and informed about how they had been nominated, and were then briefed. Once this process was completed, they were asked to make a non-obligatory expression of interest to be involved in the research project, indicating who the key players were in their area and nominating a main contact person.

4.7 Data collection strategies and instruments

To ensure a contribution to educational knowledge, it is important that a case study involves sufficient collection of data to produce an in-depth understanding of the entity being studied. Techniques used in case studies include observation, interviewing, archival records and document analysis (Burns 2000). The latter three were used in this study.

Gray (2009) argues that case study databases can involve diverse formats including the use of case study notes resulting from observations, interviews or document analysis, case study documents and tabular materials of statistical information. This research gathered quantitative data through the use of a survey, which provided rating scales and data about training partnerships.

Data were obtained through fieldwork from the survey, in-depth interviews and institutional document review. The four VET providers were initially approached through contacts at senior levels, such as director and/or vice director, to ascertain their receptivity to participate in this research. Through ongoing discussion, each senior contact supported participation in the research and provided access to appropriate partnership leaders at the institutions.

In each case, personal contact was made by the researcher. In all cases, the partnership leaders facilitated their respective institution's approval for the research and participation by their associated corporate partners. Working with partnership leaders, a list of prospective interviewees and survey respondents was developed for each case.

In order to gather information from partnership participants and stakeholders involved with the partnership, prospective interviewees and survey respondents were identified. The prospective interviewees were purposely selected to enable insight into the workings of partnerships from multiple vantage points. These included those actively or previously involved in aspects of partnerships. The following partnership responsibilities guided the identification of respective interviewees:

- VET coordinator
- Industry liaison personnel
- Corporate contacts.

A total of 24 prospective participants were contacted by the researcher to undertake the survey. Of these, 22 agreed to participate. The eight participants interviewed were drawn from each of the VET providers and their industry partners who had agreed to participate. They were all generous in giving their time for interview. Fourteen participants drawn from all four VET providers completed the survey. The distribution of all proposed participants by function is presented in Table 4.2 below, which covers both those who were interviewed and surveyed.

Table 4.2: Respondent distribution by function (N=22)

Respondent role	Number of respondents	Model of data collection
VET coordinator from VET P1-4	4	Interview
VET coordinator from IP1-4	4	Interview
Industry liaison personnel from VET P1-4	10	Survey
Corporate contacts from VET P1-4	4	Survey

For VET providers, the participants with administrative responsibilities included departmental heads and staff with responsibility for partnership decision, creation, development and maintenance. In all cases, both the original partnership architect and current leader in all four VET providers were interviewed. All participants had intimate knowledge of, and firsthand experience with, the respective partnership and operated in a significant capacity.

4.7.1 Survey tool and procedures

A survey was integral to the study design and developed around the partnership framework of environmental, training and people factors (Lendrum 2003). A structured survey was completed by 14 participants drawn from 4 (four) public training providers. This was followed up by semi-structured interviews in which VET providers and their industry partners were asked about their specific training partnership.

Surveys are commonly conducted with the intention of making descriptive assertions about some behaviour, characteristic or attitude of their populations (Babbie 1990). Gray (2009) makes it clear that surveys involve the *systematic* collecting of data, whether this be by interview, survey or observation methods, so that standardisation lies at the heart of surveys.

The aim of the survey, for this research, is to gather VET providers' opinions about partnerships with their industry/employers. The survey was followed up in more detail, enabling a range of issues to be explored in interview in much greater detail in relation to environmental factors (size of institution, location, industry, areas of training expertise, number of partnerships, types of major competitors, length of major partnerships, financial arrangement); training factors (perceptions of the level of flexibility, customisation, levels of choice for trainees/apprentices/employers, rating of the success of the training partnerships, administrative systems); and people factors (areas of professional competency among staff, strategies in gaining trust/commitment in the relationship) (Callan & Ashworth 2004).

The questions on the survey were adapted from an existing questionnaire formerly utilised in evaluating partnerships between VET providers and industry partners. Survey questions can be found in Appendix D.

As a data collection methodology, the survey approach has several limitations. This method relies on participants' mood and honesty in the self-reporting of their responses. The effectiveness of responses is also reliant on the clarity of survey items and the approach used to present individual items (Cohen, L, Manion & Morrison 2000; McLeod 2003).

4.7.2 Interview methods

After the survey information was collected from 14 respondents, and follow-up interviews were conducted with other remains 8 (eight) participants to collect more in-depth information on issues arising from the survey results. In order to obtain relevant and qualified information, purposive sampling was employed to determine interviewees pertinent to the case being studied.

The researcher in this study is the interviewer. Consequently, the responses of interviewees were anticipated by the researcher alone. Additionally, a list of semi-structured questions was developed, not to be distributed to interviewees, but used to direct the researcher in focusing the responses of

interviewees in the cases being studied (see Appendix C). The purposive method in selecting interviewees was anticipated to provide significant voluntary interviewees for this study.

In order to gain a comprehensive result represented by four cases, the interviewees were selected purposively, but voluntarily, from each of the four VET providers and their respective industry partners. Most significantly, the interviewees were chosen because of their roles in the design, policy making, administration and implementation of partnership programs.

Interviews could have taken the form of face-to-face interviews, telephone or email interviews or group interviews. The interview format was determined by practicalities and provided the greatest value in addressing the research questions. They included open-ended questions designed to collect opinions, thoughts and perceptions and were designed to be flexible, enabling the researcher to ask additional questions based on responses received. Thus the interviews in this study were conducted face-to-face.

Interviews were audio recorded by the researcher. None of those interviewed objected to being recorded. These audio recordings aided the researcher in reviewing the topics discussed in interview and were stored electronically on a secure external hard drive. Notes taken during each interview were transcribed and backed up to an external hard drive. The interviews were in Bahasa Indonesia and translated into English.

A consent letter was mailed to VET providers and industry partners, prior to the interview time, and followed up with confirmation. The content provided an overview of the study and requested participation on a voluntary basis. Confirmation of willingness was established by contacting interviewees by phone, and explaining the study and the voluntary basis of their participation in order to ensure accuracy of the data from the interviews. The consent form for participants was completed before they were interviewed and the proforma can be found in Appendix B.

Yin (2003) identifies that semi-structured interviews allow views and opinions to be probed, where it is desirable for respondents to expand on their answers. Most commonly, case study interviews favour an *open-ended format*, in which key respondents can be asked about the facts of a matter as well as their opinions about events (Yin 2003).

Yin (2003) notes that the interview can be used as the means of gathering information regarding a person's knowledge, values, preferences and attitudes. It can also be used to test a hypothesis or identify variables and their relationship. Furthermore, it can be used in conjunction with other research techniques, such as surveys, to follow up issues. The semi-structured interview allows for consistency across sites while permitting some flexibility in questioning views and opinions, where it is desirable for respondents to expand on their answers (Gray 2009).

4.7.3 *The interview questions*

The interview questions were a part of an emergent design based on survey responses. The purpose of interview questions was to collect the experiences of stakeholders in the partnership and gather their narrative stories about the partnership, as well as provide clarification of survey responses. Following the analysis of survey responses, a series of interview questions that prompted more in-depth understanding were developed. These questions focused on the partnership formation process and the participant's role, clarifying questions regarding training partnership, partnership challenges, and other related comments. A semi-structured interview question was adapted from existing interview questions previously used in evaluating partnerships between VET providers and industry partners. The interview questions can be found in Appendix C.

Face-to-face interviews were conducted at the interviewee's worksite to make the location convenient to both the researcher and interviewees. Interview dates and times were arranged so they were opportune for the

interviewees and researcher. The interviews were held where it was quiet and private, so that audio recordings could readily take place.

All respondents were asked to describe their role regarding the partnership and the time period they had been involved. The interviews covered the following factors:

- Environmental factors
 - Types of partnerships
 - Size and location of partnerships
 - Track record and reputation
 - Levels of formality
 - Cultural issues at work
 - Impact of globalising pressures
- Process/training factors
 - Key drivers for training
 - Flexibility and customisation
 - Return of investment
- People factors
 - Building trust
 - Communication skills and relationship management

A semi-structured but open-ended approach was used in interviewing participants. The role of each participant in their respective partnership dictated the areas that were probed, based on the participant's knowledge. A repetitive approach was employed with each participant, through the researcher sharing appropriate comparable or different responses elicited during preceding interviews with other participants.

Typical questions from the interviews are as follows:

1. Who makes up the partnership?
2. What is the nature of the partnership?

3. When did it begin?
4. When is it planned to finish?
5. Who is the recipient of the training?
6. What were the key drivers for making this partnership happen?
7. What are the benefits (financial and non-financial) of the partnership to you as a provider/industry partner?
8. What have been major challenges to you as a provider/industry partner in making the best of this partnership?
9. When you compare the current success of this partnership to other partnerships you are involved in, is it more successful than other partnerships, about the same success, less successful than other partnerships? Why?
10. What are the Rupiah⁴ values of the partnership; what is the number of staff involved; what is the number of provinces; what are the number of locations for delivery of training?
11. How were the training flexibility, level of customisation, management of staff development needs, and administration arrangements in the partnership adjusted in the training design?
12. How has the partnership benefited your people who have been involved in the partnership?
13. What people issues need to be improved to make this and other partnerships work better?

The interviews were transcribed and coded using Nvivo. The data from the surveys and interviews were triangulated in relation to the policy documents for VET partnerships. Based on the information collected, topical or thematic analysis was used to interpret and report the case studies.

⁴ The Rupiah is the official currency of Indonesia. The ISO 4217 currency code for the Indonesian Rupiah is IDR.

4.8 Data analysis

Individual (see chapter five) and cross-case analysis (see chapter six) were both conducted. The cross-case analysis provided insight on the existence of common partnership elements and themes, as well as key disparities. The data were analysed utilising commonly accepted qualitative research procedures (Creswell 2009; Yin 2003).

Patton (2002) states, ‘Cross-case analysis means grouping together answers from different people to common questions or analysing different perspectives on central issues...Synthesis of different qualitative studies (case study) on the same subject is a form of cross-case analysis’ (p. 500). Patton (2002) continues, ‘For scholarly inquiry, the qualitative synthesis is a way to build theory through induction and interpretation. For evaluators, the purpose of the qualitative synthesis is to identify and extrapolate *lessons learned*’ (p. 500).

Miles and Huberman (1994) explain the principles, purposes and strategies of cross-case analysis: ‘We need a theory that explains what is happening - but theory that does not forcibly smooth the diversity in front of us, but rather uses it fully to develop and test well-grounded sets of explanations’ (1994, p. 207).

An initial exploratory inductive analysis was performed to assess the data to uncover main ideas, emerging themes, discrepancies, and to assess its completeness. The interview transcripts were reviewed as a whole in order to develop a holistic sense of the data (Creswell 2009). As Agar (1996, p. 103) recommends, researchers ‘... read the transcripts in their entirety several times. Immerse yourself in the details, trying to get a sense of the interview as a whole before breaking it into parts’.

A coding process was developed to further reduce the research text to broad themes for each case. Category coding labels were constructed and applied. A similar process was employed to construct cross-case analysis. The

following outlines the themes and coding categories emerging from the analysis undertaken in chapter three:

- Environmental issues
 - Types of partnerships
 - Size and location of partnerships
 - Track record and reputation
 - Levels of formality
 - Cultural issues at work
 - Impact of globalising pressures
- Process/training issues
 - Key drivers for training
 - Flexibility and customisation
 - Return of investment
 - Administrative arrangement
- People issues
 - Building trust
 - Communication skills and relationship management

These will be built upon and extended based on both case and cross-case analyses reported in chapters five and six respectively.

4.9 Trustworthiness

This research followed the design of a basic qualitative study. As stated by Merriam (1998), a qualitative study should use recommended methods and principles in order to generate genuine data. This study was based on the proposed methods of qualitative research to guarantee trustworthiness.

This case study design is deliberately explained in more detail, aimed at not only focusing on the cases being studied, but also on achieving internal validity. De Vaus (2001, p. 233) notes that case study design is suited for all areas in all disciplines and goes on to say:

Case study designs are often seen to be deficient in all these areas. However, careful attention to these matters at the design stage can deal with many of these criticisms.

Trustworthiness and internal validity of this study were measured utilising commonly acceptable procedures for qualitative research (Gray 2009). Lincoln and Guba (1986) argue that researchers always aim for integrity of concept and purpose to obtain value, truth and credibility when he or she does research: the objective itself becoming internal validity. This research utilises several steps to establish reliability, dependability, confirmability, transferability and credibility.

The research design is established precisely and targeted, not only to focus on the cases being studied, but also to improve the quality of the data collected. With quantitative methods reliability is attained through calculating the responses statistically. In these case studies, reliability is achieved through the employment of a carefully crafted, in-depth interview technique.

As previously mentioned, the knowledge and insights gained through the study were compared to the current literature concerning partnerships to identify commonalities and differences. Debriefing took the form of participant review through open discussion immediately following the interview. Additionally, follow-up discussions were held with key case study participants, as the analysis progressed, to share the emergent themes. Triangulation of the findings was conducted utilising all data sources. Multiple voices from surveys and interviews were included for each partnership and served to provide a means to check the accuracy of key events and emerging themes.

A consent form (Appendix B) provided to each interviewee from both VET providers and industry partners prior to interview, resulted in confirmation from interviewees. The consent form clarifies the range of cases being

studied and asks candidates to participate in this study, on a voluntary basis, with no compulsion.

4.10 Ethical considerations

The research design includes interviews with VET coordinators, industry liaison personnel and industry employers, none of whom were in a direct power relationship with the researcher. There was minimal risk to the participants of this study as the data being sought posed little or no risk to their personal or professional activities. Responses were in confidence and in no way threatened the employment relationship of respondents. In order to protect them, the risks to participants were minimised through the confidentiality of the data. Only the researcher knew the name associated with the interview data collected and through survey responses.

David Gray (2009) argues that to some extent research that includes data collection or dealings with human (or animal) populations involve ethical consideration. The research was conducted in accordance with the ethical guidelines for case study methodology by providing a consent form with sufficient and accessible information regarding the research. This enabled participants to make an informed decision as to whether to become involved, or not (Gray 2009; Merriam 1998; Stake 1995). Specifically, interviews were conducted with awareness and sensitivity in their workplaces, so as not to disrupt ongoing business.

Despite the fact that this research is seen to be exploring partnerships that have been publicly perceived as successful, negative comments and insights regarding the partnerships naturally arose during in-depth interviews. Accordingly, interviewees were afforded confidentiality. The researcher retained a professional, objective posture through all research activities including interviewing, survey and document review. The researcher attempted to maintain accuracy in collecting and analysing the data.

The qualifications of the researcher were essential for the success and credibility of this research. The researcher has 20 years' experience working in VET institutions in Indonesia, including eight years working in VET/industry partnerships as a staff member. For the purposes of this study, the role of the researcher is independent, and does not represent any institution.

This research obtained ethics approval from Victoria University Human Research Ethics Committee on 7 July 2011 (see Appendix E). Hence, this research has been informed by the values of respect for human beings, research merit and integrity, justice and beneficence as determined in the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007).

4.11 Limitations of the study

The researcher is the instrumental device in data collection and may bring many biases and subjective attitudes to a research project. This reality is one of the limitations of any qualitative study, and was also a factor in gathering and analysing data for this study. Furthermore, as Guba and Lincoln (1985) stated, the researcher can skew data analysis so the reader may think that case studies are accounts of the whole, when they are only part of the picture. As a primary tool for data collection, the researcher clearly acknowledged personal views and attitudes that may affect or skew results (Merriam 1998). As qualitative research focuses on depth rather than breadth, the 22 participants from four VET providers and four industry partners can present their views and perceptions.

To deal with these limitations and strengthen dependability, several steps were taken by the researcher. As suggested by Lincoln and Guba (1986) and Merriam (1998), the researcher has explained the assumptions and theory behind the study, the personal position on the group being studied, the basis

for selecting informants and a description of participants, and the social context from which data were collected.

One of the assumptions made concerning this research was that the researcher presumed that participants would give relevant information on their views of VET providers' roles in training partnerships with industry. In addition, it was assumed that data collected for this qualitative research would provide useful insights and information, and add to the database of available information on the development of partnership programs between VET providers and their industry partners.

Although it is not appropriate to generalise the findings to other training partnerships, the research provided a robust exploration into the four case specific examples. The specific findings are pertinent to the respective case studies, even though they lend credence to the body of literature on such partnerships, more broadly, and suggest a common set of factors for success. The research created a rich description of specific contexts and was constructed so that transferability to other contexts could be assessed by the reader, regarding key factors for partnership success.

The four cases provided both a rich diversity of information about the specific partnerships and reflect a commonality in the contextual elements enabling partnership success and longevity. Additionally, while the findings should not be generalised to wider partnerships, the research draws attention to key partnership elements that should be heeded by those embarking on the formation of similar partnerships.

4.12 Conclusions

The methodology of this research is structured to facilitate an investigation of the role of VET providers and the factors impacting training and industry partnerships. Further, this research adopted a multiple case study approach through qualitative analysis, by exploring and discussing the knowledge and

experiences of participants who were directly involved. The research questions posed in this study provided an informative case study approach to partnership review to assist VET providers and industry corporations in forming future training partnerships.

This chapter discussed the research approach including case study design, data sources, target population, sampling method and data collection strategies. It also described data analysis, trustworthiness, ethical considerations and limitations. The key conclusion is that the research methods chosen enabled the research to be conducted ethically, and to explore the studied partnerships in depth. And while the study has limitations, it should provide a valuable source of validated information for others seeking to establish partnerships, not only in Indonesia, but more broadly. Each of the four case studies will be reported in more detail in the next chapter.

Chapter 5

The Partnerships

5.1 Introduction

A case study may be presented as a narrative, providing the actual narrative detail of real, or at least realistic, events. It can also be a scheme, an exposition, and sometimes even a conversation (Boehrer & Linsky 1990). Boehrer and Linsky (1990, p. 43) also state that case study reports are extensively descriptive, with ‘the most problematic issue often referred to as being the determination of the right combination of description and analysis’.

In this chapter, four case studies are presented with both description and analysis of interviews and data documentation. This will be followed by cross-case analysis in chapter six. For each case, the organisational context and background characteristics of respondents related to partnerships are presented for VET providers and industry partners. Subsequent sections describing each case study address the partnering process, partnership characteristics and factors contributing to the sustainability of the partnerships in relation to Lendrum’s (2003) framework.

The case studies explore existing partnerships and their evolution from initial creation to current relations between VET providers and industry partners.

The research was guided by the research questions, examined within the context of environmental, training and people factors in partnerships. The questions (see chapter one, section 1.4) were:

- What are the common environmental factors impacting upon the establishment of the partnership and the participants’ readiness to partner; what types of partnerships have appeared in Indonesia; how do these factors adjust according to the size and location of the VET providers and industry partner; how are reputational effects operating;

what are the relational and organisational cultural issues at work; what has been the impact of globalising pressures?

- Can successful training models be identified in these partnerships; what are the key drivers for training; to what degree do training models vary in their levels of flexibility, customisation, administrative arrangement and the formality of training liaison; what is the perceived return on investment for the industry partner?
- What skills are required by VET providers to develop and maintain partnerships?

This study investigated the following four partnerships labelled as:

- power generation enrichment program (VET P1 and IP1);
- skill upgrading in electrical and instrumentation (VET P2 and IP2);
- training in teaching methodology (VET P3 and IP3); and
- human resource training (VET P4 and IP4).

These partnerships in all four cases have been running for more than four years. They have survived the establishment and start-up stages and each has undergone a series of changes in the course of the partnership. The cases focus on impacting factors, benefits and challenges of the partnerships between four VET providers and their respective industry partners.

This chapter presents the findings of this study based on the data collected through the survey, interviews, and document analysis described in the methodology chapter (see chapter four). In order to provide a comprehensive picture of partnerships and activities, the background characteristics VET provider respondents are described. The results from interview data are presented. Interview questions were developed (see Appendix C) and provide an added richness and depth to the survey responses by giving an account of the respective experiences of VET providers and related industry partners.

5.2 Background characteristics of respondents

Fourteen individuals participated in the survey from vocational education and training providers and eight respondents participated in the interviews from both VET providers and industry partners. The first part of the survey items involved the polytechnic participants reporting their organisational position in relation to working on industry partnerships. Other items provided an opportunity for open-ended responses, later analysed and categorised.

Table 5.1 shows that nine of 14 surveyed were equally distributed between teaching staff (3/14), business development managers or partnership coordinators (3/14), or CEOs and directors or other senior managers (3). However, five respondents were in the “Other” category, which included heads of general affairs, data and information section, and entrepreneurship training unit.

Table 5.1: Partnership coordinators⁵

Title	Number of responses	%
Other	5	35.7
Teacher	3	21.4
Business Development Manager/Partnership Management Coordinator	3	21.4
Chief Executive Officer/Director/Managing Director/Vice Director	2	14.2
Other Senior Manager	1	7.3
Total	14	100.0

Table 5.2 shows that more than half of respondents acknowledged themselves as those who established and sustained partnership management (57.1%). Other respondents identified themselves as those involved in partnerships but who did not have strategic positions (28.6%), and the remainder (14.3%) acknowledged themselves as those who managed these partnerships.

⁵ Table 5.1 is based on survey question 1 in Appendix D.

Table 5.2: Level of involvement in partnerships⁶

Involvement	Number of responses	%
I set up and continue to manage such partnerships	8	57.1
Other	4	28.6
I manage such partnerships	2	14.3
Those managing key partnerships report to me	0	0
I set up these partnerships	0	0
Total	14	100.0

Table 5.3 presents the type of providers. As can be seen in this table below, respondents were mainly from vocational education institutions, with nine (64.3%) from polytechnics, and five (35.7%) from a vocational training centre. None were from a university or vocational secondary school.

Table 5.3: Type of providers⁷

Institution type	Number of responses	%
Polytechnic	9	64.3
Vocational training centre	5	35.7
Other	0	0
University	0	0
Vocational secondary school	0	0
Total	14	100.0

Table 5.4 shows that almost all respondents were public providers, with nine (64.3%) based at a regional location, while four (28.6%) were metropolitan based. None of the respondents were from private providers.

⁶ Table 5.2 is based on survey question 2 in Appendix D.

⁷ Table 5.3 is based on survey question 3 in Appendix D.

Table 5.4: Classification of provider⁸

Location & type	Number of responses	%
Regional, public provider	9	64.3
Metropolitan-based public provider	4	28.6
Other	1	7.1
Metropolitan-based private provider	0	0
Regional private provider	0	0
Total	14	100.0

Table 5.5 details the location of training sites. As multiple responses were allowed, it was found that the majority (85.7%) of respondents to this question reported their training partnerships were in their local region. However, 71.4% also mentioned involvement in training located on other Indonesian islands, and six (42.9%) listed involvement in training partnerships overseas.

Table 5.5: Training sites⁹

Location	Frequency	%
Your local region	12	85.7
On other Indonesian islands	10	71.4
In overseas countries	6	42.9
Other parts of your province	1	7.1

Table 5.6 details the largest proportion of partnerships involved a mutual service arrangement, where resources were pooled with the industry partner to gain access to equipment or resources which aided training. Joint ventures (which combine the capabilities of both partnering organisations to pursue the training opportunity) and value chain partnerships (where they worked

⁸ Table 5.4 is based on survey question 4 in Appendix D.

⁹ Table 5.5 is based on survey question 6 in Appendix D, which allowed multiple responses.

together to develop a training model to create enhanced training benefits for learners) were equally popular.

Table 5.6: Percentage of training partnership interest¹⁰

Category	Range	Mean	Mode
Mutual service partnerships where we pool resources with the industry partner to gain access to equipment or resources that aid training	0 to 100%	41.4	40
Joint ventures where we pursue a training opportunity together by combining our capabilities	0 to 100%	26.4	20
Value chain partnership where we work together to change the training model to create enhanced training benefits for learners	0 to 100%	25.1	20
Other	0 to 100%	7.0	0

5.3 Case Study One: Enrichment program in power generation

To place VET P1 and IP1 collaboration in context, it is important to provide a brief historical review and evolution of both institutions, briefly outlined in Table 5.7.

Table 5.7: VET P1 and IP1 partnership chronology (2008–2011)

Partnership opportunity emerges	2008
Initial partnership discussions between VET P1 and IP1	2008
Discussion to offer the program	2008
Initial agreement signed	2008
Training in enrichment program commenced (one group per year)	2009–2014

¹⁰ Table 5.6 is based on survey question 9 in Appendix D.

Background

VET P1 is a polytechnic: a high level vocational education institution that has a special mission to provide vocational education in applied technology disciplines. It has a long history of excellence and is one of six pioneer polytechnics founded by the Indonesian government in 1982, assisted by the World Bank. The institution is located in East Java.

A polytechnic is a professional educational institution. Its goal is to prepare its students to be work ready by developing specific applied skills in a particular area. In order to achieve this objective, a polytechnic provides learning experiences and sufficient training to shape professional skill in science and technology. The ratio of learning composition between theory and practice is 45:55% respectively, offered over six semesters using learning materials based on the recent industry demand in Indonesia.

As a higher education institution, VET P1 is a part of the National Education system in Indonesia. Its objective is to prepare students to become members of society and equip them with professional abilities. It also has a role in contributing to people's welfare and enriching the national culture.

VET P1 also established various collaborations or partnerships with industries, both nationally and internationally, in order to keep up with rapid industrial development.

The corporate partner in this case is IP1, a subsidiary of an international power company and a world leader in the development of co-generation and independent power plants. This subsidiary manages, operates and maintains a coal-fired power plant located in a rural area in East Java and is owned by a national energy company.

IP1 is a third party in the ownership of shares in power plant units 7 and 8, and subsequently the national electrical company; the company is owned by the government for distribution of electricity to the public directly. Thus, IP1

does not sell its products direct but rather sells them to a subsidiary electrical company which is bound by contractual agreement. The company's products are then distributed to communities in Java and Bali, Indonesia. These products are directly regulated by government so that IP1 does not need to conduct marketing concerned with price fixing, promotion and distribution of its goods/products.

The following highlights the chronology of development and implementation of the VET P1 and IP1 partnership (see Case Study One: “Enrichment program in power generation”). In its four year history, the partnership has experienced changes in the training schedule and training materials, and has survived in a tumultuous corporate environment.

Genesis of the partnership

Environmental issues

Initial conversations for forming the partnership between VET P1 and IP1 began in 2008 and the partnership commenced in the same year. This partnership is contract-based and renewed every year. There are two main drivers from the company’s point of view. First, when a new unit in their power plant was being built, IP1 experienced problems in finding qualified entry-level employees with the skills in ‘power generation’ to operate and maintain the plant.

Additionally, the company did not have so-called ‘luxury time’ to train new employees, because it would have been time consuming and therefore costly. Therefore, IP1 urgently needed to collaborate with educational institutions that could deliver subjects or courses to the students in ‘power generation’ before they completed their study. At this time, IP1 began to look for an academic institution to offer the ‘power generation’ program. The IP1 partnership coordinator explained his efforts in engaging a potential academic institution that would become IP1’s partner:

I was permitted to move ahead and initiate some preliminary discussions regarding the feasibility of this and initially contacted my VET P1 colleague, since VET P1 was the most adjacent academic institution... which at the time was where IP1's power plant sites were located... obviously people considered that VET P1 had more prestige, undoubtedly in electrical engineering, so IP's leader and all staff at management level were enthusiastic about the prospect of seeing whether we could talk to VET P1 in creating this new program for our new employees (IP1, Interviewee, 2011).

The second driver was the corporate social responsibility (CSR) of IP1. CSR is the commitment of business to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development (Den Hond, Bakker & Neergaard 2007). There was a potential need for new employees, operators and technicians at IP1 after the Indonesian government had launched 10.000 megawatts of electricity during the first phase and a further 10.000 megawatts during the second phase through a new power plant located at IP1. The IP1 manager described this program to the prospective academic partner:

I think this is a good opportunity for an educational institution like VET P1 to prepare the students at early stage and before they graduate by giving them the new knowledge in 'power generation' needed by IP1 (IP1, Interviewee, 2011).

From VET P1's point of view there were two main drivers for undertaking this partnership. First, there was the reputation of IP1 as a large international company in power generation. Second, it provided a great employment opportunity for VET P1 graduates with the relevant competency, which is highly desirable by the power generation industry.

IP1's next step after having created an opportunity to work with VET P1 was building support for the idea of the partnership. IP1's partnership coordinator found that VET P1 had not ever offered any of its academic programs off site. Nevertheless, the VET P1 partnership manager brought the opportunity back to his academic institution, mentioning it initially to the director of VET

P1. The VET P1 partnership manager depicts the response of his director thus:

After preliminary discussion with the representative from IP1, I went to my director and mentioned this partnership opportunity. He was indeed sympathetic. He said that it was an interesting idea; however, it still needed approval from variety sources such as teaching staff, the head of the study program, and most importantly the head of electrical engineering department (VET P1, Interviewee, 2011).

VET P1 and IP1 appear to have taken a ‘textbook approach’ in formalising their agreement from the outset. A formal memorandum of understanding or agreement was perceived as essential. The first MoU was executed in 2008. The terms of the agreement covered all aspects including technical assistance, financial arrangements and a guaranteed number of students. Subsequently, the contract has been renewed every year.

The guidelines for the technical assistance agreement and the implementation of the ‘Enrichment program in power generation’ between IP1 and VET P1 formalised the partnership.¹¹ The program provides professional vocational education, which combines the regular education of VET P1 with special competency courses for IP1 to achieve special and relevant levels of competence.

The participants in this program were fifth semester students in the Diploma 3 program in electrical, mechanical, and chemical engineering at VET P1. The enrichment program was carried out in two places: at VET P1 for ‘in-class training’ within the fields of electrical, mechanical and chemical studies and at IP1 for ‘on-the-job training’, specialising in power generation operations, maintenance and engineering.¹² The curriculum consists of

¹¹ Technical assistance agreement guidelines (IP1-VET P1) signed on 19 November 2008.

¹² This partnership was documented in print media in Indonesia and can be accessed electronically, see page 9 on <http://issuu.com/surya-epaper/docs/surya-edisi-cetak-19-nov-2009>

generic courses developed by IP1 for their employees. In addition, the participants undertake a technical English subject to strengthen their English proficiency.

There were both financial and non-financial benefits. Since the partnership is funded by the company, VET P1 could financially benefit because the funding obtained enabled the institution to support other programs internally through cross-subsidisation. A non-financial benefit for VET P1 was that its staff could develop their skill by undertaking field training on site at IP1. On the other hand, the financial benefit for IP1 was a reduction in their recruitment and training costs. The participants were well prepared with the skills needed by the company, so in future training costs will be lower because they have been trained to company standards already. Recruitment costs were also reduced because the company had found a 'ready to use' workforce which can be drawn from participating students.

There are three non-financial benefits for IP1 in this partnership. First, there was an increase in the company's reputation not only in their region, but more broadly in East Java. Second, the partnership helped to fulfil company obligations as one of the industry players that should be involved in this area of expertise for the broader power generation industry, and third, because the company had prepared the participants early, the quality of their work would improve. Of the 25 students who undertook the training program, almost 80% were employed by the company.

Two major challenges arose for VET P1 as a vocational education and training provider in this partnership. First, the scheduling for this program was considered too long by the students. The subject was delivered every week for one semester over 10 weeks every Saturday. One way of overcoming this challenge was for VET P1 to have a contract with the students which required they attend training regularly. The second challenge was preparing the teachers to deliver the course subject according to industry needs. VET P1 sent some teachers to IP1 to attend basic training. This

enabled them to experience and witness the process involved during a ‘power outage’ before they delivered the subject to their students.

There were also two challenges for IP1: one internal and the other external. The internal challenge came from the program itself. The content of the modules was not simply theory, but rather it was more applicative and practical. Moreover, the modules were also related to all equipment in the power plant. On the other hand, the course materials from VET P1 were not entirely applicable to IP1, so staff from VET P1 who were responsible for teaching this program had to be trained in five basic modules on site for several days to become familiar with the process on site. These modules covered areas such as basic power plant operation, plant science, plant cycle, basic electricity and basic water chemistry.

The external challenge faced was the resentment from surrounding communities towards the power plant, since the recruitment for new employees was based on tight selection, and all who accepted were from outside of the company’s local region. When the students started work, they also started to live and interact with surrounding communities near the power plant. In order to reduce the distortion in recruitment and the lack of local access to training opportunities and work at IP1, the company approached community leaders and met with them to discuss the problem.

As a result the company came up with a breakthrough program called ‘Talentpool’.¹³ All applicants living near the power plant with above average ability and who had not been lucky to get a job were identified and included into the ‘Talentpool’ program over two to three weeks. This program was run by IP1 and provided them with basic knowledge in power generation. Some of the participants were hired by IP1 as soon as they completed the program.

¹³ Talentpool is recruitment software for HR Departments of companies. It helps them streamline their recruitment processes, meet hiring targets and get instant reports to track performance. Talentpool caters to companies of all sizes and strengths.

Mostly they work in semiskilled jobs (i.e. maintenance and warehouse). Some also have the opportunity to work in other companies.

The partnership between VET P1 and IP1 was the most successful according to the VET P1 coordinator. VET P1 gained a number of academic benefits in this “enrichment program” partnership. First, the students gained more practical knowledge than the traditional “academic” programs offered and this program matched industry needs. Second, not only the students, but also the teaching staff at VET P1 gained more practical knowledge and more opportunities to attend other training programs regarding new industrial skills or competencies provided by IP1, at no cost. According to IP1, this partnership was also its most successful one. Other partnerships had neither the focus nor commitment. “On-the-job training” partnerships between educational institutions and their industry partners usually only ran for about two to three months, and thus participating students did not gain the level of knowledge and experience in industry they expected.

The program was driven by the polytechnic, not by the industry partner. Thus, what was delivered did not always match the company’s needs. This enrichment program in power generation was well organised. The modules were arranged in two stages: six basic modules delivered for six months before on-the-job training and six additional modules afterwards. After completing all modules, the student participants did the second round of ‘on-the-job training’ for one year with four months’ rotation through all sections of the power plant. This provided more exposure for students and helped them understand all work processes on site.

The value of this partnership is approximately Rp. 400 million, which equals about AU\$43,000 per group. There were two IP1 employees involved: a program manager and program administrator. The company also involved eight engineers and supervisors in ‘on-the-job training’. Eight personnel from VET P1 were involved in this program, covering both teachers and administrators.

Training model issues

The training model for this program was designed to be modular and flexible. Each module consisted of a manual plus video. The first five modules were delivered on campus at VET P1 and presented by lecturing staff, with the video being used to provide an illustration and visual experience of the power plant. The following 15 modules were not only presented through lectures and videos, but also involved a program of site visits to observe the real equipment in situ.

The training materials were fully designed and customised by IP1 to develop a wide range of skills. This meant participants coming from different study programs offered by VET P1 (e.g. electrical, mechanical and chemical engineering) all used the same modules. For example, students from chemical engineering studied plant instrumentation which is the domain of mechanical engineering. In the same way, students from mechanical engineering learned about water treatment so that all student participants were multiskilled.

Management of staff development needs that emerged during the program involved a sharing of team skills across VET P1 and IP1 staff. For VET P1's staff, this skill sharing was a good opportunity to gain valuable current industry knowledge while monitoring students on site at IP1. Furthermore, most of the knowledge that staff gained could be used to improve student learning at VET P1. The administrative arrangements for this enrichment program were mostly carried out by VET P1. This administrative support came from the electrical, mechanical and chemical engineering study programs. For 'on-the-job training' programs plus additional modules, all administrative arrangements were supported by IP1.

People issues

The participation of teaching staff at VET P1 in implementing the 'Enrichment program in power generation' was essential and there were

advantages for those involved in the partnership. The staff from three study programs from VET P1 had opportunities to share knowledge during their internship at the power plant. They also discovered how the company carried out human resource development and how the business plan worked. This knowledge could be used to offer new training programs needed by the company, and which could be offered by VET P1.

For those teaching staff interested in this program with IP1, the remuneration was attractive. Teaching in this program, especially off site, was above the usual workload of the teaching staff. As the VET P1 manager describes:

This enrichment program is a challenging but very attractive one in terms of the financial incentives. I don't think they (teaching staff) would participate if they were not being offered a very interesting package. Frankly speaking, they are just doing certain kinds of teaching like once a week, but the incentive was tempting (VET P1, Interviewee, 2011).

For employees from IP1 it was their chance to deliver relevant knowledge they held to the students. Also it motivated IP1 employees to be involved as lecturers and not only refresh their knowledge, but reduce their routine work which could, in turn, lead to boredom. Employees who were not directly involved in delivering formal training took on a mentoring role and assisted students in learning new job roles.

The 'people issue' challenges that emerged as needing improvement in this partnership, and in VET P1's other partnerships, was certifying the expertise of its staff. Many of VET P1's staff are capable trainers and have a lot of experience in that role. However, some of them do not possess relevant certification, or they are not licensed, either nationally or internationally, to conduct training for the power generation industry. Consequently, they could not be involved in the training partnership with industry since the industry demanded all trainers involved should be certified with, or be a member of, relevant professional associations.

There were two main ‘people issue’ obstacles for IP1 in this partnership. First, the program was run over two years. After one year the students graduated, and then they spent a further year with the company. While this program is also part of IP1’s corporate social responsibility, there were no bonds requiring the students to work at IP1. They were given priority to join the company through an accelerated recruitment process; however, they were free to find work with other companies. Second, there was restlessness amongst existing employees regarding this enrichment program.

This training program has not been comprehensively introduced inside the company, and therefore did not involve a wide range of the company’s employees. Information about its introduction had been limited to the team leaders (i.e. , department managers and supervisors). When the training participants were placed in departments and met the employees in each department, an uncomfortable situation arose amongst existing employees. As a result of this situation, the participants were given jobs unrelated to the training they had received. Thus, there was a communication gap between the company’s management and the rest of the staff regarding the aims of the program that needed to be resolved. Accordingly, the background and aims of the program should not only involve the VET P1 staff, training participants and at team leader and management levels within IP1, but be introduced and explained comprehensively to employees in all departments at IP1.

Future partnership

The latest restatement of the agreement between VET P1 and IP1 was signed in early 2013. The program continues to run each year and there is a steady stream of students recruited, even though numbers are relatively low. The capacity to expand and diversify the enrichment program seems to be progressive. As the IP1 manager describes:

VET P1 has every interest in expanding this partnership program in terms of involving more students from other study programs beside electrical

engineering, and if that meets the strategic requirements of the industry like us, then I see possibility and that's obviously where we'll go. I am very confident that our manager will consider the demand (IP1, Interviewee, 2011).

Respondents from VET P1 explained that a lot of adjustments had to be made as the partnership progressed. However, the obstacles were worked through eventually. Accordingly, the respondent from IP1 stated that the opportunity to expand the program is wide open as long as there is good communication and regular meetings between partners.

5.4 Case Study Two: Skills upgrading in electrical and instrumentation

The second case explored in this research involves VET P2. This study provides a description of the partnership between VET P2 as the VET provider and IP2 as the industry partner. A brief chronological review and profile of both institutions follow. This collaboration provides a contrast to the first case study in terms of breadth, growth and administrative structure. At the same time, there are commonalities that emerge, to be addressed in chapter six. To place VET P2 and IP2 collaboration in context, it is important to provide a brief historical review and evolution of both institutions. This is briefly outlined in Table 5.8.

Table 5.8: VET P2 and IP2 partnership chronology (2009–2011)

Partnership opportunity emerges	2009
Initial partnership discussions between VET P2 and IP2	2009
Intensive discussion to offer the program	2009
Initial agreement signed	2010
Skill upgrading in electrical and instrumentation (PLC) commenced (24 participants per group)	2010–2011

Background

VET P2 was founded in 1987 and is located in Surabaya, East Java. VET P2 is the only state polytechnic in Indonesia specialising in shipping and

oriented to marine manufacture. In carrying out government programs ('link and match') with the industry, VET P2 established strong partnerships with industry, was involved in developing six national competency standards and setting up a teaching factory, involved in such areas as the production of small ships, design services, inspection, material testing, fabrication and construction, amongst others.

As a leading vocational institution in Indonesia, VET P2 has developed a strategic policy aimed at achieving its vision to establish a global reputation in supporting, developing and actively implementing maritime technologies, so that all VET P2 graduates are able to compete globally.

Two strategic policies of VET P2 are:

1. the implementation of the teaching factory. A teaching factory is a learning method that simulates the work and atmosphere of a real company. Thus, it will be easier for their students to understand how a company works and hence transition more readily to work in industry.
2. the implementation of an international certificate of competence and dual degree by applying for accreditation to RINA¹⁴ (Royal Institute of Naval Architects). The aim of accreditation by RINA to the VET P2 graduates is to gain recognition of their competency internationally.

VET P2 explicitly addresses the importance of partnership programs in its strategic plan. As the VET P2 partnership coordinator explains:

Our first goal is to become a leading educational institution. Secondly, we are strengthening our present partnerships, profit and non-profit, with government

¹⁴ Founded in 1860 in London to advance the art and science of ship design. The Royal Institution of Naval Architects is a world renowned and highly respected international professional institution and learned society whose members are involved at all levels in the design, construction, maintenance and operation of all marine vessels and structures. RINA has members in over 90 countries, and is widely represented in industry, universities and colleges, and maritime organisations worldwide.

and private institutions and responding to emerging regional and community needs. With IP2, we are developing expertise with innovative delivery systems and also preparing for international certification (VET P2, Interviewee, 2011).

VET P2 has a lot of experience in offering professional training and certifications with the Ministry of Manpower of Indonesia. Since 1996 they have undertaken certification in OHS (Occupational Health and Safety) for welding inspectors' certification and in a range of other areas. VET P2 also collaborated with JWES (Japan Welding Engineer Society) and IWS (Indonesian Welding Society) in providing professional certification for welding engineers.

IP2 was constituted by Presidential Decree no. 15 in 1996. The company is a merger of a number of plantations in Central Java and East Java and the head office is in Surabaya. IP2 manages business units involved in the production and processing of sugar cane, tobacco and fibre crops. IP2's business is made up of 12 sugar factories around East Java, three tobacco plantations and one fibre crop plantation. The sugar cane is obtained mostly from land with 90% ownership by farmers. The sugar is marketed domestically and sold by auction.

Almost all the sugar factories were established during Dutch occupation. Therefore, the machines are old and accordingly most employees have not had many opportunities to upgrade their skills or competency. The implication of these skill shortages is inefficiency in all aspects of business operation. However, recently there has been a revitalisation program sponsored by the government. IP2 took this opportunity to upgrade their employees who work at their electrical and instrumentation laboratories by setting up a partnership with VET P2. IP2 started the initiative by inviting VET P2 to help them upgrade the competencies of the employees who are working in the laboratory by offering training in electrical and instrumentation.

VET P2 responded positively to this request. Initial discussions began in 2009 and the training program in PLC (Programmable Logic Controller) commenced in 2010 under a MoU (Memorandum of Understanding) between the two organisations. The nature of the partnership involved skills upgrading. As skills appear to fit the “know-how” dimension, it is consequently the ability to carry out tasks in the workplace that the skills upgrading program sought to address. On this basis, its purpose was not to enhance cognitive and academic capabilities but the ‘doing’ abilities (OECD 2002).

The genesis of the partnership

Environmental issues

The partnership began in 2010, is ongoing and already involves a second group of participants. The vocational training provided by VET P2 has been tailored to the company’s (IP2) needs. The rapid advances in technology made in the sugar factories through IP2’s investment in new automation and sophisticated production machines has been a major driver in making the production system more effective and efficient. This investment in technology also needed to be supported by investment in IP2’s human resources so the machines can be used, maintained and repaired properly.

For that reason, IP2 collaborated with VET P2 to conduct training in Programmable Logic Controller (PLC), instrumentation and motor drive for employees in the field of electrical and instrumentation.¹⁵ The training participants were drawn from employees at a range of levels from operators to supervisors. The curriculum was developed based on the needs identified by the company.

¹⁵ The training in PLC, instrumentation and motor drive was documented and can be accessed electronically on <http://www.ppns.ac.id/index.php/tentang-ppns/40-berita-terbaru/75-diklat-plc-instrumentasi-dan-motor-drive-kerja-sama-antara-ptpn-x-dengan-ppns.html>

The key drivers for IP2 to collaborate with VET P2 were firstly, VET P2 is an educational institution which is more practically than theoretically oriented. This focus sits well with the company's requirement for skill upgrading. Secondly, the employees lacked the necessary skills and hence required upgrading of their skills and knowledge to make best use of the new technologies available. This needed to be done as quickly as possible.

The company's mission was to catch up with technological development and, at the same time, to speed up production operations in the factory by using the new equipment effectively. The key drivers for VET P2 as a vocational education and training provider were to establish their credibility as a provider of competency based skill training to their industry partner. A second driver was to show the broader community that there is value in the acquisition of competency based skills which have an equal or greater value than a degree obtained at university.

The financial benefit in this partnership for IP2 could not be directly perceived. However, it is likely that it reduced the length of factory outage time in sugar milling if the training was designed and delivered effectively. For example, when the factory stops milling sugar and outage times are long, there are enormous economic losses for the company. After the employees had been trained, the duration of factory outage was reduced and there was a rise in sugar production.

The non-economic benefit was that all employees are now certified based on their skill and there is standardisation across certified competencies. Furthermore, it raised employees' self-confidence, including working safely in the factory. This had never happened before.

The financial benefit that VET P2 obtained was significant because the training fees go to the institution and could be used as capital to purchase

new equipment such as PLCs.¹⁶ The non-financial benefit for VET P2 is reputation. As a vocational education and training provider, VET P2 wanted to show they could collaborate by working together with a company to meet their education and training needs.

VET P2 works in a demand driven system. Smith, B and Comyn (2007) state the theory of a demand driven approach is encouraging improvement through the development of close associations between partners. A supply system ensures that only products and services related to a customer's requirements will be produced.

The challenge perceived during the training partnership by IP2 was the scheduling arrangements and finding the time for employees to attend training. The workloads needed to be balanced to maintain the factory's productivity while upgrading their competency in order to make best use of new technology to improve productivity further. The challenge faced by VET P2 was the difference in working culture between this provider and IP2, particularly in relation to occupational health and safety (OHS) procedures. VET P2 is the only polytechnic in Indonesia to have developed a safe working program in engineering. This was included among the training materials used in the training partnership with IP2.

This was a successful partnership compared to former IP2 partnerships. Firstly, the participants have not only gained competence, but have also been given a certificate of competence. Secondly, their practical skill in the factory can be accredited academically. In other words, IP2 considered this training contains a more practical focus compared to other training.

VET P2 also considered this was a successful partnership because IP2 is a large Indonesian state-owned enterprise which usually has its own fixed training program. However, the partnership gave VET P2 the opportunity to

¹⁶ PLC is a digital computer used for automation of electromechanical processes (i.e. control of machinery in factory).

undertake training needs analysis in order to advise and customise training materials to meet company needs.

The cost of this training partnership was around IDR 250 million which equals about AU\$27,400 for the PLC training for each group of 24 participants. IP2 considered this to be an expensive training program, because of cost was far greater when compared to other training IP2 had undertaken. The training program took 51 days to complete, considered the longest training the company had ever offered. There were five staff from IP2 involved in managing this training: one from the technical department, another from the human resource department and the rest from other departments. On the other hand, 20 to 25 VET P2 staff were directly or indirectly involved in the program. Theoretical subjects were conducted at VET P2's campus while practical training was held at IP2.

Training model issues

Flexibility was a feature in the design of this training partnership. Training materials in the form of modules were provided by VET P2. Facilities such as laptops and other equipment were provided by IP2 for the participants. Some simulators were used during the training at VET P2 and for equipment which VET P2 did not possess such as a boiler and milling machines. Access to these was provided by IP2 and training was conducted at their factory.

VET P2 modified the content of the training materials to include industry applications and examples needed by IP2. As the VET P2 partnership manager explains:

We had adapted training materials to address the industry requirements and in some cases to IP2's needs. So what we would do is we would get a sense of working with their employees in the factory and at the management level and get a sense as to where their employees felt the gap was. There were particular aspects that the employees would want the training materials to emphasise to meet their needs, and we did try and adjust to that (VET P2, Interviewee, 2011).

VET P2 customised training materials after the draft curriculum proposed at the beginning of partnership discussions was agreed to. In other words, the training materials were a product which combined competency on both modern and obsolete equipment, as IP2 still used both in their factories.

People issues

VET P2 found this partnership highly beneficial, especially staff development opportunities that emerged during training. The VET P2 staff gained more practical skills as they became involved in the process of overhauling a system in industry. It also built their self-confidence in doing industrial tasks. Workplace confidence also improved for the IP2 staff, who underwent training in operating machines with electrical digital control systems. Administrative support for upgrading programs was mostly provided by VET P2 with support from their industry partner (IP2). This support was needed mostly when the training was held at the factory.

There were two benefits for VET P2 staff involved in the partnership. Firstly, they obtained valuable experience in working together with a state-owned enterprise (like IP2) to manage their professional training. Until that time VET P2's other training partnerships were mostly with private enterprises. Secondly, there was an improvement in the knowledge and skills of VET P2 trainers involved.

Some people issues emerged during the training process, mainly in communication between trainers and participants. There was a lack of interpersonal skills with participants as well as trainers, for example, creating a good atmosphere during the training process or after the training by implementing culture of 3 S: Sapa (speak to in greeting), Salam (greeting), Senyum (smile). Both needed their skills to improve. Regarding people issues, this partnership has direct benefits for IP2 employees who attended. The company also benefited. Personally, it built employees' confidence by enabling them to master specific competencies through training. The

company benefits because the employees met the required skills needed, especially in area of new technology. For the benefit of the company, technology, could be viewed as a model in machine operations for other employees who are not involved in the training. Technology transfer has significant impact individually including rewards from their company of what they have done for corporate development after going through some evaluations.

Future of the partnership

The partnership between VET P2 and IP2 seems to have a well-specified strategy and operating model. Clearly, rules exist which guide VET P2 in selecting or responding to opportunities. Every partnership is tracked financially by VET P2 as part of its administrative management. Prospects for collaborating and maintaining existing collaboration with a current partner (like IP2) appear to be strong, according to the VET P2 administrator. However, where possible, they use their standard teaching programs, adjusted as required to meet individual client needs. As this administrator explains:

I certainly say that 90% out of 100%, we use our own standard programs. However, we did some adjustment and customisation on our training material in order to meet the client's needs. We also have a wide-ranging portfolio of programs that have been built up through the years (VET P2, Interviewee, 2011).

The current partnership manager at VET P2 is involved in discussions with IP2 about expanding the program to other locations.

5.5 Case Study Three: Training in teaching and learning methodology

The third case is an exploration of the partnership between VET P3 and IP3 as its industry partner. While VET P3 currently enjoys partnerships with many companies, this particular partnership has been selected for study given the richness involved in its creation.

Of the partnerships explored in this research, the structure of this partnership is more complex as it involved a vendor as a third party. The partnership has been existence since 2001 and its chronology is outlined in Table 5.9. A history of both institutions will be provided on the next paragraphs.

Table 5.9: VET P3 and IP3 partnership chronology (2001–2010)

Initial discussions between VET P3 and IP3	2001
Discussion to offer the program	2001
Formal agreement developed and signed (renewed yearly)	2001/2009
The training program commenced	2001/2009
Asian Development Bank (ADB) funding	2010
Most recent partnership agreement signed	2010
The training program continued	2010

Background

VET P3 was established in 1988 and is located in Surabaya, East Java. VET P3 is a technical institution specialising in quality education in professional engineering in electronics. The institution was established with financial assistance from JICA¹⁷ (Japan International Cooperation Agency) in civil work and educational equipment provision. VET P3 is one of the polytechnics in Indonesia that is actively involved in the development and enhancement of the whole Indonesian polytechnic education system. As such, VET P3 is seen as a national resource.

Partnerships with industry and educational institutions have been established with VET P3 in various ways. One of the collaborations was a joint program with Berufshakademie Stuttgart Germany for developing a “dual system” approach to vocational education to develop and implement theoretical knowledge and practical skills learned at university. VET P3 also had a

¹⁷ JICA is one of the government agencies in Japan’s Official Development Assistance which provides technical assistant and grant aid cooperation to developing countries.

training partnership in human resource development with UNTL (The National University of Timor Leste).¹⁸

IP3 is one of the directorates in the Ministry of National Education of Indonesia which has the following roles:

- preparing materials for policy formulation
- providing technical guidance, supervision and evaluation of vocational high school development.

The mission of IP3 is to establish and empower vocational schools to produce graduates who have national integrity and competitive advantage in both national and global markets. DTVE also seeks to empower vocational schools to develop partnerships with industry and other related institutions.

Several polytechnics in Indonesia have worked in collaboration with IP3. A recent (2011) collaboration was with one large vocational institution in Makassar, South Sulawesi.¹⁹ IP3's role in this collaboration was to provide all facilities for a range of SMKs (vocational schools) according to their specialisation. It worked together with SEAMOLEC (Southeast Asian Minister of Education Organization Regional Open Learning Centre) in conducting ToT (Training of Trainers) in distance learning management for lecturers and schoolteachers at vocational schools in Makassar.

Genesis of partnership

Environmental issues

The partnership between VET P3 and IP3 began in 2001. The first agreement was executed that same year. Subsequently, the contract has been renewed annually.

¹⁸ See the MoU (Memorandum of Understanding) in media coverage on <http://www.eepis-its.edu/id/read/fe9f1505abeca2d1f298576ff7e5dd2c/pens-adakan-kerja-sama-dengan-untl>

¹⁹ Online media can be accessed at <http://makassar.tribunnews.com/2011/03/24/politeknik-ujung-pandang-kini-punya-program-diploma-satu>

This was a strategic partnership for vocational schools teacher's recruitment and professional development, including provision for a professional qualification at D4 level (Diploma 4) or bachelor equivalent. The partnership provides training in teaching and learning (e.g. teaching methodology, how to create teaching materials and interactive modules and how to teach all practical subjects inside the laboratory by conducting some experiments). The partnership continued with funding from the Asian Development Bank's (ADB) project in 2010.²⁰ A new agreement between VET P3 and IP3 was signed in early 2010.

Participants were selected vocational schoolteachers from all over Indonesia and vocational school graduates who aspired to become a vocational schoolteacher and professional industry expert. There were 112 participants per group.

There were two main drivers in this partnership from VET P3's viewpoint. Firstly, the competency that they have developed in supporting IP3 to develop the skills of vocational schoolteachers by conducting training of trainers (ToT) for them over an extended period. Secondly, the trust that has been built by VET P3 with their facilities and resources to conduct national projects in education for the Ministry of Education, in vocational schools and polytechnics in Indonesia.

VET P3 has a long history in partnering. As the VET P3 manager responsible for the program development and operations recollects:

During the time I have been here at VET P3, we have always participated in company programs. It might have been very different, unless we had no experience at all in doing something like this before. (VET P3, Interviewee, 2013).

VET P3 rose to the challenge to develop the training program for vocational schoolteachers requested by IP3. At this point, VET P3 was also offering

²⁰ See Polytechnic Development Project: Indonesia on ADB's website at <http://pid.adb.org/pid/TaView.htm?projNo=42099&seqNo=01&typeCd=2>.

international certification for successful training participants by involving an international vendor in information technology as a third party. This vendor is able to provide a certification, which is recognised internationally, and certification can be gained through participation in the program that VET P3 provides. Lysaght and Altschuld (2000) mention that certification is a process whereby key requisite competencies for practice are measured and the professionally approved by a board of his/her colleagues.

The key drivers from IP3's point of view in undertaking a partnership with VET P3 were as follows. First, VET P3 has considerable strengths in delivering competency based training that is needed by industry. Secondly, vocational schoolteachers are required to hold higher levels of skill in their teaching areas. Finally, these teachers require a qualification at D4 (Diploma 4) or Bachelor equivalent as a minimum requirement to practice under the national regulation governing vocational schoolteachers.²¹

VET P3 has established networks to provide certification after training has been completed. This is to ensure that participants in the program not only hold certification from VET P3, but they have also obtained internationally recognised certification from large third party vendors such as Oracle, Siemens, Cisco and Omron. The goal of all certification is to support and motivate program participants to have more opportunities to compete in a global market.

In this partnership, both institutions optimised their existing resources. As a partner, IP3 has the capacity to provide skilled human resources, facilities, networking and information to benefit the partnership. VET P3 as a VET provider not only has skilful human resources, but provides an official certificate at D4 level or a bachelor degree. IP3, on behalf of the Indonesian government, operates under strict financial limits when funding this training. Therefore VET P3 made as efficient a use of its resources as possible to

²¹ See Government Regulation of Republic of Indonesia Number 19 Year 2005 concerning National Education Standards at <http://www.presidentri.go.id/DokumenUU.php/104.pdf>.

reduce costs to their partner IP3. There was no significant financial benefit in this partnership for the VET provider.

Two major challenges emerged for VET P3 as the VET provider. The first challenge was in linking and synergising with several large third party vendors, required for program success. This was especially so because these vendors provide international certifications, and it is not enough for participants to possess a diploma qualification. They also need international certification as recognition of their competency. The second challenge was to maintain good communication with the key person who was in charge of the partnership at IP3, since there were organisational structural changes of the person who was in charge to handle the program with VET P3 that occurred in the course of this partnership.

There were two major challenges for IP3 as the ‘industry’ partner. Firstly, the program should be precisely mapped out and designed to meet stakeholders’ needs, which were also very dynamic. Secondly, maintaining partners’ vision and mission with a good understanding in operating the program, conducting quality assurance of the program, implementing the program, the internal organisation and handling financial management.

There were two success indicators for this partnership. First, the amount of training that VET P3 conducted and the level of networking had also increased. Second, the quality of module preparation had improved. In addition the facilities available, for example, the quality of the equipment used during training, had been updated to current technology. Based on the questionnaire and feedback distributed at the end of the training, to gauge customer and participant satisfaction about the training process, and trainers and other supporting elements, the partnership with IP3 had been successful.

This training partnership was considered very successful from IP3’s point of view, compared to former training partnerships, which had only occurred in the short term and only partially complied with stakeholders’ needs.

The value of this training partnership was based on the project cost from IP3. In total, the cost for this training was approximately AU\$106,268 or IDR 1 billion. There were separate costs of around IDR 700 million (AU\$ 74,400) for participants, covering such items as lump sum payments, accommodation and transportation. This entire budget was covered by a project funded by the Asian Development Bank (ADB) in Indonesia. Almost all staff at VET P3 were involved, more than 20 staff members in all. Training was designed in blocks and delivered at three venues, VET P3 and two other training venues close to VET P3.

Training model issues

The training model of integrated natural science (*Ilmu Pengetahuan Alam Terpadu*) involved laboratory based training, so that all equipment that VET P3 had could be utilised by participants. Application from physics into kinetic robotics could be displayed. Training material in chemical reaction and biology could also be displayed in reality.

The training materials used in this partnership were drawn from an existing subject in SMK (vocational school) known as *Ilmu Pengetahuan Alam Terpadu* (integrated natural science), which covers the environment, chemistry, physics and a range of other topics. VET P3 customised the training materials from the existing subject and delivered training materials to participants who were all vocational schoolteachers. The program taught them how to apply these resources in teaching and learning within the classroom; however, it still aligned to the national curriculum set by IP3.

Some resources required for this partnership could not be provided by VET P3, for example, resource persons including experts in particular competencies such as automation. As a consequence, VET P3 hired experts in these areas from other institutions. VET P3 benefited from this as it allowed them to develop their own staff in these key areas, and to establish collaborations and synergies with these other institutions that supported

training. VET P3's staff also had the opportunity to improve their ability in communication with external practitioners, in particular, discussing the training curriculum. VET P3 gained experience as an event organizer, and developed their skills in organising and running a significant training event involving large numbers of participants.

To administer the program, VET P3 had staff in one particular section who handled this partnership with IP3. This involved secretarial, administrative, and financial functions. The task of this section was to service all training activities from beginning to end including organising attendance lists, trainer monitoring and managing the teaching and learning process. In order to provide a high level of customer service, some employees were outsourced, particularly when the training event was large.

People issues

In relation to people issues, the benefit to VET P3 lecturers directly involved as trainers, were that they gained insights into how to make their training materials more interesting, motivating and interactive. They encountered some problems during training regarding vocational school and considered these as challenges that made them innovate and adopt new ideas to overcome these problems. The benefits for VET P3's administrative staff were that they learned more efficient approaches to time management through undertaking such a large project.

Since the financial aspects of the partnership were not an issue for VET P3, collaboration between the two institutions became less of a challenge. Another factor encouraging this partnership was the internal support from senior staff that the VET P3 staff involved in this program received in helping them to improve and implement training materials. As the VET P3 partnership coordinator describes:

People on the management level were very supportive from the beginning. Anything we needed in connection with training materials and in terms of technology was provided. We sat together with IP3 to set the standards for the

training materials from the beginning that would be presented to the vocational schoolteachers to ensure they would be very professional training materials (VET P3, Interviewee, 2011).

The people issues that needed to be improved to make the partnership work better was competency improvement for VET P3 staff, which needed to match both market and customers' needs. This competency improvement was not only in integrated natural science to suit IP3's needs, but also competency in IT (Information Technology), especially competency in security networking or security databases. VET P3 staff were upgraded with related competency before transferring knowledge to training participants.

VET P3 provides competency based vendor certification in the areas needed by the relevant industry, nationally and internationally. Thus, in order to establish trust and maintain the institution's reputation to its clients, VET P3 staff need to not only be competent but also vendor certified. In addition, and in relation to its facilities, VET P3 bought new equipment from international vendors, such as Siemens, to support the staff development process and ensure they were properly prepared to conduct training at appropriate national and international levels.

Future of the partnership

VET P3 considers this partnership to be very complex when compared to partnerships with other industry partners. The reasons for this were the effort required to establish networks with each international vendor as a third party in order to obtain the necessary certification for the training participants. And another issue was managing the training of such a large number of participants.

Regardless of the difficulty both with maintaining good communication with their partner IP3 and networking with third party vendors, the training partnership continues to run. However, the opportunity to expand the program seems to be limited, since there is a lack of communication between

the partners and lack of transparency regarding the future strategy for the program.

At the beginning of the collaboration, both VET P3 and IP3 had wanted to leverage the partnership to create a relationship opportunity in international certification with an international vendor as a third party. This has yet to be realised. One can conclude that the lack of commitment between partners will continue to constrain the opportunity for the partnership’s expansion and subsequent growth.

5.6 Case Study Four: Human resource training at technician and management levels

The fourth case explored in this study involves a partnership between VET P4 and IP4 to provide human resource training. Table 5.10 presents a chronology of the training partnership. The profile of both institutions is presented in the next paragraphs.

Table 5.10: VET P4 and IP4 Partnership Chronology (2000 – 2012)

Partnership concept initially developed by VET P4	2000
Initial discussions between VET P4 and IP4	2000
First agreement signed (renewed yearly)	2000
The training program delivered	2000–2012

Background

VET P4 is a training institution and a centre charged with upgrading vocational teachers under the Board of Human Resource Development and Quality Assurance of Education or *BPSDMPPMP (Badan Pengembangan Sumber Daya Manusia Pendidikan dan Penjamin Mutu Pendidikan)* within the Indonesian Ministry of Education and Culture. VET P4 was established in October 1986 and located in Malang, East Java. It was funded by a European funding organisation based on a Memorandum of Understanding for technical cooperation between the Indonesian government and one of governments from European countries.

VET P4's mission is to train vocational schoolteachers in vocational skills, managerial skills and entrepreneurship all over Indonesia. As the centre for the development and empowerment of teachers and other education personnel, one of its activities is to develop teachers' skills and that of others carrying out their work. This is based on providing training across three main pillars: education and training, the development of teaching materials and consultation skills.

VET P4 has several areas of expertise including offering courses in disciplines such as electronics, mechanical, automotive, IT and management. Aside from being a training provider, it is also the teaching materials production unit which develops teaching resources and aids that are used in vocational schools and for skills training in industry. The instructors from each discipline area provide training based on ISO 9001:2008 standards in their areas of expertise in their department/unit of work.

IP4 is a multinational company selling consumer goods including food, beverages, cleaning agents and personal care products. IP4 is a dual-listed company consisting of two multinational companies in Europe. IP4 was established on 5 December 1933 in Batavia (now Jakarta) Indonesia. IP4 Indonesia is engaged in the production of soap, cosmetics, detergent, margarine, vegetable oil and a range of food and beverages. The company also acts as the primary distributor of food, personal care and home products, and provides marketing research services and partners with one or more academic institutions. These roles have the approval of the Minister of Law and Legislation in Indonesia.

Genesis of the partnership

Environmental factors

The partnership between VET P4 Malang and IP4 began in 2000 and is ongoing. The partnership involves resource sharing between institutions, especially in the development of human resources. IP4 sent staff to be trained

in a 'training of trainers' program at VET P4, and VET P4 had the opportunity through this partnership to send staff and students for on-the-job training (OJT) at IP4. However, the partnership also offered the opportunity for VET P4's alumni to be recruited and employed with IP4.

The participants in this human resource training crossed several hierarchical levels and included operators, technicians, supervisors and managers. Training for the operators/technicians focused on technical equipment, machinery and production processes. Training for the supervisor levels focused on quality control (QC) in the company. For managers the training emphasised the development of management skills, for example, how to give instructions to subordinates.

There were three main drivers from VET P4's perspective that were enablers of this partnership with IP4.

First, VET P4 qualifications were competency based. Second, VET P4's facilities owned are of a high standard and fully equipped when compared with other training providers. Third, VET P4 staff employed staff that IP4 considered highly competent. Almost 80% of their instructors had been trained overseas in countries such as Germany and Switzerland.

The main driver for IP4 in collaborating with VET P4 was the desire to build a learning culture amongst its employees and foster knowledge sharing and improved working practices.

VET P4 derived two benefits from this collaboration. The financial benefit was the income generated from this activity that could be used for maintenance and repair of their equipment and facilities, product development, innovation, training and in a range of other strategic ways. Thus, this income was used as a reserve budget to support internal development plans. The opportunity to provide both human resource and training material development for VET P4 staff through their partnership with IP4 is considered as a non-financial benefit. Through the partnership

VET P4 staff were able to evaluate the most recent training needs in industry so that current training materials could be developed and offered as a new training product.

IP4 also gained both financial and non-financial benefits from this training partnership. A lot of internal training activities conducted by IP4 staff were becoming well targeted (at no cost) after the internal employees had been trained by VET P4 and this was considered financially beneficial. The non-financial benefit for the company was the existence of a stronger culture of knowledge sharing and experiences amongst employees following the professional development offered by VET P4.

The challenge in this partnership from VET P4's perspective was the rapid introduction of new technology and machinery in industry. This means that while industry's equipment is current, the machinery available in VET providers, such as VET P4, is obsolete. In order to overcome this obstacle, VET P4 proposed onsite training using their equipment so the training is current. An added advantage was that VET P4's trainer was able to learn more about the new technology available in industry.

IP4 found the long-term training partnership a challenge. Ideally a VET provider should update its knowledge continuously in accordance with technological developments in industry, and should be able to package the syllabus according to the company's needs. In this way, training can be implemented quickly. However, this partnership has shown that there can be practical constraints in terms of a VET provider's ability to offer the latest technologies on campus. A practical solution, which was implemented here, is to train on site using the company's equipment and facilities. However, this can be a constraint, if the equipment is needed to maintain production. The challenge for IP4, therefore, is fitting in the training around production.

The partnership was considered successful by both VET P4 and IP4. This was because both institutions mutually benefited, and the program VET P4 matched IP4's needs.

The cost of this training partnership was approximately IDR 1–2 billion (AU\$209,000) per year. The staff from VET P4 involved in this training averaged three to four persons per group because training participants from IP4 usually occurred in small groups. Four training premises spread across three provinces were used: one at VET P4 in Malang (East Java), while the other three were located at IP4's facilities in Surabaya (East Java), Jakarta (West Java) and Tangerang (Province of Banten).

Training model factors

The training model was very flexible in terms of the premises at which the program is offered and the training aids used. Thus, a tailor-made approach to training was implemented, and the VET provider adjusted its offerings to meet customer needs. A tailor-made management development programme is one where each training course is purposely designed to match the needs of the client organisation (Smith, AJ & Piper 1990). Training sessions were held at VET P4, if the facilities needed for that particular training were adequate. When the training required tools or equipment that could not be found at the VET provider, an on-the-job training (OJT) strategy was implemented.

Some of the other training materials used by VET P4 have needed to be customised and updated too. However, to meet the training needs proposed by the client, VET P4 sent an expert instructor to IP4 to undertake a needs analysis over one to two weeks and started training the following week. IP4 also held a meeting with VET P4 prior to the training process to discuss company needs, develop syllabus and oversee available training facilities and equipment.

The partnership manager from IP4 considered the education and training component offered by VET P4 to be an integral component of the skills

training their employees needed. Thus, they utilised VET P4's workforce development program for the majority of their employee training. Moreover, without the customised training offered by VET P4, the company would not be able to address the identified skill demands. As he said:

Whatever we needed for training, VET P4 has been there for us through the years. Whether we needed a training program for technicians or management, VET P4 worked with us to develop what we needed and customised the training material to meet our needs. When you are working in a big company like ours, you have no idea what changes are ahead and also what new technology will come into the industry. Therefore, I know that whatever alterations come around, VET P4 will be there to support us in keeping our workers up-to-date (IP4, Interviewee, 2011).

The training demand from a large and technologically advanced company like IP4 not only provides challenges, but also benefits VET P4. It enables the institution to develop its own staff in parallel with implementing the training program at IP4. The VET P4 staff were able to improve their skills in evaluating the training demands of their industry partner and address those needs through an appropriately developed and customised training package. Furthermore, the availability of skilled instructors from VET P4 in the range of fields needed to accommodate the training participants' needs meant they obtained real value from training on completion.

Administrative arrangements for the entire program were handled by VET P4. IP4 had no significant involvement in the administration of the training program during its implementation.

People issues

In relation to people issues, the demand for training in current skills competency in industry that has been highly developed is considered as an innovation for VET P4, thus the trainer needs to adjust and learn the new skill. If the new skill is not available inside the country, they will be trained overseas. The partnership also benefited company employees who have been involved in training, so they have more systematic workflow and thus an improved workplace.

A personal relationship between institutional and company managers, as well as between staff from both institutions, was vital in maintaining communication. It is a key feature of the strong partnership between them. As the IP4 manager explains:

I do know who to call for what I need. I have developed relationships with several of the staff development personnel and feel comfortable calling or emailing. I feel I have someone on my side at VET P4 who really cares about our employees (IP4, Interviewee, 2011).

The researcher noticed that social networking between VET P4 and IP4 staff frequently occurred. These points of contact allowed personal connections and discussions to expand. This element of communication was considered a high priority by both partners.

Future of partnership

The partnership between VET P4 and IP4 appears to be strong and stable. When the research was conducted the latest agreement was until 2012 and both partners were confident that it would be sustained. This is because the partners maintain open and timely channels of communication.

In regard to building industry relations and support, the VET P4 manager pointed out that partnerships are an excellent way for an academic institution to gain credibility through working together with an international corporation

such as IP4. He emphasised the importance of good communication and networking:

The more people know about each other, the more possible there is for people to work together. Normally, long-lasting partnerships are caused by open and timely communication between partners (VET P4, Interviewee, 2011).

Correspondingly, the respondent from IP4 echoed that the opportunity to expand the program is wide open as long as steady communication and regular meetings persist between both partners.

5.7 Conclusions

The study of an existing partnership between vocational education and training institutions and selected enterprises provided important findings about their evolution from initial creation to current state and resulting workforce development relations. The findings include communication strategies, benefits, challenges, and factors that define a sustained partnership between the vocational education and training (VET) provider and selected industry partner. In all four cases, the partnerships have been operating for five years. They have survived creation and start-up phases, as well as the impact of external and internal changes with their corporate partners. The cases share a focus on impacting factors including environmental, training and people factors for current training partnerships of respective partners.

The benefits and challenges that arose from all four case studies can be seen in Table 5.11.

Table 5.11: Partnership’s benefits and challenges

VET	Industry	Benefits	Challenges
VET P1	IP1	<ul style="list-style-type: none"> • Potential for future collaboration • Practical knowledge for student in a workplace context and student employment • A more efficient tool for employee recruitment, company (IP1) cost reduction and retention of employees 	<ul style="list-style-type: none"> • Long-term training schedule, teacher preparation to meet industry needs, curriculum development • The need to provide appropriate industry training for VET P1 trainer prior to the commencement of the program • Issues with surrounding communities at IP1 over access to training and work at IP1 • No binding contract with the training participants • Restiveness amongst existing workers at IP1 over the training offered to VET P1 students and their access to jobs at IP1
VET P2	IP2	<ul style="list-style-type: none"> • Institution’s reputation • VET P2 trainer’s knowledge and skills improvement • Revenue stream • Company (IP2) cost reduction • Employees retention • Employees skill improvement and certification for skill recognition 	<ul style="list-style-type: none"> • Working culture, especially in working safety (OHS) • Difficulty of arranging of training schedule for IP2 training participants around IP2’s work schedule
VET P3	IP3	<ul style="list-style-type: none"> • Institutional (VET P3) development, good experience in handling big training • Upskilling VET P3 staff 	<ul style="list-style-type: none"> • Collaborating and synergising with international vendors for skill’s recognition • Maintain good communication with the key contact person at IP3
VET P4		<ul style="list-style-type: none"> • Generating income for facilities maintenance at VET P4 	<ul style="list-style-type: none"> • Rapid development of industry machinery technology for VET P4

	IP4	<ul style="list-style-type: none"> • Obtaining access to the latest technology at IP4 • Skills development for IP4 employees and cost reduction in conducting integral training management 	<ul style="list-style-type: none"> • Long-term training program and fitting in the training to meet the needs of production at IP4
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Key conclusions derived from these four case studies presented above are as follows. Factors underpinning partnerships between VET P1-4 and IP1-4 are interpersonal skills and communication skills as important partnership competencies to have in the conduct of their current jobs. The existence of a partnership champion is inevitable. Management support and trust are also reported as significant elements in conducting a partnership. The development and adaption of courses, materials and delivery modes that are client specific were also important. Geographic proximity is another aspect. Cross-case analysis will be presented in the following chapter.

Chapter 6

Cross-case analysis

6.1 Introduction

Cross-case analysis “is used when the unit of analysis is a case, which is any bounded unit, such as an individual, group, artefact, place, organisation, or interaction” (Mathison 2005, p. 93). Mathison (2005) argues that cross-case analysis is frequently the second level of analysis allied with a case study approach. Spangler (2002) states that one purpose for doing cross-analysis is to enhance generalisability, which is an appropriate goal for qualitative studies. Miles and Huberman (1994) suggest that cases, adequately sampled and carefully analysed, could answer reasonable questions that make sense beyond each specific case. They also felt that cross-case analysis deepened understanding and explanation.

The four cases described in this thesis provide a rich opportunity to look at common issues and emerging models concerning the partnering process and factors contributing to successful partnerships. This research suggests there is no unilateral approach or set of steps to ensure that partnerships between VET providers and industry will be sustained. While the cases involve similar types of partnerships, they also reflect important nuances and differences in their creation and implementation.

This study describes the essential impacting factors of partnering shared by the cases which contribute to enduring partnerships. Figure 6.1 below shows the framework, enhanced with findings from the analysis describing key impacting factors in the partnership lifecycle.

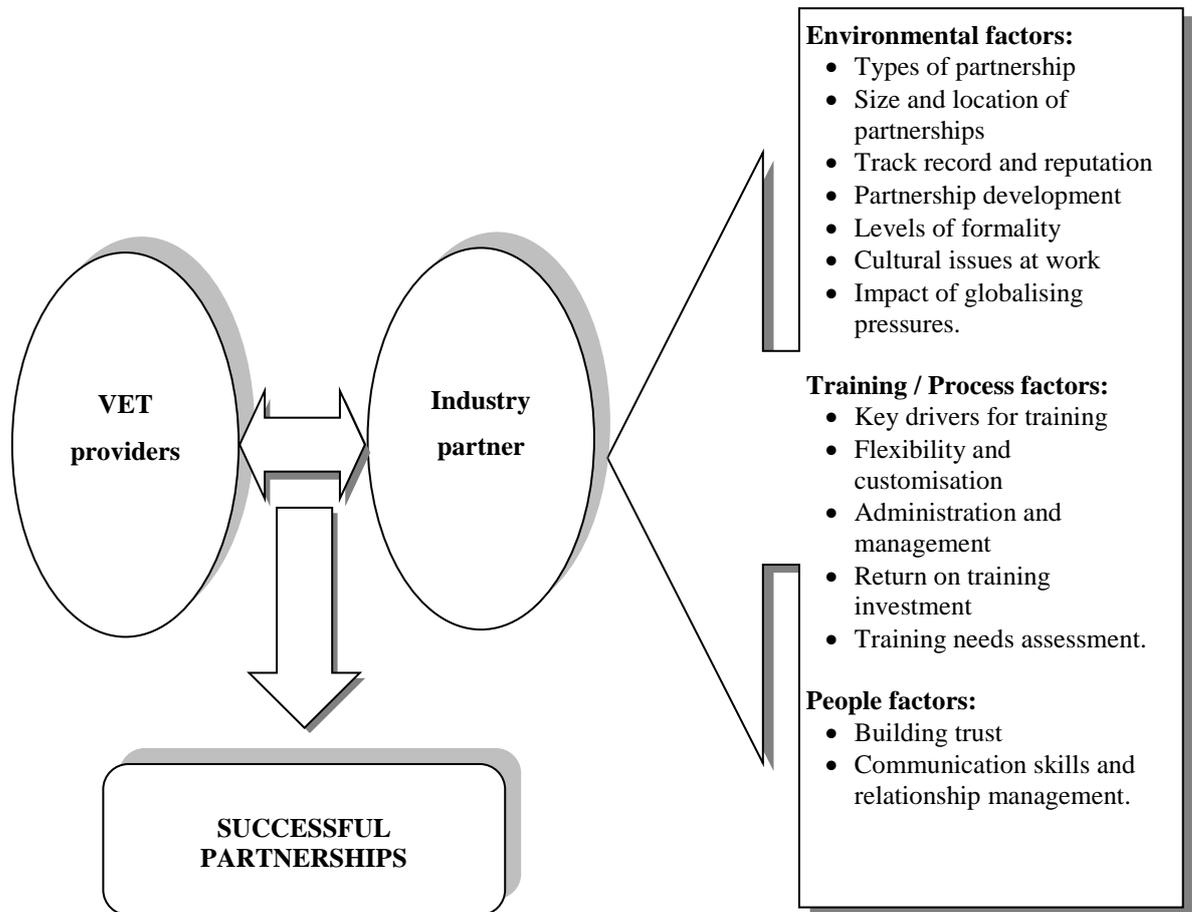


Figure 6.1: Partnership impacting factors framework applied to analysis

Source: (Helmy, 2011)

In each case, challenges appeared for both VET providers and partners. Each case was different and arose from the distinctive expectations and situations of respective partnerships. For VET P1, explicit challenges included the preparedness and competency of its staff to act as trainers and the duration of the program, considered too long for students. For IP1 as VET P1’s partner, challenges emerged internally in relation to the program which had not been

informed properly and externally with people who live close to the company who need jobs at IP1.

In VET P3's case, the challenge was improving relations with third party vendors such as two major international companies that provide international certification for the program's participants. For IP3 as VET P3's partner, the challenge was in understanding how best to operate the partnership. This included quality assurance with the training result and overall financial management. In VET P2's case, the most explicit challenge in making the best out of this partnership was a cultural issue, including the implementation of a safety program, since IP2's employees needed to be informed and effectively trained in workplace safety. IP2 faced the challenge of scheduling their employees to attend training, since they were also needed in the factory, which operates 24 hours a day. For VET P4, the major challenge was addressing the rapid development of robotic technology at IP4. This was a challenge for IP4 as well. The research supports the view expressed earlier in chapter three that partnerships need commitment and persistence throughout their lifecycle (Miles & Huberman 1994).

6.2 Impacting factors on partnerships

The following section discusses factors impacting training partnerships provided by both participants from VET providers and industry partners. They include environmental, training/process and people factors (Lendrum 2003).

6.2.1 Environmental factors

The first research question guiding this research covered a range of 'environmental' issues including: "what are the common environmental factors impacting upon the establishment of the partnership and the participants' readiness to partner; what types of partnerships have appeared in Indonesia; how do these factors adjust according to the size and location of

the VET providers and industry partner; how are reputational effects operating; what are the relational and organisational cultural issues at work; what has been the impact of globalising pressures?

Factors emerging consistently from the four cases that impacted lifecycles of partnerships are discussed below.

Types of partnership

Based on the survey, 14 respondents from VET providers were asked to describe what they understood by the term ‘partnership’. In particular, those interviewed were questioned regarding their understanding of the term ‘VET provider/industry partnerships’ and the range and type of partnerships with which they are involved; They were also asked the nature of the training relationship, whether it was formal or informal, and undertaken at one or more locations; and whether the partnership was primarily concerned with generating income for the VET provider, or whether it was more about attaining other specific outcomes.

In summary, the respondents considered that partnerships were mutually advantageous business relationships which improved the skills and performance of people and communities. Their descriptions of partnerships show there was solid agreement amongst VET providers. To illustrate further, six representational quotes have been drawn from these respondents. They suggested that partnerships could be described in the following ways:

We are looking for collaboration and networking as well as the need to improve the competence of human resources while we gain the trust of our industry partner. Through partnership we will earn profit for the development of our institution (*Survey, 2011*).

As a vocational education and training provider, we need business partnerships to help provide training and education services to industry.

Moreover, we also try to link up the student's world with industrial world and expect to change the student's mindset (*Survey, 2011*).

Collaborations include a series of relationships from preferred VET provider status, formal contract, contracts per project, and training needs identified for us by industry partners. Firstly, we aim to meet the industry needs and to ensure financial viability. Secondly, our objective is to increase mutual financial benefit and non-financial benefit such as developing our own organisational competency (*Survey, 2011*).

Partnership is an implementation 'link and match' between industry and an education institution including vocational education institution which had been regarded as an ivory tower (*Survey, 2011*).

Partnerships involve a range of activities that are established by mutual agreement and to benefit of all parties in terms of funding, program, human resource development, and organisational culture exchange (*Survey, 2011*).

As a higher education institution, besides implementing community service as one of our aims, we also look for a true partnership where there are lots of two way benefits. We should be making money as non-tax revenue at least in the longer time, and at the same time improve teacher skills by working together with relevant industry partners (*Survey, 2011*).

In summary, the major benefits that VET providers perceived in partnerships with industry were generating income for institution development and gaining trust from industry partners. This development included improvements to facilities, improvements in staff and teacher skills, and providing students with opportunities to gain more knowledge and experience in industry.

There was a question in the survey for VET providers that asked them to explain the features of a partnership in which they were presently most involved. Their descriptions of their current operating partnerships show that there were numerous partnerships running with industry partners. For example:

Our institution cooperates with an Indonesian national oil company through coaching and mentoring small and medium enterprises, and providing support facilities and infrastructure as well assisting with recruitment (*Survey, 2011*).

We are working together with one of the largest mining contactors in the world providing students with the opportunity for field work practice in order to gain research data for their final report and help their recruitment (*Survey, 2011*).

We have partnerships with several big vendors such as Oracle, Cisco and Siemens which benefit the students by enabling them to obtain certified training at a reasonable cost (*Survey, 2011*).

One of our departments, the mechanical engineering department, provides professional education programs in hydraulic training, a partnership of workforce empowerment through certification, skills upgrading for supervisors and technicians in industry, and human resource training for workers at an international company which manufactures and distributes cement (*Survey, 2011*).

Our institution has an agreement for enhancing the educational development of employees inside an industry enterprise, whilst simultaneously giving opportunities for our own staff to gain access to vital advanced technology equipment. Moreover, we have established a mutual collaboration in entrepreneurship and are granting scholarships for the students (*Survey, 2011*).

Training and vendor based certification for vocational schoolteachers with background in science through the Directorate of Technical and Vocational Education (*Survey, 2011*).

The comments from the survey above show that the level and type of collaboration between VET institutions and industry appears to be strongly reliant on the size of the company and the sectors in which the companies operate (Muscio, Quaglione & Scarpinato 2012).

Collaborations were enacted through joint service arrangements and joint ventures. The results of the survey indicate that partnerships consisted of three basic types:

- mutual service partnerships where the resources of VET providers and the company were pooled to gain access to equipment or resources which aided training programs (41.4%)
- joint ventures where the VET provider and the company jointly pursued a training opportunity by combining capabilities (26.4%)
- value chain partnerships where the partners worked together to develop a training model to create enhanced training benefits for learners (25.1%).

A small number (7%) of research participants described 'other partnerships'. Investigation of their replies has shown that these involved consulting activity undertaken on an ad hoc basis, and impromptu partnerships. However, this only occurred if the partnership was viewed as beneficial for both the VET provider and industry partner.

VET providers were asked in the survey to describe the types of partnership they would like to develop further. Mutual partnerships were mentioned more frequently than any other type of partnership. VET providers understood that the establishment of more mutual collaborations would allow them to optimise all resources in their institutions such as facilities,

laboratory and human resources with support from the industry partner. Furthermore, they also believed that they are able to showcase their abilities more effectively when working with a variety of partners in a business environment.

VET providers were interested in developing mutual partnerships through collaborating and synergising with an industry partner. Such alliances were seen to allow VET providers a greater opportunity to expand their experience base comprehensively rather than only one aspect. They were also interested in providing scholarships for students and giving the students opportunities to obtain more knowledge and experience in industry through the partnerships.

Mutual partnerships were revealed as the highest preference in conditions where there was a real sense of perceived inequity in relation to the benefit of the partnership. As one of the VET provider administrators acknowledged:

Some of our industry partners have limited and inadequate budgets. In other words, they have a small budget for training. However, the mutual service partnerships obviously still would be excellent. To overcome this problem we can make use of their expertise and industry relationships to develop opportunities for both the industry and our institution (VET P1, Interviewee, 2011).

Most of the partnerships involved a direct two-way agreement between VET provider and industry partner. Nevertheless, there were also examples of three-way partnerships between a government institution, the BNSP /Badan Nasional Sertifikasi Profesi (National Professional Certification Agency), VET provider and industry partner.

These cases demonstrate the importance of mutual value for partners as Bowie (1994), Foskett (2005), Meister (2003) and Uhlik (1995) suggest. In each case, VET providers and partners emphasised the importance of benefits for their respective institutions as the foundation of their relationships.

Table 6.1 summarises the benefits driving partnerships from each participant organisation’s perspective. It is important that each derive some benefit from the partnership, which is the partner’s *raison d’être*.

Table 6.1: Partnership benefits

Partner	Perceived benefits
VET P1	Revenue stream and potential for future collaboration, and student employment
IP1	Employee recruitment and retention
VET P2	Revenue stream for equipment procurement and reputational improvement
IP2	Company cost reduction, employee retention and skill enhancement
VET P3	Revenue stream and institutional development
IP3	Existing resources optimisation
VET P4	Income generating for maintenance and repair, and additional expertise in new technology
IP4	Cost reduction in internal training management and skills development

For each of the VET providers, the partnerships created the opportunity for increased revenue to help fund desired programs and projects as well as providing funding for equipment maintenance and procurement. For VET P1, the opportunity of working together with IP1 was perceived as an extremely rare situation for collaboration. The partnership held the prospect for VET P1’s students to gain an enriching and ‘real world’ experience in power generation. In fact, a more significant outcome of the collaboration was realised during ongoing training and gave rise to a significant number of the students gaining employment with IP1. A VET P1 senior manager recalls:

The value for VET P1 was essentially that we generated competent resources, in this case our students. We wanted to provide human resources which met industry needs (VET P1, Interviewee, 2011).

For their industry partner, IP1, the benefit was the ability to use the partnership as a tool for employee recruitment and retention. The educational opportunities provided through the partnership were seen as a corporate differentiator for IP1, which enhanced its attractiveness to the

prospective partner. In VET P3's case, the partnership was one outcome of the strategic revenue planning that was integral to their institutional development. For IP3, the partnership was part of their national commitment as a government institution to assist vocational schoolteachers' development and address their perceived skills deficits in science and technology.

For VET P2, the partnership brought an opportunity to generate income for facilities procurement, to improve their reputation, and to extend their corporate collaboration portfolio. Moreover, the partnership funded supporting infrastructure and training programs for VET P2. As a result, VET P2 was able to leverage its learning and experience to develop the entire academic institution through an 'upgrading' program. For VET P2, the partnership was aligned with the institution's strategic growth objectives. For IP2, the partnership enabled them to fulfil their commitments for employee education and ensure they had a workforce whose skills were keeping pace with emerging technology. As one of the IP2 partners describes:

We are already running out of time in our employment regeneration, so we needed to accelerate our staff's technological capabilities. Our company consensus is that education really makes a difference and you know how you hear that and it can sound trite at times, although we all still access the same equipment. The technology is more common than not and even at an international level we see there's going to be changes needed in equipment and technology that is going to have to take place because of the realities that are occurring globally. So we need to upgrade staff skills to become more effective in our factory operations, and specifically on our new equipment or machines (IP2, Interviewee, 2011).

For VET P4, the partnership was part of the strategic plan for increasing revenue and was integral to improving the expertise of institutional staff. For IP4, the partnership was part of their commitment to employee development and addressed perceived skill deficits in technology. Similar to IP2, the training program was also viewed as a tool to help retrain employees.

Size and location of partnerships

The findings of the survey showed that partnerships were mainly established in the same province or local area, followed by other provinces of the

islands.²² Approximately a quarter of respondents stated that partnerships had been established on other Indonesian islands, and in overseas countries. Of the partnerships discussed in interviews, one involved delivery in three provinces and the remaining three operated only in the province in which both the provider and company were situated. Respondents to the survey revealed that overseas corporate partnerships were with countries such as Japan, Korea, Rwanda, Germany and Australia.

The number of locations where training took place varied across partnerships. One partnership was delivered in four locations and most often these locations were industry sites. One partnership (VET P2 and IP2) involved delivery in three locations and the last two partnerships were delivered in two locations.

Geographic proximity to the industry partner was considered very important by the VET provider. The benefits in having the training provider close to the workplace meant that they were easily accessible so that delivery could occur on site, and VET provider staff could attend meetings on site easily. This type of partnership was common in small regional centres where mining, forestry and other production companies actively sought a local provider because of beneficial flow-on effects into the local community. A VET provider partnership coordinator suggested:

We delivered the training into three locations. We have several classes, which we used to facilitate this training. We also used other locations outside campus for the training which is close to us and accessible, so that we can control all activities easily (VET P3, Interviewee, 2011).

In many cases industry chooses a local provider to show their support for the local community. Companies that offered employment in regional locations stated they wanted to show their support to the area by selecting their preferred training provider from within their local area or province.

²² The finding based on the survey question 6 in Appendix D

Companies have the freedom to employ any training provider, including those situated in big cities. However, they considered that, by engaging a local provider, it sent an important message to workers. This approach shows their long-term commitment to the province and, as one employer stated, there are both ‘social and community issues’ which affect their options about the choice of a training provider for their company. One of senior managers from IP1 explained the situation this way:

The company has responsibility socially and environmentally. Through CSR²³ (corporate social responsibility) as one of the drivers, we involve a higher education institution, in this case VET P1, which is located in the same region as the partnership program. We want to demonstrate our commitment to the local community and encourage a positive impact through these activities on the environment, consumers, employees, communities, and stakeholders (IP1, Interviewee, 2011).

The interviews also revealed that some companies had accessed local providers because of a lack of satisfaction with the performance of metropolitan-based training providers. The catalyst for one partnership developed from a degree of dissatisfaction with a large metropolitan provider due to the lack of flexibility and quality in training provided, and their inability to meet industry needs.

Gross income

The information presented in Table 6.2 is based on survey information regarding annual gross income derived from various partnerships being managed by their VET providers.

Table 6.2: Partnerships’ annual gross income²⁴

²³ Corporate social responsibility (CSR) is a form of corporate self-regulation integrated into a business model. CSR policy functions as a built-in, self-regulating mechanism whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards and international norms.

²⁴ Table 6.2 is based on survey question 13 in Appendix D.

Gross income category	Number of partnerships producing this income (%)					Total %
	1	2	3	4	5+	
Under IDR 50.000.000 in gross revenue annually	3.13	0.00	3.13	3.13	6.25	15.63
From IDR 50.000.000–IDR 100.000.000 annually	3.13	0.00	0.00	9.38	0.00	12.50
From IDR 100.000.000–IDR 200.000.000 annually	0.00	3.13	3.13	6.25	0.00	12.50
From IDR 200.000.000–IDR 300.000.000 annually	0.00	3.13	6.25	0.00	0.00	9.38
From IDR 300.000.000–IDR 400.000.000 annually	3.13	0.00	0.00	0.00	3.13	6.25
From IDR 400.000.000–IDR 500.000.000 annually	3.13	0.00	3.13	0.00	0.00	6.25
From IDR 500.000.000–IDR 1.000.000.000 annually	3.13	0.00	0.00	0.00	0.00	3.13
Over IDR 1.000.000.000 annually	6.25	0.00	0.00	9.38	18.75	34.38

This table presents the multiple responses of 18 respondents the level of institutional annual gross income derived from one or more partnerships. The majority of respondents from VET providers were aware that no less than one partnership generated gross income up to IDR 50.000.000 annually. Nevertheless, 11 (34.38%) respondents were aware that their partnerships produced over IDR 1 billion gross annually. In one case this income was derived from a single partnership. In others, it involved multiple partnerships including three to four partners. Additionally, VET respondents were also aware of existing smaller partnerships in their institutions, with almost two-thirds of respondents aware of 10 or more training collaborations estimated at under IDR 50 million gross per annum.

Track record and reputation

Each of the case studies in this research suggest that networking and personal connections are important in creating an opportunity for partnering. However, they also suggest the importance of educational partners demonstrating characteristics of supportive academic atmosphere including the components inside which are relevant to the partnering company. In each

of the cases investigated in this research, the VET provider was able to create ‘a differentiation’ or exhibit a niche ability which enhanced its attractiveness to the prospective industry partner.

All VET providers noted the recognition they obtained in the training marketplace from being connected with big companies. This included the provision of training for a major government bureau (e.g. IP3), large multinationals (e.g. IP1 and IP4) and national companies (e.g. IP2). VET providers considered that these training providers usually improved their status in particular niche training markets, raised the profile of their organisation, and assisted VET providers to compete more effectively for business tenders, both nationally and internationally. It also led to structural and cultural changes that allowed these VET providers to become more competitive in their training market, and especially in creating new collaborations in other provinces.

In four cases, there were a range of key differentiators that emerged from VET providers’ track records. Table 6.3 summarises the sources of differentiation for each VET provider as perceived by their industry partner.

Table 6.3: VET providers' track records

<i>VET providers</i>	<i>Key differentiators</i>
<i>VET P1</i>	<i>Prestigious image, reputation for corporate collaboration</i>
<i>VET P2</i>	<i>Recognised leader in shipbuilding engineering programs, track record in corporate collaboration</i>
<i>VET P3</i>	<i>Trusted for good facilities, competent staff and a "can do capability"</i>
<i>VET P4</i>	<i>High profile and track record for industry collaboration, nationally and internationally</i>

These findings further underscore the view advanced by Meister (2003) that notes the importance of establishing academic differentiation and possessing particular core abilities in certain niches. As recommended in the case studies, these differentiations were of value to potential partners and increased existing personal and professional provider networks.

In VET P1's case, their status and reputation for excellence enhanced their image with IP1. The IP1 partnership coordinator pointed out:

I was probably the one who strongly recommended them, since we are inclined to recruit from highly esteemed VET providers in our region at bachelor's level in electrical engineering. The more 'snob appeal' we can bring to this the better (IP1, Interviewee, 2011).

This insight demonstrated the quality of the relationship between respective VET P1 and IP1 leaders, and created a positive benefit for VET P1. This theme is repeated in the VET P3 case, even though the source of the differentiation is not status. Rather, it was VET P3's experience with other industry partners, and their apparent willingness and confidence that they could develop training programs required for vocational education teachers that 'won over' IP3. In the case of VET P2, the prestige of their shipbuilding engineering programs and collaboration of that polytechnic with IP2 helped the VET P2 team to demonstrate the attractiveness of their programs. In VET P4's case, their experience in working together with large numbers of

industry partners both nationally and internationally, and their perceived competency, have ensured their relationship with IP4 as an industry partner.

The potential continuation of partnerships for all VET providers is related to the development into larger and more significant projects which might provide more income to the training provider. Indeed, one of the consequences of being chosen to undertake training with significant industry partners has led to tenders being offered for other projects, both nationally and internationally. Some have been big projects. In general, therefore, the reputation acquired from delivering high profile training enhanced and enlarged their training businesses. As one VET provider explained:

We have assembled this partnership and we discover that we are now seeking other ways in which we can reproduce the partnership. There is an indication that more businesses are coming to visit our campus to see what we are doing as they have taken notice of our achievements. These achievements have raised our profile in other industries as prospective clients, and impacted on our staff availability for international projects (VET P4, Interviewee, 2011).

Partnership development

All the partnerships studied arose because of VET providers' marketing attempts or in reaction to an expressed industry need. This research provides evidence that the development of a partnering opportunity into a real program requires more than just identifying the opportunity. It is obvious that the educational partner must embrace the opportunity and proactively guide it through the development stages in order to create an actual relationship. The level of bureaucratic complexity and clarity of management vision varied across the educational institutions studied.

In responding to the survey, VET providers noted that most training partnerships with industry were a result of industry need or arose through marketing attempts by VET providers. To be more specific, this included:

- a) investigation by the company which had recognised a lack of skills, lack of apprentice numbers in an industry, information technology

training needed in rural areas and the requirement for skills certification by the training partner

- b) attempts at partnerships driven through the VET providers by an industry consultant, business development unit or industry consultancy unit manager. These consisted of following up word of mouth contacts, through business networking or a recommendation given to them by another customer, 'cold-calling' of industry, or as a result of winning a prize for training.

For those VET providers where entrepreneurial opportunities activities have been encouraged and partnerships were developed previously, the steps appear to be clear. On the other hand, if this is the first time a VET provider has attempted to develop a partnership, the pathway to its formation must be ignited in some way. In all four cases, the responsiveness of the VET providers and the presence of an advocate for partnerships are both fundamental elements to moving the opportunity forward.

A responsive and supportive academic environment is suggested in this research as essential for the creation of the partnership (Watkins 2004). The cases demonstrate that, at a minimum, an entrepreneurial spirit should also exist within VET providers or, at least, within any unit tasked with pursuing partnership opportunities. Responsiveness to need was also shown clearly as a VET provider staff need to deliver on commitments to their corporate partners and to foster confidence in their industry partner about their ability to perform.

Possessing the necessary partnership skills and capabilities and being able to translate them into effective institutional performance characterises each case study in this research. In all cases the industry partner drove the program timelines and schedules for deliverables. Responding to these needs, although often challenging, was a shared priority of all VET providers in this study.

As the interviews show, most partnerships were generally three years' duration. Many of the collaborations were viewed as a continuing process of relationship development which frequently involved more than direct training. Thus partnerships ranged from being open-ended to having a specified end point. However, the partners were always ready to assess their value and, on that basis, expand or extend the partnership. Accordingly, partnerships usually had no end point. In relation to assessing their value, while some were being regularly evaluated, others were evaluated over a particular cycle, agreed by both sides.

Thus the majority of partnerships operated for a nominal duration of between one and three years, with many having determined end points. However, the possibility for renewal always existed, as previously mentioned. Thus, these partnerships were dependent on continued funding, whether from industry or government, and the partnership could not survive if funding levels were reduced or discontinued. Two of the partnerships (VETP3/IP3, and VET P4/IP4) had associations and links going back as far as the early 2000s, while the other two were formed around 2009.

These longer term collaborations had begun from small training activities and evolved over time into larger and more extensive partnerships. They are presently functioning at a high strategic level due to substantial levels of trust built up over time, as shown in the following two case studies.

Case study three (VET P3/IP3) is a nine-year partnership which began by providing a successful training program in teaching methodology for vocational schoolteachers. This non-profit partnership involved a regional public VET provider and one of government directorates tasked with vocational school development. The directorate provides funding and ready accessibility to relevant training premises. The VET provider supplies staff and specialist services in vocational education and other niche courses related to the program, allowing many of the participants to develop their own teaching plans which have since been implemented.

Case study four (VET P4/IP4) is a partnership between a regional public VET provider and a multinational company, run for over 10 years. The industry partner reported that their long-term training partner ‘knows us pretty well’, and ‘they get the job done for us’. In this case the trainers were seen by industry to have gone out of their way to familiarise themselves with the working environment of the business. They attended company meetings to learn about the operating systems of the business and worked alongside business employees on site.

The starting point for these partnerships often occurred through individual interaction. From the interviews, which included both VET provider and industry corporation interviewees, a theme that emerged was increasing levels of communication between team members which occurred in the course of the partnership. A second theme to emerge was ensuring that a steady dialogue between partners was maintained, so that adjustments to partnership arrangements could be made incrementally. It was also suggested that there be one person – a partnership ‘champion’ – from each partnering institution who was committed to the project on an ongoing basis, and that they be the principal point of contact. It was found that some people may be involved with the project initially and then be reassigned to other projects. However, in some cases, there was inconsistency as to who was accountable, and this caused delays during the design and implementation phases. Providing one central contact would have offered additional stability and could have minimised the miscommunication that occurred. It also suggests that such partnerships should provide for succession planning for these ‘principal points of contact’ in their implementation processes.

VET provider respondents explained in their interviews that the training partnership had arisen through a contact in industry or a personal friend or colleague. Often the industry partner and VET provider had been collaborating in other ways prior to the formation of the partnership. In one

instance, staff had moved from the VET provider into the industry or vice versa and they became a potential point of contact in establishing the link. In another instance, both VET and industry partners had had a long history of working together, and this increased the partners' confidence in the viability of the relationship. As one of the industry partners acknowledged:

In the final phase of the partnership process, it is individuals you are doing business with, and identifying which individuals are taking the main role. We've been working together with them for a long time so we are very familiar with each other and, as a result, we have built trust in this relationship. We are pleased with their support, the value of their programmes, and also the structure of their fee (IP4, Interviewee, 2011).

Conversely, there was a possible weak point acknowledged by one industry administrator regarding the main role of a highly successful VET provider:

I have some anxiety regarding the succession planning in the VET institution, since the role of the individual we work with is very significant and I have some doubt that they have considered who could take over the key person role in our partnership from them. Our concern is that if this key person goes, the entire collaboration that has already been established might change and as not be as good as before (IP3, Interviewee, 2011).

Besides individual key person relationships or 'champions', which are critical in partnerships, some partnerships have used on-site training coordinators. One of the significant benefits of employing such a coordinator was that it guaranteed a specific point of contact for the industry partner and VET provider, and assisted in overcoming cultural difficulties and everyday problems which could potentially arise on both sides of the partnership.

Levels of formality

VET institutions considering partnerships with industry are encouraged to develop formal contracts at the outset that clearly define the deliverables, roles and financial terms of agreement (Bray & Scalzo 2005; Kuglin & Hook 2002; Meister 2003). All four case studies in this research involved the signing of formal agreements at the beginning of the relationship.

All four VET providers began their partnerships with a MoU as the ‘umbrella’ which expressed a ‘convergence of will’ between the VET provider and industry partner. Such a memorandum was often followed by the development of a formal contract, which included clear expectations about program objectives, financial arrangements which guaranteed VET providers were rewarded for any training they conducted, and which documented the roles of respective partners.

Detailed information emerged in the interviews regarding the tools used to legalise the training partnership. Callan and Ashworth (2004) argue that a broad cross section of VET providers and industry partners had used formal MoUs for their joint venture agreements and, in many cases, a detailed formal contract then followed.

As one VET provider staff member pointed out:

The collaboration we had considered as a proper one to share their training knowledge with us and vice versa. For this reason, we have worked with industries to utilise our staff who will meet their benchmarks. We had agreements which developed into a formal contract agreement where we also negotiated a financial arrangement for payments for the delivery of training by us or sometimes by the industry partner (VET P4, Interviewee, 2011).

In this situation, a formal contract agreement (usually a MoU) was based on a functioning partnership described by research respondents as an active document of evidence, explaining how both partners contribute to training.

All four VET providers in this study had also undertaken partnerships with industry with no secure formal agreement. However, in these cases the VET provider operated as a service provider to meet short-term and particular needs of their industry partner as they emerged. Most of these collaborations were very successful. All four VET providers had experience in delivering a number of these short courses to various groups of workers, workplace trainers and assessors. These included courses in automotive, electrical and other vocational areas. Nevertheless, the industry partners interviewed suggested these types of relationships somehow never reached the level of a

true partnership. In these cases there was no tailored training to meet particular needs. The training was therefore seen as ad hoc and not well planned.

Wilson (1995, p. 267) identifies two levels of collaboration: coalitions and ad hoc alliances. Coalitions are defined as:

An enduring arrangement requiring that choices over some common set of interests, for example, resources, goals, strategies, or the like, be made by the explicit mutual agreement among the members. A coalition thus, is an ongoing mechanism for explicitly coordinating some or all of the actions of the members; it is an organization of organizations.

In contrast, ad hoc alliances “typically take the form of loose, cooperative relationships between two or more associations with respect to the attainment of a particular end” (Wilson 1995, p. 278).

Wilson (1995) argues that organisations tend not to form coalitions unless severely threatened in some fashion, or if the organisation can be augmented. When faced with shrinking resources, a potential crisis develops and VET providers look to form short-term ad hoc alliances or more long-term coalitions with other organisations that have similar goals.

In general, VET providers were not particularly satisfied with ad hoc training partnerships. They were seen by VET providers as a ‘quick-fix’ approach to deeper structural and cultural matters which could be solved more effectively if the industry partner had committed to a more extensive program of training and development. On the whole, they felt coalitions or longer term partnerships were more effective.

Cultural issues at work

The right internal culture and organisational atmosphere is inspiring more partnerships, both in training and industry enterprises. However, Elmuti, Abebe and Nicolosi (2005) argue that developing partnerships in corporations can be challenged by cultural differences, lack of

communication, changes in strategy, and differing objectives and goals. Despite these challenges, higher education partnerships have been successful in many industries. Saxton (1997) suggests that in order to benefit from anticipated synergies, organisations should have similar cultures and approaches to strategic decisions.

All four industry partners were positive about the continuing efforts of their VET provider partners to make the partnership work. They frequently gave examples of what they sensed to be considerable obstacles, which their VET provider partners had overcome, to successfully take on the role of training provider and partner with them. A major challenge for VET providers was having had to be aware of, and be familiar with, their industry partner's procedures and organisational culture.

Managers in both the public and private sector enterprises in this study were very appreciative of the efforts made by VET providers to learn about their organisations and, in particular, to understand the changes being made by their organisation. In some companies, the VET provider became responsible for conducting training that supported a significant program of cultural change. As one manager commented:

Industry considers training is most essential to guarantee that the workers pass on the latest information and do not regress to their former customs when they are back on site. The VET provider has done a good job in helping us with this cultural transformation (IP1, Interviewee, 2011).

Another manager agreed:

I can say to you there are examples at other locations where people can't even have a meeting of minds; we don't have that problem here. Do we have our differences? Yes indeed. But our company can manage the differences, and we are able to work well with the VET provider. It's an open exchange of ideas (IP4, Interviewee, 2011).

In the survey, respondents from VET providers were asked to describe the features of their institution that made them attractive to business as partners. Their explanations focused on what they saw as the positive features of their

organisation. These included its facilities, location, staff skills and commitment and its ability to be flexible. Each of these features is discussed in greater detail below.

Facilities: Sharing facilities and equipment was a major factor contributing to the partnership. One example was the partnership between IP2 and VET P2, which has a strong specialisation in shipping. They were able to easily incorporate the sharing of equipment within the new VET provider facility through the partnership. As this VET provider's administrator stated:

We have good facilities in heavy machinery for training in shipping; we have a large space available so that we can share equipment with our industry partner in training program (VET P2, Interviewee, 2011).

Geographic location: The VET providers were well placed geographically and strategically. Strategic included being a high profile metropolitan training provider with local business development, which had an outstanding reputation for provision in their regions. The benefits of having a strategic geographic location that was easily accessible, was that training could be delivered by the industry partner on site and there could be timely communication. Guenther and Kilpatrick (2003) state that location of learning is one of the quality factors besides the purpose of the partnership, and the management or leadership of the program contributes to the level of success of outcomes.

Skilled staff: VET providers who have competent, caring and dedicated staff who are prepared to work intensively with industry are key. The staff must be highly qualified in the area of training and preferably have a higher education degree. The VET institution also needs to ensure that it establishes significant positions in its organisational hierarchy dedicated to business development activities to support the teaching staff working in the partnership. The VET staff engaged in business development must be linked to industry. They also need to have had on-the-job training experience in industry and be able to identify industry training needs.

Attitudes and personalities: These factors both play a role in whether or not personnel from different institutions can “get along” and support a common goal. Staff working for VET providers require attitudes that support flexibility in training. This flexibility includes a willingness to customise their approaches to training delivery. In this way a VET provider is able to provide a rapid response to address industry needs. This must be supported by good management and administrative systems within the VET provider organisation, which also needs to have innovative approaches to providing “one-stop” training solutions for their clients. As one VET administrator suggests, “we all have this collaborative attitude here”. Another expressed a similar sentiment: “I think part of this, is that the VET provider really does see itself as an integrated unit and that it has a collaborative character”. Finally, a VET administrator summed up:

Overall, all of us have recognised that we just can’t do it alone. If you have an attitude that you are competing against each other, none of you really get anywhere. So we all have a collaborative attitude here. It’s kind of like we are all in this together and none of us can do what we want to do without the others. So it’s an attitude thing that is at the foundation and it really just goes back to how much that it is really just part of our culture (VET P3, Interviewee, 2011).

Table 6.4 shows how respondents from VET providers indicated their levels of agreement or disagreement regarding several aspects of partnering.

Table 6.4: Cultural and attitudinal issues²⁵

Per cent of respondents who agree (n=14)	Number (%)
We are operating in highly competitive training market	12 (85.7)
Our organisational culture (e.g. our values, how we relate to people) is proving to be an asset in our partnering with industry	12 (85.7)

²⁵ Table 6.4 is based on survey question 8 in Appendix D.

We have a highly successful track record in partnering with industry	11 (78.6)
There is a strong support in our organisation for seeking industry training partnerships that will be profitable and high profile	10 (71.4)
Industry is attracted by our track record as a successful partner	10 (71.4)
We see ourselves being successful in particular niche markets of industry training	10 (71.4)
We are still developing a track record as a good training partner	10 (71.4)
Our organisational structure (e.g. level of hierarchy, control systems) is proving an asset in our partnering with industry	10 (71.4)
The organisation has a clear strategy about how it will build its level of industry partnering	9 (64.3)
We are the 'partner of choice' for a number of industries	9 (64.3)
Our geographical location gives us competitive advantages in gaining access to certain key industry partners	8 (57.1)
Our institution does manage partnerships interstate	5 (35.7)
Increasing the levels of profitable training partnerships is a major goal of our organisation	3 (21.4)
We still operate almost as the only provider of certain types of industry training	3 (21.4)

The statements in Table 6.4 above provide an additional opportunity to explore respondents' outlooks about their partnering arrangements in a more structured way than was possible through the interviews. The majority

(11/14, 78.6%) agreed they had developed a highly successful track record in partnerships. However, while it was agreed that track record was attractive to industry (10/14 respondents), respondents also agreed they were still developing that track record (10/14, 71.4%). The majority also agreed they were successful as a provider of training to particular niche markets (71.4%) and were a partner of choice (64.3%). Just over half agreed they had geographical or location advantages which assisted the development of partnerships with key industries (57.1%). In addition, 10 of the 14 (71.4%) respondents from VET providers agreed there was strong support in their institution for seeking training partnerships with industry. The great majority considered that establishing profitable partnerships was the main purpose of the institution; however, at the same time 85.7% of all four VET providers were working in a highly competitive training environment and had an organisational culture which supported training partnerships.

Conversely, some VET providers' respondents' ratings in the survey were lower regarding their institution, with around 21.4% having clear strategic goals about how to build on their level of partnership with industry. Moreover, some respondents' concerns were declared regarding geographical location of their providers due to a competitive market in training partnerships with industry.

Impact of globalising pressures

In order to remain competitive in world markets, industry should have highly skilled employees who can keep the enterprise economically viable in a global economy. Burke (2000, p. 1) provides a cautionary perspective:

Globalisation, technological and demographic changes have been major factors in highlighting the need for increased education and training throughout life... Given the likelihood that governments will be unwilling to provide additional resources required, there is a need to examine the most efficient and equitable ways of providing education and training and incentives to encourage the financing of education and training by employers and individuals.

For workplace and industry managers, training is seen as part of the process of business reorganisation in the context of globalisation, changes in technology and intensified competition. By and large it is not seen by managers in the context of the changes made to broader training policy. As one manager commented:

The impact of globalising pressure is that we have issues like seeking relevant training that can be provided by VET providers, being able to secure skilled workers in the future, and lastly to minimise the direct and immediate costs of training (IP2, Interviewee, 2011).

6.2.2 Training factors

The second research question guiding this research was: “Can successful training models be identified in these partnerships; what are the key drivers for training; to what degree do training models vary in their levels of flexibility, customisation, administrative management and the formality of training liaison; what is the perceived return on investment for the industry partner?”

The following section highlights the factors impacting the endurance of partnerships that consistently emerged in all four cases.

Key drivers for training

The main drivers for entering training partnerships identified by the 14 participants in the survey are shown in Table 6.5.

Table 6.5: Main drivers for industry partnerships²⁶

Per cent of respondents who agree (n=14)	Number (%)
To find future employers for our students	13 (92.9)
To build extra capability within our staff	12 (85.7)
To give staff stronger links with industry	11

²⁶ Table 6.5 is based on survey question 10 in Appendix D.

	(78.6)
Industries/employers have demanded that we assist them	8 (57.1)
To bring in additional revenue	4 (28.6)
If we did not get involved in the partnering, another institution would have taken the opportunity	4 (28.6)
To copy what other institutions are doing	2 (14.3)
Our motivations are not really clear	1 (7.1)

As Table 6.5 shows, there were three main drivers to establish industry partnerships—to find future employers for their students, to build additional capabilities in their staff through the challenges and experiences of the partnership, and to provide staff with stronger links with industry.

Few respondents stated they entered partnerships to copy what other training institutions were doing. About 4 of 14 VET provider respondents (around 30%) agreed they were involved in partnerships to avoid another institution taking up the opportunity, if they did not. Finally, only a very small proportion (1/14, 7%) of these respondents agreed that their motivations for entering training partnerships were unclear.

The survey also identified benefits for VET providers through partnering (Table 6.5). Around 30% of respondents mentioned the financial benefits gained through additional income, so it does not appear to be a major driver. (This was also confirmed by cultural and attitudinal findings in Table 6.4.) However, financial benefits were usually packaged with a range of other beneficial but non-financial outcomes. For instance, training partnerships have been used as a catalyst in upgrading staff skills. In other words, VET providers develop a new and direct income stream which reduces financial pressures on certain parts of various institutions. However, involvement in partnerships had also introduced flexibility into VET provider programs. The

VET staff were also challenged to reconsider how they delivered training and used existing technology. One of the VET provider administrators stated:

Financial benefit is not too significant for us, no matter how large an income we generate. The income generated goes to the institution to provide additional budget for facilities procurement. The significant benefit is 'reputation', since we are a vocational institution which meets the needs of industry. So, in other words, it is 'demand driven' rather than 'supply driven' (VET P2, Interviewee, 2011).

These respondents also demonstrated in the survey that they were unanimously positive regarding the benefits of their partnerships.

Staff as well as the student benefits included access for students and staff to the most recent equipment and technology. This consequently reduces the level of funds invested for the institution and provides job opportunities for students and development opportunities for staff. The opportunities include placements for students on fieldwork assignments; and staff being able to seek higher level qualifications, as well as further and more diverse job roles and good opportunity for people who wish to obtain more than one skill (*Survey, 2011*).

Enhance rank and reputation due to the improvement of the organisation's responsiveness in the marketplace; improved trustworthiness and position in the provincial society; relationship development with business world; value of having a collaboration with a large international corporation (*Survey, 2011*).

A new design of training delivery being set up which consist of flexible training delivery, the launch of new training packages, and a good relationship with certification body for accreditation (*Survey, 2011*).

Non-financial profits from being in training partnerships that enabled better understanding of commercial life; and specific financial profits, including increasing the size of the budget for the institute or providing extra funds that

were used to leverage access to additional government support (*Survey, 2011*).

Better plan and arrangement suited to industry targets (*Survey, 2011*).

The VET provider staff interviewed also emphasised the non-financial benefits to their institution. More specifically, these benefits were direct in terms of finding future employers for the students, to upgrade the skills of their staff, and to encourage the staff to create stronger links with stakeholders and employees. The manager of one VET provider noted from his experience in the training sector:

You had to have a culture change on the campus because our director...had the vision that we should be the people's training partner. We wouldn't be where we are today in training and have the reputation in the community we have without that vision. Therefore, we also had to change the culture on campus so that we are not just teaching students who are coming into our classroom and focusing a financial profit, we are taking the classroom out to business and industry (VET P1, Interviewee, 2011).

In conclusion, another VET provider administrator summed up his experience with industry partnerships as follows:

Right now, business people don't really think much of educators. Not all educators understand business and, you know, I think the educational situation in this country shows there's a major problem. Industry can't sit on the sidelines anymore and say, "We're not getting what we want" and just complain about it, and educators can't say, "Well, that's not our job"

Industry and education do not communicate intensively with each other and do not respect each other. They do not cooperate with each other either. If we are going to be developed country, education, especially vocational education, is the key to that and education won't work if business doesn't support it (VET P4, Interviewee, 2011).

Respondents from industry talked in interviews about a vision they shared with VET providers in relation to the future of their industry. They considered this vision was a key driver of partnerships. Corporate visions also led to a lot of collaborations. Those interviewed in the enterprises studied were enthusiastic about trying to maintain and expand the professional standing of their businesses. They wanted to set up partnerships

in training to increase retention rates in their industry, overcome skills gaps in their workforce, and build a skilled labour force to satisfy their customer's needs.

Other visions identified from company staff included the drive to create a learning culture amongst the employees, develop the technological capabilities of employees along with their academic ability, and establish a formal training structure. This requires a regular review of, and communication about, the skills being learned and their application. These visions also included the desire to take responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities and all other members considered as stakeholders. This was seen as part of the company's corporate social responsibility.

VET providers observed that once they had worked with industry partners for a specified time, and since price was critical, they spent some time bargaining over the best price for upcoming training delivery. They also mentioned that both industry and VET provider had a good understanding of what a fair price should be to benefit both parties in the relationship. The value of partnership sooner or later turns out to be more significant than training expenditure.

In some cases industry had determined that financial motives for outsourcing training were now of less importance. For example, one employer noted that:

It was important that we had a good VET provider in our local area as a partner that we can rely on and who can supply training at our site rather than outsourcing training with provider from outside the local area. Moreover, some industry did not want to lose a level of training which they had considered as highest level (IP1, Interviewee, 2011).

Flexibility and customisation

Both polytechnics and universities in Indonesia provide human resource development services for organisations through partnerships. As business

organisations receive greater benefits, partnerships between industry and higher education institutions have expanded (Campbell & Slaughter 1999; Hagen 2002). Government agencies also consider polytechnics and universities to be important external providers of training and development, reflecting the need for continuous professional development, for flexibility, and for promoting continuous adaptability and change (Mavin & Bryans 2000). However, Hannah (2001) suggests that it is very challenging for higher education to become more flexible in order to help increase the effectiveness of the workforce.

When collaborating, those on both sides of the partnership sometimes find it difficult to change the way they do business to meet the other side's goals. Sometimes this lack of flexibility is in the training program itself, while at other times it is about the personality of the individuals involved. One VET provider commented on both of these issues when he stated, "not being flexible enough and they [VET provider staff] would have to learn a new curriculum." Thus the opportunity for further collaborative effort was lost in this case.

A VET provider administrator described the role that an individual's personality plays in promoting or inhibiting flexibility:

Every once in a while we get a particular individual who has it in their mind they are going to demonstrate their capability for themselves. If they have an attitude that is more self-centred as opposed to collaborative, it can be difficult (VET P3, Interviewee, 2011).

Ashton and Sung (2002) argue that work teams in high performance enterprises as well as VET providers typically incorporate devolution of decision making, self-management, multi-skilling, job rotation and cross training. These methods confer greater flexibility on the institutions, but can only work if staff or employees possess technical skills and soft skills (e.g. a positive attitude, good communication skills and problem solving skills) in addition to those normally required in a more traditional organisation.

A wide range of delivery models were explored in the survey by VET providers and industry partners for the successful industry training delivery. The training occurred through the utilisation of:

Individual learning materials including all forms of electronically supported learning and teaching such as computer based learning (*Survey, 2011*).

Training material in-class (*Survey, 2011*).

VET provider's staff with qualification in the Certificate IV in Training and Assessment and the Diploma in Training and Assessment in order to give more flexibility to training delivery alternatives and training timetables (*Survey, 2011*).

In general, respondents from industries mentioned in interview that on-site training had saved workers time and consequently money by returning them to the workforce and their job more quickly. As one VET provider trainer stated:

Our institution has a student policy which supports our students learning on site as it permits them to show capability and then go back to campus for further study rather than stay on campus for the whole semester. When they become competent, they've been returned back to industry, although ahead of the time set by the academic schedule (VET P4, Interviewee, 2011).

Companies which operate 24 hours a day and seven days a week consider the delivery of training involved balancing the production time with time spent on training. They saw this as a big challenge. Business owners generally try to make the most of the time employees spend in the workplace.

VET providers and employees in industries stated that sometimes it was not easy to drag people away from sites for training, as site administrators and their companies were trying to meet the basic operational needs of the business. A sugar factory administrator discussed this situation as follows:

The machines in our (sugar) factory are running for 24 hours, seven days a week. Our employees are working 24 hours a day across shifts in the factory.

It's really a tight schedule. So, we also require the on-site training to adjust and fit in with our factory working schedule (IP2, Interviewee, 2011).

At the same time, some company partners noted they did not actually think much about how the VET institution provided the training, and whether it was conducted at night, at a distant site, or to the employee's working timetable. They were simply worried if the training did not occur.

One VET provider manager stated:

Preparing people to be ready for training is not an easy thing to do. It can be a tough thing to deal with. However, we have no other option than to do it. Sooner or later you will become more skilled and knowledgeable at arranging your training delivery, pricing, providing levels of flexibility, the size of the class and the availability of the teacher in order to get the most effective and flexible training possible, and to reduce the impacts on the learners and teachers (VET P2, Interviewee, 2011).

A significant attribute of the training partnerships studied was high levels of customisation. The companies, as the providers' clients, required highly customised and contextualised training to meet their needs. Examples of customisation are drawn from each of the case studies as described below:

Case Study One: One VET provider informed the study that they have to send staff to industry prior to the real training for one to two weeks because the industry partner proposed that new training material be delivered to the training participants and their employees. This was seen as a way to customise the program.

Case Study Two: In this case, special assignments were built in from the very beginning by VET P2 as the client; IP2, thought it did not have access to training packages which met their recent industry needs in electrical and instrumentation.

Case Study Three: For the vocational schoolteachers who were training in science teaching and learning methodology, customisation occurred because the teachers were trained by VET P3 in using an assortment of teaching

methods. This approach suits this group because they need more than one method to transfer knowledge to the students.

Case Study Four: IP4, a large international company, worked with a variety of VET providers in order to guarantee diversity of trainers and teaching styles. IP4 believed that this type of customisation effort provided a greater range of teaching methods and trainer–learner dynamics and, as a consequence, led to increased levels of motivation for their staff to attend training.

Another important issue that helps make such partnerships effective is that the VET providers and industry partners are located in the same geographical area. This co-location has an impact upon provincial economies with all industries committed to using local VET providers. In other words, local VET providers are preferred by local industries.

At the same time, VET providers also indicated they felt an obligation to meet the training needs of particular local industries. Each partner felt that location played a key role in the overall collaborative process.

In their review of educational institution and industry links and partnerships Melville and Hawke (2002) examine partnership outcomes in terms of the initiating source, the purpose of the partnership, the location of the learning, and the management or leadership of the program. It is suggested that the quality or nature of those three factors, including location, contributes to the level of success in outcomes of partnerships.

VET P2 provided some insights into training relationships with local industry in regional locations, including why a choice of regional over metropolitan VET providers was made. They pointed out that one of the administrators of IP2 wanted to increase the skills of employees without having to send them for training away from the company's location. Finally, all four VET providers stated that the collaboration gave their training staff in the

provinces the opportunity to improve their levels of industry knowledge and skills.

Administrative management

This study found that when a partnership has matured to a stage where administrative arrangements are in place, the partners had confidence in each other and the business of the association could progress. This ‘harvesting phase’ is where the association enjoys its accomplishments and benefits from the efforts to get administrative arrangements right (Mulcahy 2003).

Administrative skills, business skills and operational skills were all identified as essential to, and a significant part of, the role of frontline management in VET. A report on managers in the Australian VET context identified management strategy as an essential, overarching element for successful management and leadership (Mulcahy 2003). Moreover Mulcahy (2003, p. 88) concludes that frontline managers of both VET providers and industry not only have a dual focus but perform a dual role: ‘one part strategic and the other part operational’.

One of the first surprises that emerged from this study for the researcher was the narrow band of persons and positions, exclusively from upper level leadership, who proved to be the main drivers for the establishment of partnerships. Across all the partnerships studied it was mostly those persons in administrative roles who were mentioned as the initiators. According to an upper level administrator of one VET provider:

You know, one thing I will say, our director, and this is why I think we have been successful...remember, he started this, he wanted this. I never went to him on any project where he did not give his full support, even if it meant spending money, you know,...it came from the top down and that’s why I think a lot of things fell into place (VET P4, Interviewee, 2011).

In interview, both VET providers and industry partners stated they used a range of administrative mechanisms to increase the intensity of

communication, which in turn build levels of confidence between partners. As one VET administrator described:

There were a variety of approaches to the administrative management of the partnership with our industry partner. For example the regular meeting held quarterly or each semester helped to raise issues and evaluate what is happening. There was also regular communication by telephone and teleconference if needed. (VET P1, Interviewee, 2011).

Moreover, VET providers and industry partners highlighted the need for sustainability and continuous improvement in order to provide better quality training delivery. Both pointed to the important role of a steering committee. They believed that a steering committee worked well and helped to facilitate the exchange of ideas, including sharing ideas about what the training program aimed to achieve, and the tasks and obligations needed to underpin that achievement. As soon as the partnerships were operating, VET providers and industry partners reported that the problems caused by poor and onerous administrative management were overcome quite quickly once the ‘actualities of managing the partnership hit us. This was especially so for the VET provider’.

The function of steering committees in many institutions has given VET providers a clear connection to information about the industry partner, and evolving training requirements. This also provided access to key persons and decision makers who had the authority to authorise the required training. Having persons who are decision makers on such committees was vital to enable decisions to be made quickly. At the same time, VET providers have utilised input from the industry partner to help in the selection of training staff, especially where they are trying to build new expertise in a teaching department.

Additionally, steering committee membership provided a regular commentary about the performance of the institution and also helped identify potential training opportunities. Steering committees worked best when they

were able to discuss issues frankly with each other and were able to raise issues at any time.

Throughout the creation and developmental phases of the relationship a key person from the academic institution's perspective was a partnership specialist or 'champion'. The role of the partnership champion for VET providers was significant. In all four cases the institution's responsiveness to the opportunity manifested itself early in the partnership's progress through the emergence of this academic specialist who acted in a role that, in some instances, extended his/her functional responsibilities.

In all four cases, the partnership champion spearheaded opportunity within the institution by securing senior level support for such opportunity and ensuring its implementation. While the internal challenges facing VET providers varied across cases, there is a similarity in the champion role: a doggedly focused and enthusiastic leader who personally identifies with the opportunity and is committed to seeing it come for life.

Watkins (2004) and Santoro and Chakrabarti (1999) point to the importance of the key person's role in the start-up phase of a partnership with industry. The champion should help navigate the organisation into this new or unfamiliar role with their industry partner. In two of the cases examined, the key person was at senior administrative level with a position title (e.g. partner management coordinator, vice director of external affairs or head of department). In circumstances where the key person, or champion, does not have access to the decision making processes within the institution, he or she must gain the support of a senior administrator.

In all four cases where partnering is seen as a normal event, there was a clear desire on the institution's part to chase collaborations if they seem to be consistent with the institution's goals. Essentially, there seems to be an expectation in these cases that the VET provider's manager pursues and champions partnerships as part of their responsibilities. In such an

institutional context, the key person in the partnership did not face uncertainty regarding the support of the institution's senior administrative leadership.

The case of VET P3 provides a deeper understanding of the role of the partnership champion. In this case, the champion faced significant resistance from the administration both inside his own institution and the partner institution. As the program evolved from the training courses to the request to offer a vendor certification program, the VET P3 champion encountered increasingly uncertain support from key constituencies within his institution to source international vendors who would be able to conduct the certification program for vocational schoolteachers undertaking the training.

Partnership champions need to establish an internal network of support among senior leaders. In this situation, academic responsiveness was feasible only after consensus regarding the viability of the opportunity was achieved. A key person who happened to be the VET P3 partnership champion admits:

The main challenge was at the beginning by preparing the motivation and the strength to avoid failure by keep trying to overcome the barriers...however, even that wasn't too serious once I saw that both my director and other senior administrative staff ...were supportive of it, I didn't worry about getting stern warning (VET P3, Interviewee, 2011).

The case studies show that an effective key person as a partnership champion understands the internal culture in which they work. In this respect, it is the unwritten rules and ways of functioning (Kezar 2005) that seem to be most understood by this key person in the partnership. In VET P3's case, the partnership champion effectively enlisted the support of senior academic managers, while chasing the formal approval procedures. Correspondingly, the limits within which the key person in VET P1, VET P2 and VET P4 needed to operate were clear and, as such, they pursued opportunities aligned with the institution's entrepreneurial culture. In all four cases, the partnership champion nurtured collaboration within the institution. In every case, whilst

the breadth of the respective programs determined the scale of participation needed around the institution, cross functional relationships were important.

Partnerships appear from these four cases to exist whether or not the institution as a whole has embraced the collaboration. These cases underscore that partnerships usually involve specific groups within the larger institution. If an enthusiasm for the partnership is encouraged by the institution's administrators, it provides the opportunities for cross functional teams to develop and be effective. In cases where staff from other academic units were involved, encouragement for partnership was apparent from the respective administrative leadership. Kezar (2005) concludes that a leader's involvement in acting as a role model is significant in fostering a collaborative culture.

VET providers and industry partners also share administrative management. In interviews industry partners mainly expressed their satisfaction with their VET provider partners and how they had managed the administrative processes during the training process. A VET administrator stated:

In administrative management, we have been supported by our own staff from the partnership division. We have a secretary, a financial person and other staff in the administration unit who serve the entire training process. These functions including monitoring training participants' attendance, staff monitoring, training preparation and deal with any possible shortcomings during the training process. In some partnerships we shared our administrative management with the industry partner. Moreover we did outsource some of the partnership functions that we can't cover (VET P3, Interviewee, 2011).

The interviews with key participants suggest that a great deal of administrative effort was being expended by both the VET provider and industry partners in order to progress the training program. As one company manager mentioned:

The improvement in administrative arrangements helped us obtain rapid access to quality results since VET provider as our partner had the experience to identify the training needs and to improve the quality of company in-house training (IP2, Interviewee, 2011).

Some employers suggested there were quite considerable levels of administrative inconsistency in their service delivery within some VET providers. The level of bureaucracy, including administrative and financial management procedures of public VET providers, are sometimes recognised as difficult areas for industry to comprehend. On occasion, administrative inefficiency also slows their response to industry needs. It was problems such as these that led to the view that some companies do not use public VET providers like polytechnics. Instead, they turn to private training providers because they believe they will obtain a more direct and personal service and greater responsiveness. As one employer mentioned:

Getting a certificate of competency for our employees is pretty hard actually, so... that's why a lot of companies prefer to use other training providers because they provide a much more personalised service. The person you are talking to is the person that issues the certificate. With public VET providers sometimes that's not the case. The person that comes to deliver training does that delivery. However, someone else generates the material, someone else puts the data into their computer. The training facilitator cannot do that and they don't have access to print out certificates, so that's what's hard.

And to be honest the service we get from those private training providers who can provide any one of a number of types of management, supervisory or human resource type training [means that] the service we get is much better. They are much more willing to do what we want, rather than us constantly having to try and get what we want (IP1, Interviewee, 2011).

One VET provider asserted:

We are aware that our management structure for decision making needs improvement and empowerment, and it also needs to be a little different. We have bureaucratic processes that need to be followed in the institution so for any decision to be made it needs to progress through the necessary levels of bureaucracy. Therefore the decision making is really slow. Our desire is to make the decision more rapid and without any delay through an appointed person who is responsible for the decision. This empowerment will not only let us to meet industry requirements without delay, but also would increase our trustworthiness (VET P1, Interviewee, 2011).

The responsiveness of VET providers was demonstrated by the ability of academic staff to deliver on commitments to industry partners and to give industry confidence in their ability to do so. It is that ownership and ability to

translate that ownership into institutional performance that characterises each case study in this research. In all four cases the industry partner had a significant opportunity to drive the program timelines and schedule of deliverables. Responding to these requirements, while challenging, was a shared priority for administrative arrangements for VET providers.

Return on training investment

‘Returns on training investments are nearly always positive and can be very high’ (NCVER 2001, p. 1). The mission of many companies is to provide a return on investment, make shareholder profit, sustain the workforce, and to compete successfully in their given market. It is broadly recognised that investment in training by companies is important, if Indonesian firms are to gain the status of high performance enterprises. The variety of suitable training programs and the calculation of returns from such programs are equally essential inputs into the decision-making procedures of successful enterprises. Indeed, the returns from training are increased when training programs are incorporated within the whole corporate plan for the enterprise (Figgis et al. 2001).

VET providers deem that returns on training investment have a significant impact including better outcomes for the training program, increased productivity for the business and an improved competitive edge. In the survey, respondents from VET providers were asked to explain what they believed were the benefits of the partnership to their industry partner. By forming a partnership, especially a training partnership with a VET provider, corporations can take advantage of the institutions’ core competencies and contribute to the economic development of the community simultaneously.

Moreover, VET providers identified the following benefits training brought to the industry partner in the survey:

Professional development for workers, including access to improved human resource competencies and reduced competency gaps, professional

certification for employees by national profession certification bodies e.g. LPJKN (National Construction Services Development Board) in welding; enhanced personnel proficiency, improved comprehension and self-confidence, and improved career pathways for employees (*Survey, 2011*).

Improvement in customer service by the company, including improvement in recognising and monitoring client needs in order to satisfy customers and meet client need (*Survey, 2011*).

Awareness for the industry partners of improvements in national education through recruiting more alumni and establishing more networks with higher education institutions (*Survey, 2011*).

An improvement of the management system in the training division supported by qualified individuals in the institution to access for future partnerships (*Survey, 2011*).

Improved training productivity and training results for industry including being able to concentrate on their main business (*Survey, 2011*).

Business partners were optimistic in interviews about the returns from training. All four industry partners realised significant improved efficiencies and obtained benefits and a return on their training investment throughout the organisation. As one senior manager pointed out:

With highly skilled people that knew how to do things and understand how to configure or repair a piece of equipment, this company was able to operate with a lot less...craftsmen and...operators than we had in the past. So, the cost savings were significant. We had highly skilled people, it didn't take as many of them to do the work, and they were capable of learning [instrumentation]. We didn't have as many employees and although we paid them more per hour, we still came out ahead because we had highly skilled people! (IP2, Interviewee, 2011)

Another employer noted the value of new recruitment for the company:

There is financial benefit for our company through new recruitment of students graduating from VET P1 and our training cost is definitely down. In terms of training, the participants who had undertaken the enrichment

programs we offered while they were studying at their educational institution were well prepared for the new job as soon as they were recruited. Accordingly, our training cost has become lower since they don't need training for their new job anymore (IP1, Interviewee, 2011).

The non-financial benefits described by VET providers in the survey included:

An opportunity for the students to participate in certification of competence which accredited their studies either nationally or internationally at low cost. Almost all of the students got good jobs (*Survey, 2011*).

The new knowledge, ideas, encouragement and better development in problem solving regarding issues in training programs and interactive learning (*Survey, 2011*).

Lower institutional operating costs and the optimisation of the skills needed in industry. Also, greater understanding and knowledge for the VET provider staff in the training division in running the training program with the business partner and the importance of having business mind-set (*Survey, 2011*).

Another VET provider administrator pointed to the high level of employability students attained after joining the training program, created in collaboration between the institution and the industry partner. As a representative of the industry partner pointed out:

No one who had completed the training program went unemployed. Everyone that came to the campus, attended this program, and got their certificates, got higher paying jobs. Therefore, a high level of employability was achieved and this met the needs of employers wanting to retain highly trained employees (IP1, Interviewee, 2011).

Participation in this training changed the VET provider culture. According to one administrator of a VET provider:

And that's the other thing this kind of partnership leads to. It leads to the transformation of the institution itself. We've learned a tremendous amount from all this training. It would be difficult to get this kind of transformation

without having support from our industry partner (VET P4, Interviewee, 2011).

Returns on training investment take many forms. These returns are not always in the form of increases in employee productivity or profitability, which have been the usual variables that researchers in this area were concerned to measure. Measuring training impact to determine results will be beneficial to the organisation and disclose value to the stakeholder.

Training has multiple results. Some are related to productivity, others to staff benefits and the growth of human capital that will benefit different elements of the organisation in different ways (Brinkerhoff & Gill 1994, p. 10). Bannikoff (1998) notes that providing opportunities for updating skills was a fundamental purpose of the VET system. All staff members of VET providers, including teaching staff, are also essential to successful educational partnerships (Bray & Scalzo 2005; Spangler 2002).

As VET provider respondents to the survey indicated, one of the main advantages for their institution from the collaborations with their industry partner was updating the skills, knowledge and experience of teaching and training staff in modern business practices. Accordingly, VET providers believed that it would make their teaching and training staff more employable, not only in the VET sector, but outside the sector as well. These were among the returns they derived from their investment in the partnership.

In all four cases, all staff interviewed, including the teaching staff in VET providers, were motivated from the outset to participate in training partnerships with industry. These partnerships also enabled staff to be paid more and offered them a chance to work with adult and other non-traditional students (company employees) in a corporate environment. Above all, the opportunity to be employed outside the VET sector gave them valuable experiences and exposure to the national and international marketplace. One VET provider administrator, in commenting on return on training investment, noted:

Skill improvement for our staff and an exposure to current industry experience and knowledge gained through partnership with industry partner are considered very important and significant. They (the VET provider's staff) found the upgrading of their skills very useful for improving their delivery as well as their understanding of the needs of a commercial business (VET P4, Interviewee, 2011).

One VET provider, VET P1, had a partnership program: a so-called 'enrichment program' with its industry partner. In this case the program allowed both their students and staff to work and train with new technology in industry to develop skills. It was possible for staff to transfer that knowledge by developing formal courses at their institution and, as a result, enabling qualifications to be developed in a new area of technology.

The various returns on training investment also emerged in the firms working with VET providers in a training partnership. One of the senior managers in industry described the returns in interview:

As a matter of fact, returns can come in the form of a number of measures including higher levels of value added activities as a result of higher levels of skill, more flexibility among workers who can carry out a range of tasks. It also can lessen overhead costs to the firm, for example more cost-effective use of existing facilities, lesser consumable expenditures and reduced human resource expenses. Finally, it provides greater capacity to innovate in adopting new technology and introducing better forms of work organisation (IP 1, Interviewee, 2011).

The statements by both VET providers and industry partners were echoed by another manager at a different site where a training partnership with VET provider has existed for some time. His "personal philosophy" was, simply stated, "Appreciate your people. Partner with people to assist you [to] be successful and try to keep your business in business." He spoke often about return on investment benefits for the company and the necessity of employee training to keep pace with the marketplace:

We see how fast technology is changing, so you have to be adaptable to that change... you have to stay updated yourself, and that's how we do it, through our people. And those partnerships allow us to do that" (IP 4, Interviewee, 2011).

The quotes regarding returns on training investment in this research show that today's corporations and VET providers are seeking to maximise their return on investment including funds spent on employee and staff development. The days of offering benefits solely because it added value to the individual are largely gone. Now, there is an increased emphasis on showing the value of any employee and staff development activities regardless of cost and whether they are the industry partner or the VET provider.

6.2.3 People issues

The third research question guiding this research was “what abilities are required by VET providers to develop and maintain partnerships?”

The following section discusses the people issues in training partnerships identified by participants. The issues include building trust, communication skills and how the relationship is managed in the training partnership.

Building trust and sustained relationships

The complexities involved in forming and maintaining a partnership require a strong commitment to the partnership and a strong relationship among participants. Dhillon (2007) emphasises the importance of social relationships involved in the success of partnerships both in terms of shared values and trust and a commitment to working together. The ability to re-evaluate the current status of the organisation on the basis of what the partnership should be accomplishing is a strong feature in assuring viability and continuity of the partnership.

Hutt et al. (2000) and Sako and Helper (1998) identify important characteristics of trusting relationships as follows:

- open and prompt communication
- frequent and timely interactions and exchange of information

- accurate feedback on each partner's actions
- the sharing of information which can facilitate co-ordination between organisations.

Network theory (Thorelli 2006) views organisations as nodes in a network. These networks emerge out of the need to exchange resources. Forms of collaboration that apply to this network approach are based not only on economic motivations, but also on power and trust. High levels of trust make a significant contribution to successful training partnerships. Thus viewing partnerships as networks allows researchers to gain valuable knowledge about theoretical and practical issues like relationships, building trust, and familiarity in building partnerships.

In relation to partnership sustainability, all four VET providers and their industry partners interviewed agreed that building trust was important. They also talked about the high levels of mutual trust needed to form a successful partnership. All respondents emphasised the importance of establishing a strong relationship through ongoing discussion.

One of the industry managers commented on the goal of “trying to establish a relationship, one of mutual trust that is based on a set of very specific desired outcomes,” and that the next step was “the phase that [is] built on that trust, which says, we are really committed to this.” Furthermore, as one manager noted:

Initial contact is obviously important. Lots of discussions as to what kind of work they could bring to the table, what kind of capabilities they had, personnel they had available, various things like that. Then, the final steps were usually some sort of document to make the agreement binding (IP 3, Interviewee, 2011).

Moreover, high levels of trust were quoted in interviews from both VET providers and industry partners as a basic element in building partnerships. VET provider staff offer continuous support to the industry partner. and make effort in understanding their ability to present training in different areas

and to be more active in learning especially in administration management and handling the upcoming progress of the partnership.

In relation to maintaining the partnership, one VET administrator believed it all came down to “building trust,” especially when industry needs were about range of structural and policy based limitations that imposed upon training.

This is our current process; however, for you we would make this change to be able to meet your need. ...helping them understand that we are going to do everything we can to meet the specific needs of their employees and their employee training. However, when it came to a point where we had to push back a little ..., then it was easier to come to them and say, “well, you know, we do really need to change this piece of it because these are our processes that we cannot change because of government policy” or whatever it was that may be a problem at that particular time. And then, you know, developing the trust at the front end and demonstrating to them (the industry partner) that we can change, and when we could not change, it was much easier to be able to convince them that “okay, let’s think about how we might be able to change it this way” to be able to meet their needs... to meet our needs (VET P2, Interviewee, 2011).

One of industry partners summarised the situation:

If there are concerns that arise where we have some anxieties about the content of the training and the training delivery, we are very confident to say that things should be changed because of the trusting spirit of our liaison and being able to be so open. Due to the nature of the relationship, we can talk about it with openness, and this represents the quality of the trust and loyalty we have in one another (IP1, Interviewee, 2011).

Thus, trust is the expectation that performance will match expectations. The processes that build (or reduce) trust are the events, transactions, activities or partnering processes on which partnering expectations are based. As one of the VET provider supervisors said:

We keep our promises, we deliver the training on time, and we provide good customer service. These kinds of activities help to build trust between the two of us (VET P3, Interviewee, 2011).

According to Yoder and Ham (1999), partnerships are characterised by their durability, flexibility and cooperation; they are long-term relationships requiring a level of intimacy and interaction leading to trust and a mutual

commitment to common goals. Arend (2004) contends that companies consider partnerships and alliances as merely the first step towards achieving the company's goals, and thus establish selection policies consistent with long-term objectives in developing a training partnership with a VET provider.

In the interviews employers noted they would like to build a long-term liaison. They commented that the most successful partnerships they cultivated were frequently those with VET providers whose intention it was to be alert to their requirements. These providers also took a long-term approach to expanding their abilities to work with industry. Both VET providers and industry partners work towards a long-term training partnership.

Such collaborations were active and ongoing, frequently running for a minimum of approximately three years' duration. At some point in this period, with levels of trust building, VET providers with the best performance were encouraged to become more integrated at all levels with the industry partner, and to increase their influence through the initiation of other forms of training.

As one VET provider administrator stated:

Industry, like IP3, wanted a trusted partner that provided needed expertise, the ability to compete and win work, and provide an increase in industry capabilities. When the objective of the partnership was achieved and with all things being equal, they still come back to our relationship because that relationship was formulated based on trust, honesty and was long-term (VET P3, Interviewee, 2011).

Another comment from an industry partner regarding their preference for long-term training partnerships suggested that:

Continuing collaborations for a long period avoid unnecessary use of time and expenditure. Therefore, we have a preference in long-term collaborations. It's not necessary for partners to create new partnership program when one already exists. By sustaining the successful relationship with the same partner we have been familiar with, we (industry) will be more cost-effective and

consume less time. In the end, by sustaining this partnership we could eliminate the obstacles and this makes it easier and more successful by having fewer people to do business with (IP 1, Interviewee, 2011).

Falk (2000) argues that one characteristics of an effective VET partnership is the continuity of associations. After a certain period of time, this continuity leads to more positive VET results through constant communication and trust building.

Communication skills and relationship management

Communication is important on so many levels, perhaps even more so when you move across cultures within institutions, across organisations and within culturally diverse countries. The importance of personal relationships has already been discussed in this thesis, as has the importance of having a designated person associated with the partnership. Callan and Ashworth (2004) state that a major foundation of trust is honest and frequent communication needed for successful training partnerships. As Mowen and Kerstetter (2006) note, the ingredients of successful partnerships often include clearly defined missions, open and regular communication, strong leaders and trusting interpersonal relationships.

The most successful alliances are manifested by high levels of association between the two institutions that rest principally on professional relationships and communication involving people in strategic positions from both sides of the partnership (Callan & Ashworth 2004). Moreover, Callan and Ashworth (2004) add that both VET providers and their industry partners were interested in sharing resources and in discussing their existing and growing business goals by utilising each other's contacts.

Based on interviews it is clear that all four VET providers and their industry partners share the same opinions. They noted that when they shared in open and honest communication, they felt there was a 'true partnership'. Moreover, regular two-way communication sustained the quality of

partnerships and they devoted considerable attention to maintaining quality communication. Continuous communication complemented the establishment and sustainability of the partnership. One of the VET administrators commented that partners need to be “aware of what the expectations are and what the responsibilities are” in establishing the partnership. This same administrator also posited the importance of communication, which “leads to setting clear expectations.”

Mohr and Spekman (2006) maintain that mutual sharing allows both institutions to become familiar with the strategic selections they face. Such frankness is often not usual for management, but this should be built into its communication approaches and accommodated within its autonomous decision making to enhance the quality of the partnership. One of the VET provider administrators pointed to the importance of competency in communication:

When we select people for alliances what is very important is their interpersonal skills. This is mainly in team building, communication and relationship building skills. We have a project manager in the training partnership who is confident and determined to achieve the project outcomes. Our project manager has the ability to inspire both his team members and our client team members (VET P2, Interviewee, 2011).

In examining the quality of communication, Mohr and Spekman (2006) argue that successful collaboration between partners is intended to demonstrate more information sharing, more involvement in planning and goal setting and a higher level of communication.

One of the VET providers suggested that various aspects of ‘communication quality’ were related to management structure of the alliance:

To be able to monitor the performance of the ongoing partnership project, you need to have a good management system in place and you also need to have reward systems in place to encourage the partners’ commitment to the end goals of the partnership. As I mentioned communication skills are essential, but also it is the method of communication that is important. In other words, they have to know how to communicate effectively. It is the quality of communication which is crucial (VET P4, Interviewee, 2011).

Open and ongoing communication and senior leaders demonstrating their commitment to the partnership were factors requiring consideration when establishing and maintaining the partnership. Another VET provider stated:

The continuity of open and regular communication after we start our work for the customer is very critical. There is always a fear that after establishing all the contractual agreements in the partnership, all the meetings, all the relationship building that occurs prior to finalising the agreement, that all the key players will go their different ways (VET P1, Interviewee, 2011).

Both VET providers and industry partners believed the best and most lasting partnership was the result of excellence in communication and maintaining that communication. In this case, trust is seen as a key antecedent to quality communication. As one of the VET managers stated:

When we trust our partner, we rely on them to provide accurate and timely information about their requirements. We want this information in order that we can meet their specific requirements. If the information provided is not accurate or timely, then we will not be able to meet their expectations. We also expect them to pay for what they receive. This failure could result in the relationship disassembling [sic]. Any critical failure in trust can disassemble [sic] the relationship, either from the client's side or from ours (VET P2, Interviewee, 2011).

A clear and concise statement from VET providers and industry partners in relation to partnership communication was that “open and timely communication is essential for success.”

Effective working relationships and strong communication skills drive successful partnerships. The four partnerships underscore the significance of this interpersonal component. At the centre of these partnerships are people working together, communicating and forging relationships. As such, interpersonal dynamics matter. Kanter (1994) observes partnerships from this perspective, positing that the partnerships were, at their core, built upon relationships between people. Similarly, the four cases in this study reflect an emphasis on human connections as an important factor in sustaining

partnerships. In all cases, the respective partners refer to people when describing both positive and negative aspects of the partnerships.

Table 6.6 shows the rating by respondents from VET providers of how effectively VET provider staff work in several specific areas of partnering.

Table 6.6: VET provider staff effectiveness in partnering²⁷

Per cent of respondents rating their staff as effective in partnering (n=14)	No. (%)
Building personal relationships with the industry partner	12 (85.7)
Setting shared goals with the industry partner	10 (71.4)
Carrying out training needs analysis	9 (64.3)
Showing real interest in partners' proposals and concerns	9 (64.3)
Provide information and regular feedback to the institution about the performance of partnerships that they manage	9 (64.3)
Negotiation skills	8 (57.1)
Marketing what we can do	7 (50)
Legal and contractual arrangements	7 (50)
Employer liaison	6 (42.9)
Project management	6 (42.9)
Winning the job	6 (42.9)
Identifying and managing risk in the partnership	6 (42.9)

²⁷ Table 6.6 is based on survey question 22 in Appendix D.

As shown in Table 6.6 above, most VET provider staff in the survey (12/14, 85.7%) believed their staff have good skills in building relationships with their business partner, setting shared objectives with the industry partner (10/14, 71.4%), carrying out training needs analysis (9/14, 64.3%), showing a real interest in the partner's proposals and concerns (64.3%), and providing information and regular feedback to the institution about the performance of partnerships that they manage (64.3%). Less than half of the VET provider staff in the survey (6/14, 42.9%) believe that their staff working effectively in identifying and managing risks, however.

The importance of carrying out training needs analysis or assessment (TNA) was concluded by VET provider staff (responding to the survey) to be the third one of highest rating and was supported by industry partners in interviews. Many studies found there are more beneficial roles for TNA. Brown (2002) describes four main roles. The first role is to identify specific organisational problems that will guide training direction. Even though individual departments recommend a specific training program to an HRD department, no one really knows which kind of specific training program solves specific problems. Therefore, TNA should be used initially to identify specific training issues in an organisation.

The second role is to obtain management support for the training program. In general, it is not easy for managers to see the actual impact of training programs on their department's or organisation's performance. TNA can help managers identify the possible results of a training program. The third role is to generate data for evaluation. Since TNA helps set specific goals for the training programs, those goals can be the criteria used when the results of training programs are evaluated. Therefore, TNA can also serve as a basis for evaluating the effectiveness of the training program.

According to Brown (2002), the fourth role of TNA is to help analyse the costs and benefits of training. This analysis can identify potential benefits

from specific training by discrepancy analysis in performance and also the potential costs of conducting training. The training costs and benefits analysis assist top management in making decisions to invest in training, based on identified needs, and to obtain estimates of the return to business from their training investment.

Hence, TNA was seen by VET providers and industry as a major tool to secure and build the relationship.

One employer commented on and appraised their VET provider partner regarding a TNA that had been carried out at their company, stating:

We are satisfied with the performance of our VET provider partner which leads us in this partnership. They were very responsive by providing us with all the information we required on the basis of a training need analysis they did prior to the training. That improved our confidence in being able to work together with them and made us start the training straight away (IP2, Interviewee, 2011).

The performance of VET provider staff seems to be exhibited most clearly when the partnership is appreciating the visible support, effective communication and commitment. This is demonstrated by the ways in which respondents speak with enthusiasm about the partnership and about their sense of ownership. This was observed in discussions with all four VET provider leaders, teachers and corporate partnership planners. On the other hand, when collaboration appears to be experiencing some ambiguity in corporate commitment, and when there is a lack of communication and corporate leadership, the collaboration appears to dissolve into more of a vendor agreement. This was the case in the partnership between VET P3 and IP3.

6.2.4 Partnership performance

Dowling, Powell and Glendinning (2004) explain the elements of successful partnerships in some depth and suggested performance measures should be used on a continuous basis to chart progress and success. They identified key

performance measures to include: benefits to all partners involved, consequences if the partnership should end, long- and short- term advantages, and the cost effectiveness of maintaining the partnership.

It is critical to see how well managers in human resource departments or training departments in industry understand the potential of training for organisational performance improvement, especially partnership performance. All four VET providers were pleased with the performance of their partnerships.

Respondents from VET providers were invited to scale the performance of their present training partnerships in the survey. The results are presented in Table 6.7. The respondents were also given the opportunity to describe this performance more extensively in interviews.

Table 6.7: VET providers' performance in collaborating with industry (perceived levels of satisfaction)²⁸

Percent of respondents who agree (n=14)	No. (%)
The quality of our communication with the industry partner	13 (92.9)
Our flexibility with staffing arrangements	12 (85.7)
Our openness to experimentation	11 (78.6)
The financial returns to us in the longer term	11 (78.6)
Our ability to establish trust	9 (64.3)
The commitment shown by our staff to make the partnerships a success	9 (64.3)
Our success in customising the training	9 (64.3)
Our flexibility in providing different delivery modes for the training	8 (57.1)
Our willingness to make changes to the nature of the off-the-job training	8 (57.1)
Our application of non-financial measures of the success of the partnering	7 (50.0)
Our level of planning within the partnership	7 (50.0)
Our willingness to adopt a long-term perspective in judging the success of the partnership	7 (50.0)
Our willingness to customise training to meet industry needs	6 (42.9)
The administrative arrangements we put place to manage the day-to-day issues arising in such partnerships	6 (42.9)
The financial returns to us to date	5 (35.7)

²⁸ Table 6.7 is based on survey question 15 in Appendix D.

Our application of financial measures to determine the success of the partnering	4 (28.6)
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Table 6.7 shows that the consistency and quality of communication by VET providers with industry partners was mentioned most frequently as necessary and dependable performance in each partnership (13/14, 92.9%). Flexibility in staffing arrangements (12/14, 85.7%) and openness to experimentation (11/14, 78.6%) to achieve better results in training partnerships were also rated highly.

Lower ratings of satisfaction were found for financial returns (5/14, 35.7%), as well as the application of financial and non-financial measures to determine the success of the collaboration (4/14, 28.6%).

Based on similar questions, VET providers also rated their respective business associates' performance as shown in Table 6.8.

Table 6.8: Industry partners' performance (perceived levels of satisfaction)²⁹

Percent of VET respondents rating themselves as satisfied with their industry partner (n=14)	No. (%)
Their ability to establish trust with us	12 (85.7)
The quality of their communication with us	11 (78.6)
The commitment shown by their staff to make such partnerships a success	11 (78.6)
Their openness to experimentation with the training model	10 (71.4)
Their willingness to customise the training	9 (64.3)
The financial returns to them in the longer term	9 (64.3)
Their level of planning within the partnership	9 (64.3)
Their success in customising the training on the job	8 (57.1)
Willingness to make changes to the nature of the on-the-job training	8 (57.1)
Their willingness to adopt a long-term perspective in judging the success of the partnership	7 (50.0)
The administrative managements they put place to manage the day-to-day issues arising in such partnerships	7 (50.0)
Their flexibility with staffing arrangements	6 (42.9)
Their flexibility in providing different delivery modes for the training	6 (42.9)
Their application of financial measures to determine the success of the partnering	5 (35.7)
Their application of non-financial measures of the success of the partnering	5 (35.7)
The financial returns to them to date	4 (28.6)

²⁹ Table 6.8 is based on survey question 18 in Appendix D.

Table 6.8 shows VET providers' perceived levels of satisfaction with their respective industry partners. Higher ratings related to their ability to build a trusting relationship (12/14, 85.7%), communication quality (11/14, 78.6%), commitment of industry to making the partnership successful (11/14, 78.6%), and openness to experiment with the training model within the partnerships (10/14, 71.4%). Lower ratings were given to industry partners on their application of financial and non-financial measures to determine the success of partnering (5/14, 35.7%), and the financial returns to them to date (4/14, 28.6%).

The building of good quality communication and social interaction between VET providers and industry partners is an important contributor to the longevity of the partnership. As one VET provider manager explains:

Well, we usually precede our board meetings with our industry partner with a dinner. Our teachers and staff, we have a monthly meeting and not everybody can join because, again, it's a matter of commitments and availability, so we make it available on-line as well as on the ground and when the groups come together on the ground, there is lunch. You know, and that may sound simplistic, but we've done that periodically for all these years (VET P4, Interviewee, 2011).

One industry manager echoes this feeling:

As you know, way back at the beginning of this partnership, we put a lot of time into developing the relationships here. Again, if it ever comes to an end, I think people are going to say this was a very good relationship. I hope so (IP 1, Interviewee, 2011).

The four industry partners also expressed their satisfaction with the results of their training partnerships in interview. They were satisfied with the capability of VET providers to deliver good quality industry training that was flexible, customised, met industry needs and was open to regular review.

6.3 Influence of business series and adjustments on partnerships

Currie et al. (1996) list a number of considerations necessary in developing partnerships, if those partnerships and links are to be beneficial to both industry and educational institutions. These included an understanding of the background environment (e.g. track record and reputation, location of the partnerships), as in times of continuing uncertainty business needs to see value for its investment of time and money.

At the same time, educators increasingly grapple with growing community expectations over formal curriculum, social education and professional accountability. And establishing a link to industry by fulfilling industry needs in order to achieve desired outcomes for both parties. There should be a formal policy framework and this framework should be part of each organisation's planning in order to integrate the partnership so it is linked to the culture of both parties.

In the context of vocational education and training links, Currie et al. (1996) propose the development of local hubs that would comprise consortia of local interests (e.g. representatives of the public and private sector industry, schools, teachers, universities and VET providers, teacher's associations, education unions and appropriate organisations who deliver relevant education). This structure would have the potential to develop a broader strategy across a range of industries in educational institution/industry links and partnerships.

The cross-case analysis from four case studies provided clear results of the benefits and challenges that emerged in training partnerships between VET P1-4 and IP1-4, as shown in Table 6.9.

Table 6.9: Partnership benefits and challenges that emerged

Benefits (O)	Challenges (X)	VET P1 – IP1		VET P2 – IP2		VET P3 – IP3		VET P4 – IP4	
		O	X	O	X	O	X	O	X
• Practical knowledge for students/VET staff	• Curriculum development	O	X	O				O	
• Employee recruitment	• Partnerships set up and contract	O	X				X		
• Company training cost reduction	• Flexibility and customisation	O	X		X		X		X
• Employees retention	• Genuine communication, trust and respect		X	O	X		X		X
• Reputation	• Policy and total service			O					
• Skills improvement	• Training needs assessment			O	X			O	X
• International recognition (certification)	• Impact of globalisation and working culture				X	O	X		X
• Institutional development	• Transparency, key person, and succession planning						X	O	
• Generating income	• Partnership set-up, contract, and advisory process	O		O		O		O	
• Upskilling staff/employees	• Industry knowledge							O	X
• Obtaining latest technology	• Resources				X			O	

The four case studies revealed that the goals and strategic importance of the partnerships may evolve over time. As it is, the responsiveness of the vocational education institution to changing business requirements is essential. This can be seen in all four cases in the above table and is

supported by the researcher's discussions with program managers. Programs are specific to industry and strongly influenced by the business partner. However, the level to which a changing company environment affects the partnership varies across these four cases.

On some occasions, changes in the corporation's commitment and supporting policies can negatively impact VET providers including student participation. This situation was found in the VET P2 and IP2 partnership. This case reveals both a change in the strategic significance of the partnership and in day-to-day management for the industry partner. In this situation, a guiding focus at the outset was attraction and retention of staff in the area of technology. When the requirement to recruit talent decreased, the reason for the program was viewed as less of an attraction and retention tool, and viewed more as an employee benefit for personal skill building or upgrading. In short, the emphasis of the partnership changed over time.

The institutional culture, lack of interpersonal skill in training participants and apparent lack of management support for the partnership at IP2 reinforces the view that organisational commitment, communication and management are essential to maintain good working relationships (Austin & Peter 2000; Kanter 1994). In contrast, for VET P1 and IP1 (undertaking the partnership known as the 'enrichment program' in power generation), changes in the industry have provided opportunities for VET P1 to grow their involvement with the industry partner including student participation.

The researcher felt there was a lack of clarity regarding the partnership responsibility at IP3. In attempting to identify and contact the current IP3 partnership manager, the researcher found there was no available person at IP3 who could discuss the partnership at the time the research was conducted. In contrast, in the partnership between VET P4 and IP4, changes in a large international company such as IP4 have provided opportunities for VET P4 to grow their involvement with the corporation.

There were also changes in institutional policies regarding course timetabling at one VET provider during partner collaboration. These were most prominent in the ‘enrichment program’ partnership between VET P1 and IP1. The adjustments of the schedule for this program affected the financial and economic environment which challenged the academic institutions. For VET providers as the educational partners, all of these adjustments became challenges to their operations, influencing partners, affecting admission, institutional finances and student service requirements.

For VET P1, VET P2 and VET P4, the possibility of future expansion and development of the partnership would seem possible. For those three VET providers, as the collaboration progresses and develops, they keep up with the transformations in their respective industry partners. Moreover, training and sustained improvement for employees seem to remain essential requirements for industry. As such, the role of the VET provider that can step up to and meet these requirements appears to be strong. On the other hand, for VET P1 and VET P2, the challenge in the future will be: how to carry on their partnerships with IP1 and IP2; how to compete with other vocational educational institutions as competitors to IP1 and IP2; and to look for other opportunities for collaboration with other industry partners, both in the same region and outside their local area.

For VET P3, they will continue working with IP3 to expand the programs in vocational schoolteacher training throughout the regions and in other provinces in Indonesia. VET P3 continues to face a challenge in establishing a viable collaboration with international vendors as third parties in the VET P3 and IP3 partnership.

6.4 Conclusions

This study of existing training partnerships between a VET provider and a selected industry partner was based on the data collected from a series of

interviews and surveys. The research has provided an important opportunity to analyse the impacting factors for training partnerships, communication strategies, and their benefits and challenges. The analysis revealed patterns that pointed to effective leadership as the key initiator of each partnership. Key themes of “environment,” “training,” “people,” “business,” and “needs” emerged from the data collected. These themes influenced the lifecycle of partnerships both positively and negatively.

In relation to VET providers, the main drivers for setting up training partnerships were to find future employers for their students, to provide staff with solid contacts with industry, and to build additional staff capabilities. The benefits for industry partners included an enhanced industry capacity to focus on their core business, and to deal with shortcomings in skills. VET providers would like to develop further partnerships involving joint ventures with a range of companies and institutions. VET provider staff thought that joint ventures permitted them to exhibit their capability to work with a variety of partners in a commercial environment.

In regard to training models, high levels of customisation were a key element of all four training partnerships in this study. Corporations required the training to be effectively customised to meet their needs. In order to maximise the effectiveness of communication in the partnership, both partners used a variety of administrative mechanisms, including regular meetings between both partners (quarterly or every semester) and continuous monitoring and evaluation, to identify the issues that emerged.

Respondents’ responses were mixed when asked if communication between partners was adequate. The type of information shared between partners was predominately centred on the process of training materials development and the logistics related to the training program. All respondents concurred that the appropriate level of confidentiality was maintained.

Key conclusions from this cross-case analysis are: the development of specific skills (i.e. interpersonal skills); communication skills for people involved in partnerships that could become partnership champion which considered to be challenges for both industry corporations and VET providers in managing and maintaining training partnerships within the pressure of globalisation. Training needs assessment has also become inevitable in establishing partnerships, since VET institutions are not always dealing with training programs but also act as consultancy agents.

Both VET providers and their industry partners emphasised the value of possessing high levels of mutual trust. This becomes the main driver in maintaining partnership longevity. Both VET and their industry partners concurred that successful partnerships were symbolised by high standards of collaboration. This mostly depended on good relationships and communication between significant people from both institutions.

The major reasons for forming a partnership identified by both partners was improving employee skills, retraining employees, knowledge exchange and improving product quality. The criteria for a quality partnership centred on the VET provider's ability to be innovative, flexible and responsive. It also depended on building trust, establishing common needs, setting goals, developing a shared mindset relating to customer service and continuous improvement, and strong and effective organisational leadership.

The key strength across these four partnerships, exhibited throughout this study, was the fact that both VET providers and their industry partners thrive in a collaborative environment—not one of competition. Thus, this researcher contends that because these partners 'live' in a collaborative environment, they have spawned successful joint ventures.

Chapter 7

Conclusions and Recommendations

7.1 Overview

This chapter presents the conclusions and recommendations of the study based on the review of existing literature (see chapter three) and the cross-case analysis of the data collected through this research (see chapter six). This chapter also comprises four sections as follows: key findings of the thesis, implications, conclusions and recommendations, and finally closing remarks. The recommendations section also provides a revised conceptual framework and recommendations for further research.

The purpose of this evaluative case study research was to gather, examine, and present data to better understand the role of partnerships in VET delivery in East Java, Indonesia. The case studies draw on critical evaluation of the relationship between a VET provider (including polytechnics) and industry partner. The study has a specific focus on the partnership's impacting factors, and benefits of the partnerships. The analytical lens utilised in this study was the strategic partnering theory proposed by Lendrum (2003). The present research contributes to the literature relating to long-term training partnerships. It is hoped that the identification of the key factors and conditions contributing to successful partnerships will serve to improve and strengthen future VET/industry partnerships in Indonesia and beyond.

Information generated through this study about the factors involved in how VET providers and industry partners develop and sustain successful partnerships may help inform both education leaders and decision makers in Indonesia in managing and developing specific programs through more effective policymaking.

It may be concluded, for example, that such partnerships are instrumental in creating new streams of revenue for VET providers. The prospect of creating new knowledge and abilities in their staff and their partner's staff, potentially enhance the competitive positioning of VET providers and industry partners alike.

The respondents to the study were from four vocational education and training institutions in East Java, Indonesia and four specific corporations or targeted business/industry representatives that had established partnerships with institutions over the last three years. These four case study sites contribute findings of relevance to other VET institutions or corporations.

This study is significant for four reasons. Firstly, since the vocational education sector has a major role in the developing countries, particularly Indonesia, this study is significant to both VET providers and industry partners for current and future planning of partnerships in Indonesia. Secondly, this study provides valuable insights for all key players from VET providers and industry partners. This research has provided an in-depth understanding of how different institutions collaborate to develop valuable and sustainable partnerships. Thirdly, the study is significant in that it identified and discussed a range of emerging issues that impact on training partnerships between VET providers and industry. Finally, this research contributes to a growing body of knowledge in this field. This is of particular relevance because it is one of the first to study this phenomenon in an emerging economy.

This study makes a contribution to the literature on VET training partnerships and extends prior research findings through seeking evidence drawn from the Indonesian vocational education field, focusing on three key areas of significance. First, the study contributes by making recommendations for improved practice and through the development of resources to be used by VET providers and industry partners in staff development for employees. Second, it offers improved insights regarding

the issues that emerged in the establishment and ongoing development of training partnerships from both industry and provider perspectives. Finally, this research contributes to international understanding and growing knowledge of VET/industry partnerships.

It is anticipated that this research will be used as a reference tool by the Ministry of Education and Culture (MoEC) of the Indonesian Republic in determining vocational education policy for Indonesian VET institutions and in planning for the future.

7.2 Key findings

A number of factors play a role in the formation and endurance of the four VET provider/industry partnerships studied. All four VET providers had been involved in training partnerships with industries for more than five years. According to VET providers and their partners, the most common reasons for creating a partnership were improving employee skills, knowledge exchange, retraining employees, generating income and student employment. The criteria for effective partnerships focused on their capability to be inventive, flexible and receptive. Common needs and objectives helped establish a mutual mindset, a common attitude which related to customer service and continuous improvement, and the ability to manage organisations.

The following discussion will focus on key findings related to three key factors in partnership: environmental, training and people factors (Callan & Ashworth 2004; Lendrum 2003). In addition, the benefits, challenges and concerns arising from the case studies will be considered. The themes emerging from each research question are discussed below.

Environmental factors

Research Question One: What are the common environmental factors that strongly impact on the establishment of the partnership and the participants' readiness to associate; what kind of partnerships have appeared in Indonesia; how do these factors adjust in line with the size and site of the VET and industry partner; how are reputation impacts operational; what are the institutional and relational cultural issues at workplace; what has been the impact of globalising pressures, for example, through the adoption of Western (Australia) models on training partnership experience?

A common topic among VET provider directors and senior administrators was the high level of responsibility to provide assistance and to improve relationships with industry. This commitment was indicated in each VET provider's mission statement. Each VET administrator conveyed a personal interest in making training partnerships with industry an integral part of their academic institution.

A formal agreement was created at the outset of the relationship in each case. Contractual agreements between the VET provider and industry were needed and planned to enable the VET provider to customise training courses to meet industry needs. Such memoranda of understanding included information regarding training materials, training costs, and the implementation of training. Thus there seems to be transparency regarding the operational and financial parameters of the agreement. On the other hand, the absence of a formal contractual agreement does not seem to reflect an unprofessional approach regarding the terms of the partnership.

As Lendrum (2003) asserts, a contractual agreement is appropriate and unavoidable in partnerships between the public and private sector. Bray and Scalzo (2005) and Meister (2003) urge VET providers and industry partners to develop formal contractual agreements at the beginning, that clearly define respective roles, deliverables and financial terms.

Regarding the flexibility of the contractual agreement, Lendrum (2003, p. 8) suggests, “If there are such requirements, then have a contract and have a term, but work towards and be able to demonstrate that the relationship works as if there was no contract and no term’. VET provider coordinators in the study discovered that their institutions needed to be flexible and willing to respond to the needs of industry as a client.

The four coordinators from each of the VET providers concurred that their academic institutions are providing beneficial assistance to local communities through the development of partnerships with industry in their provincial or local area. All four VET provider coordinators pointed out that they were committed to harmonising the institution’s course and program offerings, and to modifying courses to “tailor programs” in order to meet local industry needs.

The location of VET providers in relation to their industry partners is an important factor in facilitating partnerships. All four VET providers studied are located strategically to maximise partnership benefits. As stated by one VET provider administrator:

Well, you know, the location of our institution is very strategic, because it’s in an urban area. Accordingly, it gives industry and business access to a diversity of experts and resources (VET P2, Interviewee, 2011).

All four VET provider coordinators believed that numerous opportunities existed to reach out further to meet the demands of other industries in their local area.

The researcher identifies culture as a significant factor in understanding the dynamics of the relationship between a commercial organisation and educational institution. Cultural issues at work also played a key role in partnerships between these four VET providers and industry partners. Lendrum (2003, p. 13) notes that ‘culture comprises the organisation’s basic

belief and value systems, with strategy and structure the mechanisms by which the organisation relates to the outside world’.

VET providers in this study are all public VET providers owned by the government with strict internal protocols that sometimes caused difficulties in building good communication with industry. They were also challenged to focus on agreed objectives with the industry partner because they operate in two different and not entirely compatible cultures and environments. As Goldsmith and Eggers (2004) note:

Rigid bureaucratic systems that operate with command-and-control procedures, narrow work restrictions, and inward-looking cultures are ill-suited to addressing problems that often transcend organisational boundaries. (Goldsmith & Eggers 2004, p. 7)

Restrictive institution policies and bureaucracy were frequently mentioned as major barriers to partnership success. Although all four interviewees from VET providers prefaced their comments by saying that the restrictions are fewer than in the past and flexibility has improved, the problem still existed. A clash of cultures mentioned by VET providers in interviews most often related to the provision of staff who can meet the training needs of the industry partner. Examples of bureaucratic obstacles experienced by industry partners include training scheduling, delivery and customisation of training course materials, and training location and facilities.

Training factors in partnerships

Research Question Two: Can successful training models be identified in these partnerships; what are the main training drivers; to what degree do training design adjust in their flexibility levels, customisation, arrangements in administrative and the formal procedure of the training liaison; what is the apparent return on investment in training partnerships for the industry partner?

Respondents agreed that the creation of the training partnership is a two-way matter. Often industries come to the VET provider for assistance and at other times it is through contacts made by the partnership program coordinator from VET providers. Respondents also indicated the importance of having an advisory or steering committee in a partnership program, as these committees provide the expertise, knowledge and support necessary to remain focused on the needs of industry.

Lendrum (2003) notes that client focus and client satisfaction should be the main driver in establishing partnerships today and in future. This research indicated there is a shortfall in developing customised training programs because the skills required by employees in the company today are not being provided. Therefore, in developing more customised and flexible training, VET providers need personnel with a stronger focus on customer service, better entrepreneurial and marketing expertise, along with personnel who are competent in managing projects and industry partnerships (Callan & Ashworth 2004).

In order to meet industry training requirements, the VET provider coordinators in this study emphasised their ability and keenness to assist partnership development by determining training needs and through the development of appropriate training programs based on needs analyses. They also spoke of the ability of their institutions to adapt and customise training courses to meet specific industry/client needs. As Kennamer and Katsinas (2011) suggest, VET providers developing customised training programs for an industry workforce ought to be intensely alert in relation to the training needs of local industries as they develop these training programs.

In explaining the role of customised training in industry, the expression “long-term value” echoed throughout the interviews. Concerning the advantages of skills training in industry, the IP4 manager made the following comment:

Through the years, we have made several demands to VET P4 to develop programs to train in new competencies for our current workers. With recent technologies being introduced, job responsibilities are changing very quickly. If we are going to keep up-to-date, we should have a dependable source of training and that is where VET providers like VET P4 play a big part in the success or failure of the economy in this area. We have been told that there will probably be an employee shortage in the next five years or so. We will need to fill that void with competent, skilled workers and VET P4 is able to help us do precisely that (IP 4, Interviewee, 2011).

As a result, by forming a solid system of communication through open and timely dialogue on a regular and continuous basis, workforce development programs delivered by the VET provider can identify and meet the training requirements of local industry.

Training is still considered by some companies as an expensive task to carry out. Other companies however considered it an investment rather than expenditure on their part. Nevertheless, training needs assessment (TNA) remains a challenging area and a main source of argument between human resources and finance functions of a corporation (Bashir, Memon & Rizvi 2011).

Since industry faces diverse training needs and must address complex organisational issues, TNA can detect a gap or disparity between an ideal level of performance and present level of performance. This helps to prioritise current resources to lessen these gaps (Altschuld & Kumar 2009). One of the key points in evaluating and implementing TNA that Lendrum (2003, p. 271) highlights is to ‘carry out gap analysis; agree on the training and skills required and the levels of competence to be achieved’.

The partnership coordinators at VET providers in this study explained that they conduct TNA if there is a demand from an industry partner. In the skill upgrading programs between VET P2 and IP2, they both agreed that when an assessment was completed, the outcomes generally showed a need for remedial work in electrical and instrumentation. When these skill shortages were recognised in existing employees at IP1, the trainers from VET P2

incorporated remedial work into a program as conditions permitted. As the IP2 staff member responsible for the training partnership stated:

We not only have to train and endorse new staff coming into the job, we also need to keep our long-term staff up to date. I count on VET P2 for electrical and instrumentation training. We need VET P2 not just for training, but also provide certification in electrical and instrumentation. Training needs assessment is needed to find the gaps in our employees' competency in relation to the required knowledge and skills in their area (IP 2, Interviewee, 2011).

According to the VET P4 training partnership coordinator, the training demands of industry have expanded beyond technological and re-training needs to include training courses in human resource development. The IP4 partnership coordinator agreed that the training contract proposed by VET P4 ranged from technological upgrading for technicians to retraining supervisors and providing courses in human resource development.

Training without attaining good outcomes is unproductive and extravagant. Hence, Chang, Chiang and Kun yi (2012) emphasise that it is essential to create a new model of performance-based training which emphasises training needs with the purpose of training workers and creating benefits from that training.

People factors in partnerships

Research Question Three: What abilities are being structured by VET providers to develop and maintain partnerships?

'People and communication are the key' in partnerships between two institutions or organisations (Lendrum 2003, p. 5). Lendrum also notes that, 'Building competitive innovating enterprises requires a great deal of sustained effort by people at all levels in enterprises' (2003, p. 42). There is considerable literature which describes the various people skills required to make partnerships work. Good interpersonal skills and social sensitivity at the organisational level are required in partnering. Kanter (1999) asserts that a high degree of self-awareness by enterprise is needed. This includes sharing

information, ensuring the partners' interests are at the forefront in one's mind when dealing with differences between people and organisational cultures.

Research revealed that a partnership between two institutions often begins at the individual level, where participants have some personal tie that initiates the relationship. This personal tie helps initiate the trust that needs to exist between two institutions. Lendrum (2003, p. 7) advances trust in defining his strategic partnering and alliances: 'The cooperative development of successful, long-term, strategic relationships, based on mutual trust, world class/best practice, sustainable competitive advantage and benefits for all partners; relationships which have a further separate and positive impact outside the partnership/alliance'. Interpersonal aspects, such as communication and trust amongst partners, are deemed as other essential aspects that affect partnership (Buys & Bursnall 2007).

Trust, as an element that arises over and over again, is important to the success of any kind of partnership. This often takes time, but it is often the result of informal arrangements between participants who understand, respect and trust one another. As one partnership coordinator of a VET provider stated:

The entire relationship I think has been built upon trust...it's actually not just the relationship between VET P1 and IP1. In a lot of ways it was between X (our key person) and then the VET P1 director and myself (VET P1, Interviewee, 2011).

All four VET providers and their industry partners who were interviewed for this study discussed the importance of having a high level of mutual trust that was needed to create a successful partnership.

The overarching theme, which emerged from interviews with the managers involved in this study, was that open communication and understanding each other's objectives was essential for sustaining partnerships between VET providers and industry partners. Managing relationships is related to people

and communication and most likely involve, control and administer the process of partnerships (Lendrum 2003).

Open communication is seen as crucial to the success of partnerships. All four VET providers and industry partners interviewed said they believed there was a strong relationship in the true sense of the word and that communication was open, truthful and ongoing. As Buys and Bursnall (2007, p. 82) affirm, ‘Open communication is important for clarifying the roles and objectives of each party and keeping all parties in the loop’.

Benefits, challenges and concerns

The administrators in all four VET providers emphasised the significance of their academic institution remaining focused on its objectives and mission, and being careful not to put at risk its credibility and the quality of its training. All administrators also reported they were working to nurture connections with industry, especially local industry, and to promote training services and programs offered by their institution.

Based on the feedback from all respondents across the four case studies described above (and in more detail in chapter five), the benefits VET providers expected to achieve through their collaborations were the development of customised training packages, real-life work experience for students and staff, the practical application of academic theory for both staff and students, enhanced credibility for the institution, reputational improvement as partnering institution, additional knowhow, student employment, improved problem solving skills for VET provider staff and income generation. The projected benefits for industry partners were content knowledge, the development of customised training programs, company cost reduction or cost savings, employee retention, employee certification, optimisation of existing resources, enhanced credibility in a competitive business market and as a recruitment tool.

The efforts of collaboration in training partnerships were not without problems. Moreover, challenges existed for both VET and industry organisations. The stakeholders listed several obstacles that hindered their respective training partnerships.

The challenges for VET providers were the rapid development of industrial technology, the different working culture of the industry partner, the administrative arrangement during training until completion, communication intensity and timelines, lack of transparency about the partnership's objectives and resource availability.

The challenges for industry partners were readily scheduling employees to attend training, timelines of project work completion, friction with communities around the company, concerns from the employees regarding the new training program, and lack of transparency about mutually agreed upon partnership objectives. Respondents from VET providers stated that adjustments were made as the partnerships progressed and that challenges were worked out eventually, but it sometimes took a long time. Respondents from industry partners in interviews reported that ongoing communication was required between both partners which required a lot of meetings and multiple conversations helped resolve the challenges.

The partnership coordinators in industry had individual concerns about the use of generic training programs, the readiness of customised training in training courses, a mismatch in the perception of required training material between the trainer from the VET provider and the industry client, as well as the lack of time to better discuss matters that could become issues. The representatives from both VET providers and industry articulated concerns about the former's capability to meet industry requirements for the latest and most current training. Managers from both organisations agreed that, in general, open and timely communication is needed to address the difficulties that arise.

Tishuk (2012) also notes that challenges may occur continuously along with constant changes in the partnership. At best “Accepting and managing the resulting evolution will refresh partnerships, breed creativity and allow public/private relationships—which lie at the heart of these endeavours—to develop naturally” (Tishuk 2012, p. 113).

7.3 Implications

The participants in this research openly shared their experiences regarding training partnerships between their VET providers and their industry partners. Basically, the results of this research and themes emerged from the coding of the interview transcripts and survey. Based upon this analysis of the factors identified for developing and sustaining VET provider/industry partnerships, the following implications relate to both the theoretical framework and the literature review. The analysis of data suggested the following implications for policy and practice.

Partnerships between vocational education institutions and corporations can be a useful strategy in providing workforce training and maintaining knowledgeable employees. Higher education institutions, especially those involved in vocational education and training should be effective and efficient in establishing training partnerships from the outset until the completion of the training program with industry partners. The training and other programs provided by VET institutions should be developed in line with the development of technology to support the growth of industry and services in trade and business.

The following section presents the implications for policy and practice for VET providers and industry partners. These implications are based on analysis of policy documents and respondent interviews.

7.3.1 Implications for policy

Lauglo (2009) states that policy represents a set of relatively fixed objectives, with options for a method to achieve these objectives over time. Lauglo (2009) adds that despite national policies for vocational education and training, which have as their key goal the increased productivity of the workers, these VET policies will unavoidably be concerned with a diversified amount of target groups including students, those who require training on the job or for other jobs, and who are attempting to become entrepreneurs.

Overall, the policy for the development of VET institutions in Indonesia is to improve the quality of education so graduates will have the competencies, skills and professional attitudes needed in industry and for the job market. To guarantee the relevance of technical and vocational education and to meet the requirements of industry as the users; the linkages between vocational institutions and the world of work should be made through establishing cooperation and partnerships at institutional, regional and national levels, so the widest mutual benefit can be attained.

Accordingly, the general policy for the development of VET institutions in Indonesia is focused on quality improvement, so staff and student competencies will be upgraded, and the skills and professional attitudes needed in industry and the world of work will be fostered. As Narayanan (2009) argues, businesses have a significant role to play in influencing the managers of vocational education institutions and policymakers to enhance the status of students from vocational education institutions. In part this is achieved by promoting entrepreneurship and enriching the learning process with course materials relevant to industry needs. In a sense, students could become the 'glue' in creating partnerships between VET institutions and industry.

The analysis of policy documents and interviews suggests there is policy around the broader VET system in Indonesia. What is less clear is the policy around areas such as the purpose and role of VET providers working together with industry in training partnerships. Within this policy uncertainty is the requirement for VET institutions to meet community service obligations and other stakeholder needs. Therefore, Phan and Siegel (2006) suggest that government or public policy should become a catalyst for new innovation, knowledge and skills in developing productive associations between VET providers as academic institutions and the business world.

Globalisation has become a significant social issue in Indonesia and is impacting and challenging every operational aspect of VET institution/industry partnerships. One of the elements recognised as being an obstacle in these four partnerships was dissimilarities in organisational culture. These differences were often increased when the alliance was with an international organisation (e.g. IP4). This presented even more significant cross-cultural distinctions (Hall, Link & Scott 2002). Globalisation also offered each VET institution the chance to search for alternative collaborators that could provide what seemed to be a more efficient and effective collaboration and so avoid perceived barriers to VET provider/industry partnerships.

In regard to globalisation and rapid technological transformation, Indonesia as in other developing countries, is already concentrating on mechanisation and information technology which notify 'recent trends' in business, and could be signals for designing vocational education and training for the future. The effort needed in creating these vocational educational reforms is significant, mostly, for countries which are not at the receiving end of the international distribution of knowhow and globalised trade.

Therefore, in order to keep up to date and comply with industry needs, particularly in VET/industry training partnerships, VET policymakers in Indonesia should be more aware of how technology is expanding, which currently occupies a majority portion of the economic sector in the country.

Additionally, the outcomes from this research focus on the attention of policymakers to help them develop improved policy concerned with generating better synergies at the local level: between the demands of the local economy, the abilities of its labour force, and the evolving purpose of local VET providers. D'Este and Patel (2007) state that communication and interaction between academic institutions and industry as partners is more powerful and more likely to succeed when partnerships are integrated into the VET provider or academic institution's mission.

7.3.2 Implications for practice

Based upon cross-case analysis of impacting factors identified for developing and sustaining VET provider/industry partnerships; this section presents the following implications for practice which include implications for VET institutions, business corporations, and finally the implications for partnership management. These relate to both the research findings based on the chosen theoretical framework and the literature review.

Implications for vocational education and training institutions

The study provided results that focused attention on the personnel development practitioners in VET institutions. This focus relates most critically to their practices in partnership management. VET institutions might have developed their own market to provide a range of training and vocational education services. Nevertheless, the outcomes of this study demonstrated there are impacting factors in training partnerships that need to be considered.

Those institutions that strive to be effective training providers should recognise a number of realities about businesses in Indonesia today. Business is in a state of constant flux in a highly competitive market. Industry requires that VET providers are familiar with this dynamic business environment, and enthusiastic about working with them. As one of the company managers commented:

The speed of transformation is considered to be big challenge to our company. People who are outside the business would not be very alert of the scale of cultural and technological change involved nowadays. In order to become our associate and work together with us, it is essential for a vocational education and training provider to work actively with us as we develop, transform and re-evaluate our qualifications, in other words it's very competitive. (Interviewee IP1, 2011)

In order to provide training that is relevant, flexible and tailored to meet industry specific needs, VET providers should respond to industry needs so their trainers and teaching staff are not overly affected by corporate culture, policies and procedures. In order to enable the training to be more flexible and customised, training systems should be streamlined.

VET providers as preferred training institutions for industry are expected to have a more hard-edged attitude in managing financial and non-financial risk. They also require a greater comprehension of commercial issues, especially where speculation and risks are distributed between partners. They also need to understand the administrative arrangements required, program costing, and how course materials can be customised. Related to this, legal and contractual arrangements need to be better understood.

In interview with VET providers, this researcher found there was lack of communication between the managers selected for this study and their contact liaison in industry. One key feature acknowledged in the literature for successful training collaboration programs is the need for an effective social networking system in VET/industry partnerships (Green, GP & Galetto 2005). The key endeavour for VET staff is to establish and preserve communication with local business and industry. This is endorsed by both the wider literature and this research.

VET providers should find additional financial support, or grants, to help develop and sustain training initiatives needed by local business and corporations. With additional funds, VET providers could organise a range of staff development programs that could meet the needs of the various industries located in the region. Even though financial aid has been

decreasing for higher education in Indonesia, including that for vocational education and training, finance for staff development has improved (Cohen, AM & Brawer 2009).

It is strongly recommended that VET providers keep promoting the need for their training staff to visit and talk to industry workers frequently, especially in relation to the management of existing training partnerships and to discuss the potential for other forms of training. Moreover, more staff should undertake secondments to industry and seize opportunities for on-the-job training to stay connected to their industry partners. By acknowledging and socialising these three impacting factors in training partnerships with business corporations, VET institutions will be able to obtain a range of benefits for their institutions. These include developing up-to-date curriculum to meet current business needs, and utilising existing training staff, facilities and curriculum more continuously and effectively.

Implications for business corporations

One of the impacts of this research for the business world is to point to the importance of sound relationships in partnerships and the positive effects such relationships can have on business performance. The results of this study suggest that administrators in charge of training might not be alert to the impact of training partnerships on organisational performance, or how to evaluate this impact effectively. Failure to do so may affect how well a partnership works, and therefore may not obtain the best outcome. It is critical to develop, deliver and evaluate training programs based on expected levels of improvement in organisational performance. Such improvement is a fundamental driver of training. Consequently, a proper training agenda is built on the ability to develop a rationale which is not seen as a cost, but an investment. Institutions also will be able to assess training effectiveness, both from the point of view of the extent to which they have met their partner's expectation and to determine the return on training investment.

Collaboration for advancing the vocational education standards is important. One of the large industry managers commented that their employees lack the basic reading and other skills required to perform compulsory duties competently. Cohen and Brawer (2009) emphasise that education is essential for economic expansion. Therefore, in order for an educational institution to help promote economic development, there have to be well trained workforces by VET providers. In staff development and vocational programs, industry will be provided with skilled workers which will become a well-trained team, capable of doing their jobs and realising their potential (Kennamer & Katsinas 2011).

This research also directs the attention of business to the importance of undertaking TNA to avoid employees being trained merely for the sake of training. As one manager expressed:

Some training programs involve ‘undertaking training for training’s purpose only’ rather than to develop skills or enhance performance and appears to be more about fulfilling the company’s need to be able to say (in their own training plans, almost certainly) that they have particular numbers of staff undertaking one particular training course. (Interviewee IP 2, 2011)

This comment applies to understanding the differences within the mission of an institution, which aims to appreciate learning and development along with the reality of work practice. This may be a problematic issue if the institutional objectives to enhance participation, as those workers straightforwardly got involved with the business core of the institution that are held in highest regard are resistant to the suggestion of undertaking further training. On the other hand, other workers seemingly wonder about the real attributes accorded to learning and development.

Accordingly, this study showed that it is possible for TNA to be poorly performed in the real world. Therefore, organisations face the possibility of poor quality outcomes from such assessment as the resultant training has not been properly focused. Industry should therefore be cautious in conducting

TNA themselves, or carefully evaluate the quality of such assessment when they are performed by their training partner, the VET provider.

Implication for partnership management

The results of cross-case analysis from this study indicate that all four VET provider informants had a positive outlook concerning their partnerships. However, the obstacles reported arise from institutional and bureaucratic issues. Since these providers are public VET providers, they are owned by government. It is common knowledge that government owned agencies and institutions in Indonesia are weighed down in bureaucracy which is difficult to negotiate. Therefore, they need to focus on how best to overcome the obstacles mentioned above, for example, dealing with overly bureaucratic procedures in contracting and procurement.

Consequently, to lessen the barriers caused by excessive bureaucracy, especially those in establishing and maintaining partnerships, regulation and policy requirements need to be examined and modified to make the work of those involved in industry training partnerships easier. Clear communication guidelines and operating procedures within institutions also help to lessen perceived bureaucratic obstacles. Finally, training that concentrates on capacity building and leadership within VET providers would lessen the perception of barriers.

When considering capacity building and enhancing possibilities for industry and VET institutions to develop training partnerships, personnel development is integral to the achievement of partnership success. Through training to build capacity; restructuring and upgrading their technologies, working systems and business strategies, while reducing levels of bureaucracy, should strengthen the viability of organisations for continued economic development and growth.

Despite enhancement in capacity building for VET providers, globalisation has also become a significant issue and is affecting every aspect of VET

provider and industry collaboration. The influence of globalising pressure to internationalise introduces educational institutions to new challenges in partnership management, in particular. This was clearly evident in the four case studies reported here. The study has identified the factors which act as obstacles, caused by globalising pressure on these partnerships. For example, increased diversity in organisational cultures which result from working with a large multinational and culturally diverse industry partner (Hall, Link & Scott 2002). Consequently, globalisation provides every VET provider with the chance to look for alternative industry partners that will potentially be more effective and efficient in partnership, to identified obstacles in managing training partnerships.

The study also found that maintaining collaboration required constant open communication and comprehension of outcomes. Confidence, trust and mutual esteem remained key issues. The implementation of the theory in learning and understanding these three issues (i.e. environment, training and people) reached the highest level of consensus. This provided an approach to understanding the development and sustainability of a successful partnership. Doloï (2009) concurs that a conducive environment enabling communication which is productive apparently leads to improved trust and confidence amongst partners, which in the end upholds developing collaborative risk management ability for partnerships.

Overall, frustration with partnerships seems to arise not only from the abovementioned significant factors (Lendrum 2003), but also the bureaucratic structures in partnership institutions and especially those in educational institutions. This consequence could be seen as positive for the institution since attitudes are not easy to change, whereas bureaucratic policies and procedures may be more readily modified. This thesis may provide practitioners with a better understanding of the uncertainties and tensions in establishing and maintaining partnerships between VET providers

and industry. And this understanding provides a foundation for further discussion and research.

7.4 Conclusions and recommendations

7.4.1 Conclusions

This study yielded a large amount of data from surveys and interviews. These datasets were transcribed, coded and categorised into a range of emerging themes. The researcher sourced a rich body of literature characterised through an examination of the factors impacting on training partnerships between four VET providers and their industry partners, with all partnership components from different perspectives. A key contribution to this research is the framework developed and presented in chapter three. This framework offers a holistic organising approach for the literature review and examination of the nature of training partnerships between VET providers and industry.

The framework described in chapter three is grounded by the work of Callan and Ashworth (2004) and Lendrum (2003). Its major contribution lies in synthesising multiple views and approaches cited in the literature into a robust framework that recognises the dynamic nature of partnerships and a variety of factors that impact their success. While critics may argue about the linkages of the elements and the characterisation of their content, the framework stands as a useful roadmap for consideration by both current and future researchers.

The design of case studies and qualitative research methods employed in this research do not allow generalisation of the findings to other collaborations or situations. The study does, however, provide positive guidance for those who are interested in striving to identify and characterise key impacting factors in training partnerships between VET providers and industry partners.

A number of factors play a role in the formation and endurance of these partnerships. As reported earlier in this chapter, the most commonly cited reasons for creating a partnership from both VET providers and industry partners was improving employee skills, knowledge exchange, retraining employees, student employment and income generation. The criteria for a quality partnership focused on the capability to be inventive, flexible and receptive, mutual trust, to have common needs and objectives, establish a mutual mindset or attitude to customer service and continuous improvement, and ability in organisational management.

The four partnerships analysed in this research were successful from most stakeholder's views. However, the collaborations had shortcomings, according to some. Collaborations are perceived in different ways by individuals. Whether or not the collaboration is considered a success is reliant on the level of commitment and perception of each individual involved.

The cases show that challenges in collaborating emerge differently for each of the VET providers as the "academic partner" in the relationship. For example, for VET P1, the main challenges were evident in the early stages of their decision to partner. These challenges included the duration of the program for the student to undertake on-the-job training, and the trainer's preparedness in filling competency gaps. In the VET P2/IP2 case, the greatest challenges appeared to be the difference between work cultures and scheduling arrangements for employees of IP2 to attend training in ways which did not sacrifice productivity. VET P3 presented another perspective. The greatest challenge for VET P3 was during the training phase. This provider had to proactively pursue and work with international vendors to support the partnership program with IP3 so participants could gain desirable vendor certifications. In the VET P4 case, the challenge appeared to be in machinery upgrading and supporting the information technology infrastructure of the industry partner.

There are four conclusions which can be derived from the findings of this study. First, respondents from all VET providers in the survey and interviews indicated their trainers and staff were enthusiastic about updating their knowledge and skills by exposure to industry best practice and the latest developments in new technology. VET providers strongly supported their training staff to pay frequent visits to their partnering organisation and meet the industry administrators, especially in relation to management of training partnerships. A number of VET staff had taken secondments to industry. Many used these opportunities for on-the-job training and assessment to allow them to remain in touch with their industry and to be industrially relevant. As Tony Zeiss, the President of Central Piedmont Community College (CPCC) acknowledges: “Give value first. If you deliver a very good service to a business, they want to reciprocate” (Ullman 2012, p. 21). The enthusiasm and dedication of the VET provider staff involved in each of the partnerships are difficult to convey adequately. Across the board, it was impressive to this researcher to observe their commitment to the programs, despite the challenges they faced. It was clear that while financial compensation was attractive, it was not the sole or even the dominant motivator for participation.

Second, as VET providers and industry partners work in two different environments with different cultures and communication difficulties, losing focus on partnership objectives is not uncommon, and almost certainly should be anticipated. Therefore, all four VET providers, despite being state-owned institutions, were trying hard to fulfil industry requirements by reducing the internal barriers for their teaching and training staff. These institutional constraints included inflexible policies on developing partnerships, institutional culture and rigid administrative protocols. To allow for more customisation and flexibility in training activities, the VET training systems and bureaucracy were evidently being actively reduced.

Third, to become more effective with their provision of training to industry, VET providers should be familiar with a number of operational realities facing corporations in Indonesia today. Business owners underscored that industry is in a state of continuous evolution in a marketplace which is extremely competitive. Accordingly, industry needs the services of VET providers which have the ability to recognise this situation, and whose staff have both a passion and willingness to work within these realities. Training needs assessment is one of the services provided by VET providers which establish the company's issues, the training needed and how optimal business performance can be attained. As Cekada, Tracey L. (2011, p. 28) argues, "training needs assessment provides some certainty that the time, money and resources used to develop and conduct training will deliver desired performance-based results". Ferreira and Abbad (2013, p. 79) agree, noting that 'TNA (training needs assessment) processes have a strategic role because they provide guidelines as to which professional skill deficiencies must be remedied and what the profile of future trainees should be'.

Fourth, the key factors for successful partnerships which have a strong and significant impact include open and continuous communication between partners; timely responses to industry's concerns and inquiries; flexibility in course structure, timetable, training delivery, and training locations (geographic proximity); provision of a quality training product; employment of qualified and experienced trainers and administrative staff; mutual trust between partners; and acknowledgement of the strengths, limitations and needs of both VET providers and their industry partners.

A key 'take home' message from all four VET providers is the need for flexibility. This flexibility is required because of the strong impact of globalisation on the Indonesian economy perceived by industry partners. Whilst the collaborations have been sustained for more than three years, considerable structural changes had occurred with both partners. Additionally, given the technical nature of business partners investigated in

this study, the influence of technology on the improvement of worker competence is evident. For all four VET providers, these challenges have also provided opportunities to encourage their teaching and training staff to develop the skills to work with industry.

The research, particularly the VET P4 and IP4 partnership, confirms that international companies are complex entities. Working with these global companies is challenging for VET providers, especially when structural change happens within the company. For VET providers, maintaining interaction and communication with key personnel and decision makers inside a multinational company is important to ensure constant and timely communication, although there is managerial reform inside the company. There is a risk for the VET provider that they may become irrelevant when organisational change takes place within some companies, especially if the partnership is not directly connected to the company's strategic objectives.

The four partnership case underscores the importance of creating strategic value for industry partners. As the VET P3 and IP3 case demonstrates, when the commitment and objectives become unclear or less important to the industry partner as a client, and since the partnership involved a third party that provided international accreditation for training participants, such a combination of factors could, and did, threaten the sustainability of the collaboration. Therefore, a formal contract, which includes the deliverables and time frames that are binding on both partners, should have been made prior to implementation of the partnership. Grant (2013) emphasises that clear and shared objectives in partnerships are crucial for both partners and this should be obvious. Grant (2013) suggests that as there will always be unplanned issues arising during an ongoing collaboration, both partners should be ready to deal with these unexpected surprises by ensuring open communication is maintained throughout the life of the partnership.

In all four cases, the initial growth and operation phases contributed to instituting a sound operating framework for each partnership.

Correspondingly, as the implementation of partnerships began, operational changes that modify initial arrangements were accommodated. Bray and Scalzo (2005) argue that these discoveries would propose a counter example to advice recommending the improvement of formal agreements at the beginning of the collaboration, and as the method of establishing mutual expectations. However, Grant (2013) recommended that any partnership or collaboration should have a written agreement outlining the elements and how any required changes in the job roles of those involved in the partnership will be accommodated. Therefore, when something happens unexpectedly, there is already a reference point in the contractual arrangement, and the partnership is more likely to survive any such occurrence.

Another message from this study is the verification that the same sets of basic partnership impacting factors emerge regardless of institutional or organisational settings and contexts. One of the cases demonstrates how the use of existing programs can expedite the development of new ones. This is demonstrated in VET P2's ability to use their standard OHS programs in partnership with IP2.

In partnership, industry partners are offered programs by VET providers, either using the content of the existing programs or by relying on the expertise of trainers or staff from the VET provider. Consequently, it is essential that VET providers give serious attention to the selection of staff and trainers to support the training partnership. This includes those staff involved in developing curriculum, producing training materials and teaching responsibilities to ensure "appropriateness of fit" with the needs of the industry partner.

The staff and business units of VET providers involved in collaborations need to understand the expectations of industry partners and be aware not only of their need to dictate the academic subject matter to some extent, but also the method by which the training programs and courses will be

executed. This needs a set of refined interpersonal skills and capabilities in project management on the part of VET provider staff. Perkmann, King and Pavelin (2011) highlight that involvement in industry partnerships may require particular skills and organisational competencies that are not the same as those needed in delivering regular academic programs. As a consequence, industry may be expected to look for the most skilled and reputable partners. As one VET provider's project manager advised:

To become a good partner you need to be a good listener to the requirements of your partner or client. You should have partnership leaders with excellent interpersonal skills who have professional knowledge and skills to practice collaboratively. You should possess good problem solving abilities and ensure the trust of your partner through ongoing consultation about customer requirements like their training needs (VET P2, Interviewee, 2011).

In the VET P1 and IP1 case study, it emerged that success was assessed by the progress of students who participated in the enrichment program, and thus satisfaction of both students and company partner with the program. Therefore, in order to sustain this program, partnerships should ensure both partners are satisfied.

In regard to interpersonal skills and abilities of VET provider staff, those involved in training partnerships need to understand the industry partner's expectations, not only their requirements related to academic content, but also the way in which the education and training program will be implemented. As such, staff members interacting with companies have the challenge of balancing input from industry with academic standards. This needs project management skill and a set of excellent interpersonal capabilities on the part of VET staff involved. This study supports the broader view that VET provider staff need to upskill. As Kanter (1999) found, partnerships involve interpersonal skills along with organisational social and cultural understandings such as ability in listening, self-awareness, and the capability to interpret signals and modesty.

The four cases underscore that the presence of a partnership champion within a supportive institutional environment is vital to partnership establishment

and implementation. An academic champion in each case was very helpful for VET providers to ensure support from senior level management. They also worked with the business partner to successfully progress the partnership from concept to implementation. The collaboration appeared to be well developed, where there was continuity in the person in charge over time, regardless of changing circumstances.

In each case study, the commitment of higher management within each VET provider was apparent at the beginning of the collaboration. This study found that both VET providers and industry had similar attitudes. This may reflect the longer term nature of many partnerships, and levels of trust and communication established between them over time.

Corwin, Corbin and Mittelmark (2012) conclude that the elements of success in partnerships involve a clear mission from both partners, strong commitment at management levels, a comprehensive plan for operation and coordination, continuous personnel communication to build trust, and the celebration of ongoing partnership accomplishments. As Tishuk (2012) remarks:

Partnering is an art-form, derivative of relationship building more generally and such partnerships will necessarily ebb and flow (Tishuk 2012, p. 119).

7.4.2 Recommendations

Partnerships are difficult. While some opportunities are unplanned and arise serendipitously, others result from approaches to the VET provider by industry. Nevertheless, it is essential for VET providers to develop strategies and to take the initiative and approach industry for discussions which may lead to a mutually beneficial partnership. As this research shows VET providers need to be proactive and develop points of difference that will make them the provider industry seeks. Thus, if VET providers intend to pursue such partnership opportunities, this researcher would advise them to identify their niche and differentiating attributes. As the four cases show, VET provider differentiation can be demonstrated in many ways. However,

it is an essential element in partner selection from industry's perspective. The opportunity may translate into standard programs which already exist, their adaptation, or even require the development of new programs. All these approaches need leverage from their existing reputation and expertise.

In determining their role, VET providers are required to clarify the limitations of their partnering activities. They need to be aware of the potential resources and investment that may be required to support partnership activities. This includes creating customised programs and unique delivery models for each industry partner. A partnership opportunity, which is not supported by the necessary desire and approaches to deliver on expectations, would be catastrophic for the collaboration and seriously affect the possibility of future opportunities. As Bray and Scalzo (2005) recommend, potential VET providers would be best served to recognise prospective associates and develop a knowledge base concerning their respective industry and individual company. This occurred in the VET P1 IP1 case study. The VET provider is best served to make an approach to a business prospect at senior management level, and is equipped and ready to learn about their educational needs, while already being familiar with their business. O'Connor and Lynch (2010) support the conclusions reached above and concur that collaboration between a VET provider and industry reach this full potential when win-win solutions can be identified for both partners.

In summary, this research recommends that partnerships between VET providers and industry need both art and science. Well-organised and effective management processes formulate the partnership and direct it through its lifecycle phases. Flexibility, enthusiasm to learn new collaborative ways in which to operate, and effective working relations are elements of the art of relationship. As shown in this research, both are equally important.

This case study research and the existing literature regarding impacting factors in training partnerships demonstrate that VET provider/industry

training partnerships will continue to benefit in future. In order to improve partnerships with industry, VET providers in Indonesia need to improve themselves in many ways.

Recommended areas of improvement for VET providers in undertaking partnerships with industry include:

- building better coherence between training material with industry needs and upgrade the quality of product delivery;
- building as many components of flexibility and customisation into the training as is feasible within the budget that has been allocated;
- carrying out a training needs assessment to identify the actual competitiveness faced by business worlds as they try to foster good training and skills development continuously into their companies;
- continuous staff development for VET providers' staff in the skills required to launch and oversee large training partnerships;
- recruiting new staff who will work with, and assist, partnership administrators, who, sooner or later will successfully take their place. In short, institute a program of succession planning. This will sustain and build partnership capacity;
- gaining the commitment of staff at management level for the partnership as early as possible by demonstrating the financial and non-financial benefits to the institution and the industry partner through the training investment; and
- continuously evaluate how well the partnership is meeting the partner's requirements.

The research also demonstrates that training partnerships can provide unforeseen benefits for the VET provider and deliver unanticipated strategic value to the industry partner. The VET P1 case shows how the demands of

the partnership served to move the institution forward to develop a new course subject called ‘power generation’. In this case, the indirect effects of the training partnership have been felt throughout VET P1. Whilst the operation of the partnership remains contained within academic units, the arrangement of information technology built and supported by IP1 is used by VET P1 when they deliver their training.

Recommendations for further research

As business seeks ways in which to reduce costs for employee development and remain competitive in a global environment, VET providers in Indonesia are increasingly looking for ways to generate additional revenue outside of the traditional student funding model. They also wish to be viewed as an important contributor to the local economy by helping to provide skilled and well-trained workers. Partnerships are a viable way to improve employee skills and develop the local community.

This study has found that further study is needed. First, the various factors which impact training partnerships in the conceptual model should be explored in more depth to examine the benefits and problems in establishing training partnerships between industry and vocational educational institutions. Second, research needs to be broadened by examining impacting factors in existing training partnerships between industry and private training providers. This research focused on public providers in Indonesia. However, the researcher believes that business organisations frequently utilise and prefer private training providers. Thus, further study is needed to explore why private training providers are also selected by industry in Indonesia. It is also significant to investigate all these reasons by relating them closely to effective measures of institutional or organisational performance. Such research should be in Indonesia, since there are many industries and vocational training providers in all regions.

Since the educational practices of vocational education and training institutions are amongst the issues that seem always to be under discussion and debate, with widespread dissatisfaction in some South East Asian countries such as Indonesia, Malaysia, and Papua New Guinea, further research should also focus on how industries can become more familiar with VET institution programs and the staff expertise that exists within them. Partnerships between VET institutions and industry will continue to provide fertile areas for continuous study. In particular, this research points to the need for increased understanding of the role of environmental or situational factors in shaping how, when, where and why partnerships emerge. While the four cases in this research suggest that the involvement of a partnership champion and the importance of TNA are important, required from the outset until the completion of the partnership, a deeper comprehension of these roles would contribute to the existing literature. More specific case study examples on how more commercial and often larger relationships have responded to the needs for flexibility, customisation and cultural issues are needed.

The revised conceptual framework proposed below will further guide new research. Based on the findings from cross-case data analysis and the literature review, the proposed conceptual framework, originally developed by Lendrum (2003) and Callan and Ashworth (2004) is revised. Figure 7.1 presents this revised conceptual framework.



Figure 7.1: The Strategic Partnerships: An Approach to Institutional and Industry Partnerships.

Source: Helmy (2014)

It is important to identify more factors that impact training providers and, especially those that impact training effectiveness, to improve the performance of VET providers. As shown in Figure 7.1, successful partnerships are impacted not only by the three factors provided by Lendrum (2003) and (Callan & Ashworth 2004), but also by factors within partnership. It might be more appropriate if qualitative analysis were used more effectively to investigate training partnerships as many of the measures of performance are quite intangible. A case study is therefore recommended to examine both the quality and quantity of interaction, to more clearly

comprehend the impacting factors of the training partnership between industry and external training providers.

Finally, the four case studies in this research provide the basis for additional research and the opportunity for developing an increased understanding of VET provider/industry partnerships in Indonesia: mainly the strategies used by VET providers and industries to continue to build trust, open communication and an environment of learning and continuous improvement. It would be interesting to follow the four training partnerships through their next phases, especially as they develop through the unavoidable phase of restructuring.

7.5 Closing remarks

The purpose of this qualitative study was to examine the role of VET providers in training partnerships with industry in East Java. Lendrum's model for Strategic Partnerships: the effective bringing together of environment, process and people (2003) was utilised as the theoretical framework that provided the foundation for this study. The researcher examined the three factors, namely the environment, training and people factors that had significant impact in training partnerships between VET providers and industry (Callan & Ashworth 2004; Lendrum 2003). Callan and Ashworth (2004) adapted the process component of Lendrum's model resulting in 'Partnerships – the optimum environment, training and people mix'. The framework provided by Lendrum (2003) and Callan and Ashworth (2004) provided a basis for a further adaptation of frameworks for partnerships resulting in Helmy's adaptation: **Strategic Approach to Institutional and Industry Partnerships (2014)**.

This study has expanded the knowledge base on partnership formation, communication, benefits and challenges by providing insight into a VET provider and industry partnership, beyond the information collected in

previous studies. It has presented valuable information that can be used in the establishment of future training collaborations by providing additional understanding and applicability for these types of partnerships. This research has demonstrated conclusively that clear and timely communication is an important element for a successful VET provider/industry partnership (Ullman 2012).

On an individual level, this study has helped the researcher realise that there is a constant requirement for those “partnership champions” who are experienced and expert in industry activities, and proficient in VET institutional practices, to link these two kinds of organisations. The Strategic Approach to Institutional and Industry Partnerships (2014) provides a framework to support such endeavours.

It is this researcher’s passion to be a promoter of future partnerships between VET institutions and industry in order to facilitate development and enhance the quality of skills in training collaborations. This partner initiative can only benefit the Indonesian workforce in future.

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Appendices

Appendix A: Information to Participants Involved in Research



INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH

You are invited to participate

You are invited to participate in a research project entitled 'The Role of Vocational Education and Training (VET) Provider in Training Partnerships with Industries in East Java, Indonesia'.

This project is being conducted by a doctoral student researcher Abdullah Helmy from Faculty of Arts, Education and Human Development at Victoria University under the supervision of Dr. Margaret Malloch, principal supervisor and Dr. Max Lane, associate supervisor.

Project explanation

The focus of this research is upon VET and industry partnerships, an initiative which Indonesia embarked upon in 1997 (Ministry of Education and Culture of The Republic of Indonesia 1997). Mitchell and Young (2001) argue that successful partnering is related to the ability to respond to the needs of change, continuous learning and innovation. In describing the formation and nature of partnerships, there is typically a mix of inter-organisational (for example, environment, structure, level of competition and change) and interpersonal factors (for example trust, friendships, senior executive support) at work.

The rationale of this study is that successful VET industry- provider training partnerships include the effective management of an extensive scale of environmental, training and people issues (Callan&Ashworth 2004).

This study will involve a survey/questionnaire focusing on the partnership framework of the environment, the training model employed and people issues. In-depth interviews will be conducted in which both the provider and the industry partner will be asked about their specific training partnership.

What will I be asked to do?

1. You will be given a consent form to be completed and to be returned to me within 3 days in the sealed envelope (provided) or by handing it directly to me.
2. You will be asked to complete a questionnaire in relation to your training partnership framework and to return it to me in the sealed envelope (provided) and send it by post mail (address and stamp provided) or to return it directly to me.
3. You may then be invited to be interviewed about your experiences and views of VET training partnerships. The interviews will take approximately 30 minutes and with your permission will be recorded.

What will I gain from participating?

Participating in this research will contribute to a deeper understanding concerning a strategic training partnership derived from the environment, training models and people issues in Indonesia in particular and will contribute to international understanding of VET partnerships.

How will the information I give be used?

A case study narrative will be written based on the information you provide in the interviews. You will be confirmed with the use and the interpretation of the information that you provide through e-mails and/or phone calls.

What are the potential risks of participating in this project?

There are minimal risks that you may become anxious concerning the disclosure of your working experience or institutions as a result of participating in this research. You may withdraw from the project at any phase and for any reason. All participation is completely voluntary and you may contact the Office of Post Graduate Research, or the supervisors with any queries. All data will be kept confidential, and no individual will be identified in publications resulting from the data.

How will this project be conducted?

You will be interviewed for in-depth understanding concerning the topic of research. As abovementioned, with your approval, you will be interviewed regarding training partnerships that you have experienced through your work. This interview is specifically related to VET industry – provider training partnerships and how they are shaped by environmental, training and people issues.

Who is conducting the study?

Mr. Abdullah Helmy, a doctoral student researcher at the School of Education, Victoria University, helmyabdul@hotmail.com, Abdullah.helmy@live.vu.edu.au; Mobile: +61 433 4343 92. This research is supervised by Dr. Margaret Malloch, principal supervisor, and Dr. Max Lane, associate supervisor. Should you feel that you require counselling as a result of participating in the research, you may contact Mr. Tundung Subali Patma, Director at Politeknik Negeri Malang, subalipatma@poltek-malang.ac.id.

Any queries about your participation in this project may be directed to the Principal Researcher listed above.

If you have any queries or complaints about the way you have been treated, you may contact the Ethics and Biosafety Coordinator, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4148. AEHDEthics@vu.edu.au

Appendix B: Consent Form for Participants Involved in Research

Appendix B: Consent Form for Participants Involved in Research



CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH

INFORMATION TO PARTICIPANTS:

We, Abdullah Helmy (doctoral student researcher), Dr. Margaret Malloch (Principal Supervisor), and Dr. Max Lane (Associate Supervisor) would like to invite you to be a part of a study into 'The Role of Vocational Education and Training (VET) Provider in Training Partnerships with Industries in East Java, Indonesia'.

CERTIFICATION BY SUBJECT

I,, a staff at....., Indonesia

certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study:

The Role of Vocational Education and Training (VET) Provider in Training Partnerships with Industries in East Java, Indonesia being conducted at Victoria University by: Mr. Abdullah Helmy, a doctoral student researcher at the School of Education, Victoria University, abdullah.helmy@live.vu.edu.au; ph: +61 433434392, and supervised by Dr. Margaret Malloch (Principal Supervisor), and Dr. Max Lane (Associate Supervisor).

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by:

Mr. Abdullah Helmy, the doctoral student researcher

and that I freely consent to participation involving the below mentioned procedures:

- a survey/questionnaire

I also acknowledge that I may then be invited to participate in:

- An interview on VET industry – provider training partnerships
- Audio taping of the interview.

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:

Date:

Any queries about your participation in this project may be directed to the researcher Mr. Abdullah Helmy, student researcher at the School of Education, helmyabdul@hotmail.com; abdullah.helmy@live.vu.edu.au; ph: + 61 433 4343 92, Dr. Margaret Malloch, principal supervisor, and Dr. Max Lane, associate supervisor. If you have any queries or complaints about the way you have been treated, you may contact the Ethics & Biosafety Coordinator, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4148.

Appendix C: Interview Questions

A BACKGROUND INFORMATION

Q1 TYPE OF RESPONDENT

1. Provider 2. Industry

Q2 NAME

LOCATION _____

PHONE _____

EMAIL _____

Q3 The Provider/Industry partner who makes up the partnership?

OTHER DETAILS ON A

B ENVIRONMENTAL FACTORS

Q4 What is the nature of the partnership?

Q5 When did it begin? _____ year.

Q6 When is it planned to finish? _____ year.

Q7 Who is the recipient of the training?

Q8 What were the key drivers for making this partnership happen? (e.g. key people, availability of seed capital, need to share resources, reputation of other partner etc.)

Q9 What are the benefits (financial and non-financial) of the partnership to you as a provider/industry partner?

Q10 On the other hand, what have been the major challenges to you as a provider/industry partner in making the best out of this partnership? (e.g. clashes of culture, problems in delivery of training)

Q11 When you compare the current success of this partnership to other partnerships you are involved in, is it:

More successful than other partnerships

About the same success

Less successful than other partnerships

Why?

Q12 What is the:

Rupiah value of the partnership? Rp. _____

Number of staff involved? _____ employees

Number of provinces (in 1 or more)? _____ provinces

Number of locations for delivery of the training? _____ locations
approximately

Other details

C TRAINING MODEL

Please describe how the training model is set up. Issues of how have they created:

Flexibility

Levels of customisation

How they have managed staff development needs that have emerged?

Administration arrangements

OTHER DETAILS ON C

D PEOPLE ISSUES

How has the partnership benefited your people who have been involved in the partnership? (e.g. increased their skills in marketing, better understanding of ...)

What people issues need to be improved to make this and other partnerships work better. For instance, what training needs exist among your staff involved in the partnership?

OTHER DETAILS ON D

E FINAL COMMENTS

Appendix D: Survey Questions

SURVEY

CONFIDENTIAL

A QUESTIONNAIRE FOR COMPLETION BY THOSE WHO MANAGE OR WHO ARE CURRENTLY IN PARTNERSHIPS

Dear Colleague,

You have been identified by your institution as someone who knows about the significant challenges in setting up and managing training partnerships with industry.

The aim of the survey is to gather your opinions about partnerships between your institution and industry/employers. The survey is being conducted by Mr. Abdullah Helmy (Victoria University), under the sponsorship of Indonesian Government (DIKTI).

This survey questionnaire follows up in more detail several issues raised in interviews so far with people like yourself who know about or who actually lead and manage training partnerships between your institution and industry. Completing this questionnaire will require about 20-30 minutes or less of your time.

Key points to note in completing the questionnaire:

- **Responses to this questionnaire will be strictly confidential**
- **If you are unable to answer a question or a part of it, just leave the question out**
- **Please do not attach your name to the completed questionnaire**
- **All completed questionnaires will be seen only by Mr. Abdullah Helmy who is conducting the survey**
- **All replies will be destroyed once the data are analysed**
- **PLEASE RETURN THE COMPLETED QUESTIONNAIRE BY AUGUST 30th, 2011 OR SOONER.**

Please feel free to contact Mr. Abdullah Helmy on (+61)433 434392 or abdullah.helmy@live.vu.edu.au if you have any questions. Thank you for your involvement in this significant opportunity to give feedback about the nature and success of VET industry-provider partnerships.

**Abdullah Helmy
School of Education
Victoria University**

These first questions examine the nature of your institution, your role, and the type of partnering arrangements.

Q1 What is your title? *(Please circle one or more numbers or write in).*

1. Chief Executive Officer/Director/Managing Director
2. Dean
3. Other Senior Manager
4. Head of School/Department
5. Teacher
6. Business Development Manager/Partnership Management Coordinator
7. Other _____

Q2 What is your level of involvement in VET industry-provider partnerships?
(please circle one number)

1. I set up these partnerships
2. I manage such partnerships
3. I set up and continue to manage such partnerships
4. Those managing key partnerships report to me
5. Other (please specify) _____

Q3 How would you classify your institution? *(Please circle a number).*

1. Vocational Training Centre
Polytechnic
2. University
3. _____
4. Vocational Secondary School
5. Other (please write in) _____

Q4 How would you classify your institution? *(Please circle a number)*

1. Metropolitan-based, public provider
2. Metropolitan-based, private provider
3. Regional, public provider
4. Regional, private provider
5. Other (please write in) _____

Q6 In which of the following locations does your institution have VET industry-provider partnerships *(Circle one or more numbers)*

1. Your local region
2. Other parts of your province
3. In other Indonesian islands
4. In overseas countries (if so, please name them)

Q7 What do you understand by the term ‘VET industry-provider partnerships’? Think about the range and type of partnerships that you are involved with. What are they essentially about? (e.g. a formal or informal training relationship, in one or several locations, about making money now or realistically in the longer term, less about money and more about other outcomes, specific outcomes are expected and so on)

Q8 Please circle a number from 1 (Strongly Disagree) to 6 (Strongly Agree) to show how much you agree or disagree with each of these general statements.

	Strongly Disagree				Strongly Agree	
There is a strong support in our organisation for seeking industry training partnerships that will be profitable and high profile	1	2	3	4	5	6
We are operating in a highly competitive training market	1	2	3	4	5	6
Increasing the levels of profitable training partnerships is a major goal of our organisation	1	2	3	4	5	6
We still operate almost as the only provider of certain types of industry training	1	2	3	4	5	6
We have a highly successful track record in partnering with industry	1	2	3	4	5	6
Our geographical location gives us competitive advantages in gaining access to certain key industry partners	1	2	3	4	5	6
Our institution does manage partnerships interprovincial	1	2	3	4	5	6
The organization has a clear strategy about how it will build its level of industry partnering	1	2	3	4	5	6
Industry is attracted by our track record as a successful partner	1	2	3	4	5	6
We see ourselves being successful in particular niche markets of industry training	1	2	3	4	5	6
We are still developing a track record as a good training partner	1	2	3	4	5	6
Our organisational culture (e.g. our values, how we relate to people) is proving to be an asset in our partnering with industry	1	2	3	4	5	6
Our organizational structure (e.g. level of hierarchy, control systems) is proving an asset in our partnering with industry	1	2	3	4	5	6
We are the ‘partner of choice’ for a number of industries	1	2	3	4	5	6

Q9 What percentage of your training partnerships with industry falls under each of the following categories (the total score should add up to 100%)?

- | | |
|---|--------|
| 1. Mutual service partnerships where we pool resources with the industry partner to gain access to equipment or resources that aid training | _____% |
| 2. Joint ventures where we pursue a training opportunity together by combining our capabilities | _____% |
| 3. Value chain partnership where we work together to change the training model to create enhanced training benefits for learners | _____% |
| 4. Other (please write in) _____ | _____% |
| | 100% |

Q10 What are the main drivers for your institution's involvement in industry/employer partnerships?

	Strongly Disagree				Strongly Agree	
	1	2	3	4	5	6
To bring in additional revenue	1	2	3	4	5	6
To copy what other institutions are doing	1	2	3	4	5	6
To give staff stronger links with industry	1	2	3	4	5	6
Our motivations are not really clear	1	2	3	4	5	6
Industries/employers have demanded that we assist them	1	2	3	4	5	6
If we did not get involved in the partnering, another institution would have taken the opportunity	1	2	3	4	5	6
To find future employers for our students	1	2	3	4	5	6
To build extra capability within our staff	1	2	3	4	5	6
Other (write in and rate)	1	2	3	4	5	6
Other (write in and rate)	1	2	3	4	5	6
Other (write in and rate)	1	2	3	4	5	6

Q11 What are the types of partnerships that you want to get more of? Either use the terms earlier (e.g. mutual service partnerships, joint ventures, value chain) or put in your own words what types of partnering you are really keen to build upon with industry and employers.

Q12 Think about a current partnership with industry that you are most familiar with. Please detail:

- 1. What it is about? 2. How did it come about? 3. What benefits does it bring to your institution? 4. What benefits does it bring to the industry partner/employer?**

Q13. Please give a conservative estimate of the annual gross revenue and number of VET industry-provider partnerships that you know are operating at present between your institution and industry/employers. For each gross revenue category (e.g. Rp.50.000.000 – Rp.100.000.000 annually), circle a number from 1 to 5 or more to indicate how many partnerships you know about in your institution that are operating at present around this annual revenue target.

Under Rp.50.000.000 in gross revenue to the institution annually	1	2	3	4	5 or more
From Rp.50.000.000-Rp.100.000.000 annually	1	2	3	4	5 or more
From Rp.100.000.000 -Rp.200.000.000 annually	1	2	3	4	5 or more
From Rp.200.000.000-Rp.300.000.000 annually	1	2	3	4	5 or more
From Rp.300.000.000-Rp.400.000.000 annually	1	2	3	4	5 or more
From Rp.400.000.000-Rp.500.000.000 annually	1	2	3	4	5 or more
From Rp.500.000.000-Rp.1.000.000.000 annually	1	2	3	4	5 or more
Over Rp.1.000.000.000 annually	1	2	3	4	5 or more

Q14 What training is your organisation best known for in terms of currently successful training partnerships with industry (e.g. training in automotive, laboratory operations)? Please list up to three if possible.

Q15 Please circle a number from 1 (Highly Dissatisfied) to 6 (Highly Satisfied) to indicate your level of satisfaction with the performance of your organisation in the following aspects of partnering with industry or with specific employers.

	Strongly Disagree				Strongly Agree	
	1	2	3	4	5	6
Our ability to establish trust	1	2	3	4	5	6
The quality of our communication with the industry partner	1	2	3	4	5	6
The commitment shown by our staff to make the partnerships a success	1	2	3	4	5	6
Our willingness to customise training to meet industry needs	1	2	3	4	5	6
Our success in customising the training	1	2	3	4	5	6
Our openness to experimentation	1	2	3	4	5	6
Our flexibility with staffing arrangements	1	2	3	4	5	6
Our application of financial measures to determine the success of the partnering	1	2	3	4	5	6
Our application of non-financial measures of the success of the partnering	1	2	3	4	5	6
The financial returns to us to date	1	2	3	4	5	6
The financial returns to us in the longer term	1	2	3	4	5	6
Our flexibility in providing different delivery modes for the training	1	2	3	4	5	6
Our level of planning within the partnership	1	2	3	4	5	6
Our willingness to adopt a long-term perspective in judging the success of the partnership	1	2	3	4	5	6
Our willingness to make changes to the nature of the off-the-job training	1	2	3	4	5	6
The administrative arrangements we put place to manage the day-to-day issues arising in such partnerships	1	2	3	4	5	6

Q16 In your opinion, what are the best features of your institution that make it a very attractive organisation for industry to partner with? Essentially, what is the source of your competitive advantage over other players in getting involved in industry-provider partnerships? (please list anything that comes to mind)

Q17 On the other hand, what are the key areas for improvement for your institution to be more competitive and successful in partnering? (please list anything that comes to mind)

Q18 Please circle a number from 1 (Highly Dissatisfied) to 6 (Highly Satisfied) to indicate your level of satisfaction with the performance of your industry partners in general in the following aspects of their partnering with your institution.

	Strongly Disagree				Strongly Agree	
	1	2	3	4	5	6
Their ability to establish trust with us	1	2	3	4	5	6
The quality of their communication with us	1	2	3	4	5	6
The commitment shown by their staff to make such partnerships a success	1	2	3	4	5	6
Their willingness to customise the training	1	2	3	4	5	6
Their success in customising the training on the job	1	2	3	4	5	6
Their openness to experimentation with the training model	1	2	3	4	5	6
Their flexibility with staffing arrangements	1	2	3	4	5	6
Their application of financial measures to determine the success of the partnering	1	2	3	4	5	6
Their application of non-financial measures of the success of the partnering	1	2	3	4	5	6
The financial returns to them to date	1	2	3	4	5	6
The financial returns to them in the longer term	1	2	3	4	5	6
Their flexibility in providing different delivery modes for the training	1	2	3	4	5	6
Their level of planning within the partnership	1	2	3	4	5	6
Their willingness to adopt a long-term perspective in judging the success of the partnership	1	2	3	4	5	6
Willingness to make changes to the nature of the on-the-job training	1	2	3	4	5	6
The administrative arrangements they put place to manage the day-to-day issues arising in such partnerships	1	2	3	4	5	6

Q19 Please circle a number from 1 to 6 for each statement.

	Strongly Disagree				Strongly Agree	
Staff are comfortable about sharing new ideas that might improve the partnering outcomes	1	2	3	4	5	6
There is open discussion of what we have learned from our mistakes in partnering	1	2	3	4	5	6
A failed partnership is seen as an opportunity to learn and improve our operations	1	2	3	4	5	6
Our institution does a good job in communicating to all staff what we have learned from successful and failed partnering	1	2	3	4	5	6
I work in an environment where constructive feedback is welcomed by management about how our industry partnerships are going	1	2	3	4	5	6
We regularly review the progress of partnerships with our industry partners	1	2	3	4	5	6
New ideas that challenge current training practices are welcomed	1	2	3	4	5	6

Q20 What are the criteria that you apply to judge whether a partnership is proving to be successful? Please list such criteria below.

Q21 Have you been involved in ending an industry-provider partnership?

1. Yes (what caused the end of the partnership?) 2. No

Q22 In your view, how effective are your staff who do industry partnering in the following areas (please circle a number from 1 to 6 for each item)

	Strongly Disagree				Strongly Agree	
	1	2	3	4	5	6
Marketing what we can do	1	2	3	4	5	6
Negotiation skills	1	2	3	4	5	6
Doing training needs analyses	1	2	3	4	5	6
Employer liaison	1	2	3	4	5	6
Legal and contractual arrangements	1	2	3	4	5	6
Project management	1	2	3	4	5	6
Winning the job	1	2	3	4	5	6
Setting shared goals with the industry partner	1	2	3	4	5	6
Building personal relationships with the industry partner	1	2	3	4	5	6
Identifying and managing risk in the partnership	1	2	3	4	5	6
Showing real interest in partners' proposals and concerns	1	2	3	4	5	6
Provide information and regular feedback to the institution about the performance of partnerships that they manage	1	2	3	4	5	6

Q23 Please list up to three areas where staff who manage VET industry-provider partnerships are particularly strong? (please write down anything that comes to mind)

Q24 In what areas do staff need to develop further to achieve stronger financial and non-financial returns from industry partnering?

Q25 Considering your current role in making partnerships work, what do you feel you need to learn more about to perform your current role more effectively? (please list up to 3 features)

Thank you for completing this questionnaire. Below is an opportunity for you to express your opinions on various matters that you feel need to be expanded upon or were not covered adequately in the questions.

Appendix E: Ethics Approval

MEMO

TO Dr Margaret Malloch
School of Education
Footscray Park Campus

DATE 7/7/2011

FROM Dr Deb Kerr
Acting Chair
Victoria University Human Research Ethics
Committee

UBJECT Ethics Application – HRETH 11/117

Dear Dr Malloch,
Thank you for submitting this application for ethical approval of the project:

HRETH 11/117 The Role of VET Provider Training Partnerships with Industries in East Java, Indonesia

The proposed research project has been **accepted and deemed** to meet the requirements of the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007)' by the Acting Chair of the Victoria University Human Research Ethics Committee. Approval has been granted from 15th July 2011 to 30th September 2012.

Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date (by **15th July 2012**) or upon the completion of the project (if earlier). A report proforma may be downloaded from the VUHREC web site at: <http://research.vu.edu.au/hrec.php>.

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious events or adverse and/or unforeseen events that may affect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes. Researchers are also reminded of the need to notify the approving HREC of changes to personnel in research projects via a request for a minor amendment.

On behalf of the Committee, I wish you all the best for the conduct of the project.

Kind regards,

Dr Deb Kerr

Acting Chair
Victoria University Human Research Ethics Committee